Appendix A Sampling Summary Letter

AECOM
50 Lakefront Boulevard, Suite 111
Buffalo, NY 14202
aecom.com

March 6, 2025

NYSDEC Reference
WA D009803.44

AECOM Reference
60679961

Elliot Baird, Project Manager
New York State Department of
Environmental Conservation
625 Broadway
Albany, NY 12233

Rural Background Study for Per- and Polyfluoroalkyl Substances (PFAS) in Soil in New York

Dear Elliot Baird,

AECOM USA, Inc. (AECOM) is pleased to provide the New York State Department of Environmental Conservation (NYSDEC) with this Rural Background Study Letter for Per- and Polyfluoroalkyl Substances (PFAS) in Soil in New York (NY) State.

The objective of the Work Assignment (WA) issued by NYSDEC under contract D009803-44 was to collect state-wide background soil samples for PFAS analysis, at the same sample locations throughout NY state used during the 2005 NYSDEC rural background soil survey.

1. Site Description and Background Information

In 2005, the statewide Survey to Describe Concentration Ranges for Selected Analytes in Rural New York State Surface Soils ("Rural Soil Survey") was conducted jointly by the NYSDEC and the New York State Department of Health (NYSDOH). The objective of the study was to define analyte concentration ranges in rural surface soils from points of human contact with soil and from habitat areas.

Rural properties (n = 125) were randomly selected for sampling using a digitized grid map and a random number generator. The survey determined ranges for analytes in the following three types of surface soil samples: source-distant samples were obtained from areas that were reasonable points of human contact with soil; remote samples were collected from areas distant from margins of human activity; and, near source samples were collected near a roadway or driveway.

All samples were free of readily discernible contamination. The survey protocol called for the avoidance of orchards and exclusion of remote areas that were not habitat areas. Soil samples from the 2005 survey were analyzed for selected volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organochlorine (OC) pesticides, Aroclor mixtures of polychlorinated biphenyls (PCBs), metals, amenable cyanide, and total cyanide using analytical methods commonly employed during contaminated site investigations. Laboratory analytical data included 118 source-distant, 96 remote and 28 near source samples, for a total of 242 samples.

This 2023 study was designed to mimic the procedures and sampling locations used during the 2005 NYSDEC rural background soil survey, with analysis of soil samples for PFAS.

2. Property Access Outreach Efforts and Response

NYSDEC provided AECOM with a list of the previous parcels that were sampled. This list was used to develop a mailing list for current property owners of 120 parcels. Each parcel (property) was assigned a unique 3-digit code. Letters requesting property access for the purposes of sampling for PFAS were first mailed out to each current

property owner on March 20, 2023. Due to a limited response, a second letter was mailed to these properties on April 13, 2023. This first outreach effort yielded 55 properties that were willing to participate in this study. These properties are identified as numbers without letters.

It was also determined that state-owned properties would be covered by a blanket authorization from NYSDEC. There were 12 state-owned properties included in this study.

Alternate Property Outreach #1 (A/B identifier added to the end of the original site number)

Since many of the initial properties were unresponsive, the contact information for two adjacent parcels of the original parcels was obtained, and an additional 120 access request letters were mailed out on May 5, 2023 with a second notice on June 13, 2023, to adjacent property owners. This second outreach effort yielded 29 properties that were willing to participate in this study. These properties are identified as numbers with A or B letters.

Alternate Property Outreach #2 (C/D identifier added to the end of the original site number)

By August 2023, approximately 25 properties had still been unresponsive. The contact information for an additional two adjacent parcels of the first alternate parcels was obtained, and another 50 access request letters were mailed out on August 2, 2023 with a second notice on September 1, 2023, to second-adjacent property owners. This third outreach effort yielded 14 properties that were willing to participate in this study. These properties are identified as numbers with C or D letters. In addition, the next closest property for site #017 was state owned, therefore it was selected to be sampled as site #017C.

Alternate Property Outreach #3 (E/F identifier added to the end of the original site number)

By October 2023, nine properties had still been unresponsive. The contact information for an additional two adjacent parcels of the second alternate parcels was obtained, and another 18 access request letters were mailed out on October 25, 2023. This fourth outreach effort yielded four properties that were willing to participate in this study. These properties are identified as numbers with E or F letters.

Since six different property owners were unresponsive for site #040, a nearby state-owned property was sampled instead, which was identified as #040G.

The overall outreach efforts resulted in access permission being received for 116 of the targeted 120 parcels (original or adjacent).

3. Field Activities

The field activities as part of this Rural Background Study for PFAS were performed by AECOM staff between October 10, 2023, and December 6, 2023. Refer to **Attachment A** for the photo logs. All field activities were documented digitally using EQuIS collect forms set-up specifically for the project to efficiently track sample IDs and times, soil logging information, sample point coordinates, and site photos.

3.1 Sampling Points

This state-wide background study of PFAS in soil in NY State mimicked the procedures from the 2005 Rural Soil Survey. At each property, up to three (3) types of surface soil samples were collected:

- **Source-distant samples** (labelled as “00#-SD”) were obtained from areas that were reasonable points of human contact with soil, such as yards and trails, but at least 10 meters (m) distant from roads, pavement, structures, outfalls, drainage swales, drip lines, or trash. Primarily soil; free from unusual odors, discoloration or non-soil materials; at least half a mile from an active or inactive industrial facility, waste disposal site, orchard, or other major pollution source; and not in a swamp, bog, wilderness, or other area where soil contact is rare.
- **Remote samples** (labelled as “00#-R”) were collected from areas that were at least 15 m distant from the edge of regular human activity such as yards, golf courses, farms, athletic fields, areas of fill, mines, roads, pavement, structures, burn barrels, outfalls, drainage swales, drip lines, etc. Primarily soil; free from unusual odors, discoloration or non-soil materials; at least half a mile from an active or inactive industrial facility, waste disposal

site, orchard, or other major pollution source; and not in areas inundated by water at the time of sample collection.

- **Near source samples** (labelled as “00#-NS”) were collected at a randomly selected subset of properties that met the conditions listed above and were collected approximately 2 m from a roadway or driveway.

Geographic coordinates and maps indicating designated sampling areas and site contact/owner information were provided to AECOM field staff, who visited the properties and evaluated sampling opportunities. If a designated sampling area was not accessible by automobile, field staff proceeded as near as possible to the designated area.

Sample points were surveyed by the field team using a handheld iPad GPS with an accuracy of +/- 10 m. Locations were also noted on aerial photos in the field. Surveyed locations were later plotted and compared to the locations sketched on the aerial photos in the field notes. Any locations that appeared to be significantly off were manually adjusted, resulting in an accuracy of +/- 1 to 2 m.

3.2 Utility Clearance

Utility clearances were not required given that only surface soil samples were collected at shallow depths using hand tools.

3.3 Community Air Monitoring

Community air monitoring was not required as there was no intrusive or excavation work as part of the field activities.

3.4 Soil Sampling

A total of 548 soil samples, including 232 source distant, 232 remote, 58 near source, and 26 field duplicate samples, were collected between October 10 and December 6, 2023, at 116 properties (Site IDs 001 to 031, 033 to 050, 052 to 055, 057 to 059, 061 to 064, 066 to 069, 071 to 074, 076 to 081, 083 to 114, and 116 to 125), as shown on **Figure 1**.

Hand implements, including a stainless-steel trowel, teaspoon, scoopula, or similar, were utilized to collect surface soil samples at 0 to 2 inch depth intervals. Hand augers, including a bucket auger, extension rod and T-handle, were utilized to collect soil samples at 2 to 12 inch depth intervals. Soils were placed in a stainless-steel mixing bowl to homogenize the sample, and then placed into the appropriate sampling containers. Matrix spikes, matrix spike duplicates and rinse blanks were also collected for quality assurance / quality control (QA/QC) purposes. Sampled locations were backfilled with soils not utilized for sampling. Equipment decontamination procedures are discussed in Section 3.5.

An AECOM geologist classified the soils in accordance with the Unified Soil Classification System. Refer to **Attachment B** for the soil boring logs.

Soil samples were collected according to NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC’s Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), the AECOM October 2023 Field Activities Plan (FAP), and the AECOM October 2023 Quality Assurance Project Plan (QAPP). Soil samples were placed in jars, labeled, placed in coolers, and sent under chain-of-custody protocol by courier to the analytical laboratory, SGS North America Inc. (SGS) of Dayton, New Jersey, a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory. Soil samples were analyzed for 40 PFAS compounds in accordance with the United States Environmental Protection Agency (USEPA) 4th Draft Method 1633. Upon receipt from the laboratory, the analytical results were validated by subcontracted chemists at Validata Chemical Services, Inc. (Validata) of Duluth, Georgia (GA), in accordance with NYSDEC DER-10, USEPA Region II data validation procedures, and the NYSDEC PFAS Guidance. The Data Usability Summary Reports (DUSRs), along with the revised pages (showing qualifiers added or changed) from the laboratory reports, are provided in **Attachment C**.

3.5 Decontamination and Management of Investigation Derived Waste

In accordance with NYSDEC PFAS Guidance and the QAPP, equipment used for soil sampling was decontaminated with a non-phosphate detergent (Alconox) and potable water solution followed by a PFAS-free distilled/deionized

water rinse, between each sample location. Due to the sampling for PFAS, PFAS-free water was obtained from the laboratory; the use of an untreated potable water supply was not an acceptable substitute.

Investigation-derived waste (IDW) was managed in accordance with NYSDEC DER-10. IDW generated during field activities included decontamination water, personal protective equipment (PPE) and paper towels. Solid IDW was placed in black trash bags and disposed of in the municipal trash. Spent decontamination water was poured directly over the sampling locations following sampling activities.

3.6 Equipment Rinse Blanks

One rinse blank was collected each day that soil samples were collected, over the decontaminated soil sampling equipment (stainless steel auger, mixing bowl, trowel, and spoons). Rinse blank samples were analyzed for 40 PFAS compounds in accordance with the USEPA 4th Draft Method 1633.

4. ANALYTICAL RESULTS

The validated analytical results are presented in **Table 1.** Based on the data validation completed, some soil analytical results were rejected due to deficiencies identified, which are summarized in **Table 2**. The rinse blank results are presented in **Table 3**.

4.1 Rejected Soil Results

Some data was rejected due to serious deficiencies in the ability to analyze the samples and to meet published method and project quality control criteria, which are summarized in attached **Tables 1 and 2**. The deficiencies identified for all rejected data were that the Extracted Internal Standards (EIS) reported recoveries were less than the expanded lower control limit of 10%.

Based on the data validation completed, two (2) soil samples submitted for laboratory analysis identified as 105A-SD-0-2 and 108-R-2-12 were rejected (for all 40 analytes) due to serious deficiencies identified above. Similarly, sample 105A-SD-2-12 was rejected for 38 of 40 of the analytes and 105A-R-0-2 was rejected for 39 of the 40 analytes. Individual PFAS parameters were also rejected due to deficiencies identified above, including one (1) soil sample rejected for 1H,1H,2H,2H-perfluorooctane sulfonic acid (6:2FTS), 2H,2H,3H,3H-perfluorooctanoic acid (5:3FTCA), 9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS), n-methyl perfluorooctanesulfonamide (NMeFOSA), perfluorododecanoic acid (PFDoA), perfluorohexanesulfonic acid (PFHxS), perfluoropentanesulfonic acid (PFPeS), and perfluorotridecanoic acid (PFTriA/PFTrDA); two (2) samples rejected for perfluorotetradecanoic acid (PFTeDA); 23 soil samples rejected for 3-perfluoropropyl propanoic acid (3:3FTCA); 24 soil samples rejected for perfluoro-3-methoxypropanoic acid (PFMPA) and perfluoro-4-methoxybutanoic acid (PFMBA); 25 soil samples rejected for perfluoropentanoic acid (PFPeA); and, 160 soil samples rejected for perfluorobutanoic acid (PFBA).

Out of 21,920 analyses (548 samples x 40 analytes each), there were 424 analyses flagged as rejected. This is approximately 1.9% of the data.

4.2 Excluded Sample Results

During review of the data set it was noticed that the detected results for sample 033C-SD were uncharacteristically elevated for all analytes. The laboratory (SGS) was contacted, and it was confirmed that this sample was inadvertently spiked during the analysis, and therefore, is not representative of Site conditions. These results have been excluded from **Table 1** and from the entire data set.

4.3 Applicable Standards, Criteria, and Guidance

For PFAS constituents, soil analytical results are compared to Unrestricted Use guidance values presented in the NYSDEC PFAS Guidance. As shown in Table 1, there are only soil guidance values available for 2 of the 40 compounds analyzed. The two compounds for which guidance values exist are perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA).

4.4 Soil Analytical Results

A total of 548 soil samples, including 26 field duplicate samples, were collected between October 10 and December 6, 2023, at 116 properties (Site IDs 001 to 031, 033 to 050, 052 to 055, 057 to 059, 061 to 064, 066 to 069, 071 to 074, 076 to 081, 083 to 114, and 116 to 125) and submitted for laboratory analysis of PFAS, as shown on **Table 1**.

One or more PFAS compounds were detected in the majority of soil samples submitted for laboratory analysis. A total of 56 soil samples exceeded the Unrestricted Use guidance value for PFOS, including 49 soil samples collected from 0 to 2 inches and seven (7) collected from 2 to 12 inches. Of the exceedances, 41 soil samples were collected from remote locations, 14 samples were collected from source-distant locations, and one (1) was collected from a near-source location.

A total of 60 soil samples exceeded the Unrestricted Use guidance value for PFOA, including 38 soil samples collected from 0 to 2 inches and 22 collected from 2 to 12 inches. Of the exceedances, 49 soil samples were collected from remote locations, ten (10) samples were collected from source-distant locations, and one (1) was collected from a near-source location.

4.5 Rinse Blank Samples

A total of 33 rinse blank samples were collected between October 10 and December 6, 2023, and submitted for laboratory analysis of PFAS, as shown on **Table 3**. All PFAS parameters were not detected, except for one parameter each at four (4) rinse blank samples, including PFOA at RB-11212023, perfluorononanoic acid (PFNA) at RB-11282023, 6:2FTS at RB-11292023, and perfluoroheptanoic acid (PFHpA) at RB-12062023.

Rinse blanks are used to determine whether the sampling equipment decontamination procedures have been adequately performed during sampling, thereby assuring that no “carryover” contamination has been introduced before (or during) sample collection (USEPA, 2014). 6:2FTS was not detected in any soil samples collected on 11/29/2023, the same day as the rinse blank detection, which means that there was no potential for cross contamination on this day. However, PFOA, PFNA, and PFHpA were detected in several soil samples collected on 11/21/2023, 11/28/2023, and 12/06/2023, respectively, on the same days as the rinse blank detections, which may indicate the potential for cross contamination on those days. Of note, two (2) of the four (4) soil samples collected on 11/21/2023 had exceedances of PFOA. Nevertheless, the magnitude of the PFAS detections in the rinse blank samples (ranging from 0.00061 to 0.0010 µg/L or parts per billion [ppb]) are unlikely to significantly affect the soil concentrations on those dates, which ranged from 0.062 to 2.4 µg/kg (or parts per billion [ppb]).

5. SUMMARY

The objective of this Rural Background Study for PFAS in Soil was to collect state-wide background soil samples for PFAS analysis, at the same sample locations throughout NY state used during the 2005 NYSDEC rural background soil survey. The field activities were performed by AECOM staff between October 10, 2023, and December 6, 2023.

A total of 548 soil samples, including 26 field duplicate samples, were collected at 116 properties (Site IDs 001 to 031, 033 to 050, 052 to 055, 057 to 059, 061 to 064, 066 to 069, 071 to 074, 076 to 081, 083 to 114, and 116 to 125) and submitted for laboratory analysis of PFAS. At each property, up to the following three (3) types of surface soil samples were collected:

- **Source-distant samples** were collected from areas that were reasonable points of human contact with soil, such as yards and trails.
- **Remote samples** were collected from areas that were distant from the edge of regular human activity.
- **Near source samples** were collected at a randomly selected subset of properties, and approximately 2 m from a roadway or driveway.

Of the 546 soil samples submitted for laboratory analysis, a total of 56 soil samples exceeded the Unrestricted Use guidance value for PFOS, and a total of 60 soil samples exceeded the Unrestricted Use guidance value for PFOA.

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6. References

NYSDEC. 2010. DER-10 Technical Guidance for Site Investigation and Remediation. Issued May 3, 2010.

NYSDEC. 2023. Sampling, Analysis, and Assessment of Per- and polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs. April 2023.

United States Environmental Protection Agency (USEPA). 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final. USEPA Office of Emergency and Remedial Response. EPA/540/G-89/004. October 1988.

USEPA. 2014. Sample Submission Procedures for the Office of Analytical Services and Quality Assurance (OASQA) Laboratory Branch. United States Environmental Protection Agency, Region 3. Revision 13. January 29, 2014.

7. Closure

We trust that the information provided is satisfactory for your purposes. Should you require further information please do not hesitate to contact the undersigned.

Yours sincerely,

Edyta Chorostkowska
Senior Scientist
AECOM
T: 845-245-4099
E: edyta.chorostkowska@aecom.com

Robert J. Murphy, P.G.
Senior Geologist / Project Manager
AECOM
T: 716-903-1346
E: rob.murphy@aecom.com

enclosures: Figure 1 – Boring Locations
Table 1 – 2023 PFAS Analytical Results
Table 2 – 2023 PFAS Rejected Results
Table 3 – 2023 PFAS Rinse Blank Analytical Results

Attachment A – Photo Logs
Attachment B – Soil Boring Logs
Attachment C – Data Usability Summary Reports

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Figure

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#013 #015B #014 #007 #001 #011 #019B #016E #010C #003 #024 #020B #012 #005 #017C #025 #002 #004A #006 #008A #021 #023 #022A #018 #009D #112 #124C #102 #119 #109 #116 #118 #110C #117 #125 #122 #091B #120 #121 #107 #037 #048B #035B #030 #106 #096C #108 #103 #029C #033C #034 #031A #093 #111 #049E #042C #085A #105 #113 #026 #099 #086 #092 #101 #047 #036 #050 #083B #080 #076 #084 #077 #072 #123 #104 #045F #081C #027C #088B #090 #094 #089C #078 #069 #043 #100A #046 #040G #057 #038 #028A #044 #095 #066 #055 #063 #041 #039 #087E #097A #098 #052 #068 #058 #074 #071 #062 #054 #061 #059 #067 #053 #064 #073

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Windham
Waterbury
Danbury
New Haven
Bridgeport
Long Island Sound
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Rensselaer
Schenectady
Saratoga
Saratoga Springs
Glens Falls
Fulton
Montgomery
Washington
Warren
Essex
Clinton
Franklin
Herkimer
Oneida
Lewis
Jefferson
St Lawrence
Cornwall
Kingston
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Chemung
Tioga
Broome
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Lake Simcoe
Owen Sound
Midland
Orillia
Barrie
Orangeville
Guelph
Kitchener
Stratford
Woodstock
Brantford
London
St Thomas
Ashtabula
Jamestown
Olean
Bradford
Warren
Oil City
St Marys
Williamsport
Scranton
Hazleton
Youngstown
Buffalo
CANADA
UNITED STATES
New York
Pennsylvania
New Jersey

Legend

- Boring Location
- County Boundary

Source: ESRI World Street Map

30 0 30 Miles

RURAL BACKGROUND STUDY
FOR PFAS IN SOIL
BORING LOCATIONS

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FIGURE 1

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Tables

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	001-R	001-R	001-SD	001-SD	002-R	002-R	002-SD	002-SD	002-SD	003-R	003-R
				Sample ID	001-R-0-2	001-R-2-12	001-SD-0-2	001-SD-2-12	002-R-0-2	002-R-2-12	002-SD-0-2	002-SD-2-12	FD-11092023	003-R-0-2	003-R-2-12
				Sample Date	11/7/2023 11:00:00 AM	11/7/2023 11:05:00 AM	11/7/2023 10:45:00 AM	11/7/2023 10:50:00 AM	11/9/2023 12:05:00 PM	11/9/2023 12:10:00 PM	11/9/2023 11:45:00 AM	11/9/2023 11:50:00 AM	11/9/2023 11:50:00 AM	11/28/2023 12:30:00 PM	11/28/2023 12:35:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD76288-19	JD76288-20	JD76288-17	JD76288-18	JD76818-8	JD76818-9	JD76818-5	JD76818-6	JD76818-7	JD77742-19	JD77742-20
				Sample Type	N	N	N	N	N	N	N	N	FD	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**50.4**	**74.5**	**84.7**	**93.4**	**57.2**	**82.5**	**18.5**	**55.1**	**58.7**	**65.4**	**67.0**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.6 U	< 1.1 U	< 0.94 U	< 0.84 U	< 1.4 U	< 0.97 U	< 4.3 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.6 U	< 1.1 U	< 0.94 U	< 0.84 U	< 1.4 U	< 0.97 U	< 4.3 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.6 U	< 1.1 U	< 0.94 U	< 0.84 U	< 1.4 U	< 0.97 U	< 4.3 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.6 U	< 1.1 U	< 0.94 U	< 0.84 U	< 1.4 U	< 0.97 U	< 4.3 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 9.7 U	< 6.7 U	< 5.9 U	< 5.2 U	< 8.6 U	< 6.1 U	< 27 U	< 9.1 U	< 8.4 U	< 7.5 U	< 7.5 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 9.7 U	< 6.7 U	< 5.9 U	< 5.2 U	< 8.6 U	< 6.1 U	< 27 U	< 9.1 U	< 8.4 U	< 7.5 U	< 7.5 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.9 UJ	< 1.3 UJ	< 1.2 UJ	< 1.0 UJ	< 1.7 U	< 1.2 UJ	< 5.4 U	< 1.8 U	< 1.7 U	< 1.5 UJ	< 1.5 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.6 U	< 1.1 U	< 0.94 U	< 0.84 U	< 1.4 U	< 0.97 U	< 4.3 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.6 U	< 1.1 U	< 0.94 U	< 0.84 U	< 1.4 U	< 0.97 U	< 4.3 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.6 U	< 1.1 U	< 0.94 U	< 0.84 U	< 1.4 U	< 0.97 U	< 4.3 U	< 1.5 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.9 U	< 2.7 U	< 2.4 U	< 2.1 U	< 3.4 U	< 2.4 U	< 11 U	< 3.6 UJ	< 3.3 UJ	< 3.0 U	< 3.0 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.9 U	< 2.7 U	< 2.4 U	< 2.1 U	< 3.4 U	< 2.4 U	< 11 U	< 3.6 U	< 3.3 U	< 3.0 U	< 3.0 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.78 U	< 0.54 U	< 0.47 U	< 0.42 U	< 0.69 U	< 0.48 U	< 2.2 U	< 0.73 U	< 0.67 U	< 0.60 U	< 0.60 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.78 U	< 0.54 U	< 0.47 U	< 0.42 U	< 0.69 U	< 0.48 U	< 2.2 U	< 0.73 U	< 0.67 U	< 0.60 U	< 0.60 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.78 UJ	< 0.54 UJ	< 0.47 UJ	< 0.42 UJ	< 0.69 U	< 0.48 UJ	< 2.2 U	< 0.73 U	< 0.67 U	< 0.60 UJ	< 0.60 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.78 U	< 0.54 U	< 0.47 U	< 0.42 U	< 0.69 U	< 0.48 U	< 2.2 U	< 0.73 U	< 0.67 U	< 0.60 U	< 0.60 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	R	R	< 0.84 UJ	**0.96 J**	< 0.97 U	< 4.3 UJ	**0.92 J**	**1.2 J**	< 1.2 UJ	**0.64 J**
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.14 J**	< 0.27 U	< 0.24 U	< 0.21 U	**0.13 J**	< 0.24 U	**0.95 J**	**0.14 J**	**0.16 J**	**0.14 J**	< 0.30 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 UJ	< 0.24 UJ	< 1.1 UJ	< 0.36 UJ	< 0.33 UJ	< 0.30 UJ	< 0.30 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	**0.61 J**	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.32 J**	< 0.27 U	< 0.24 U	< 0.21 U	**0.28 J**	< 0.24 U	**0.70 J**	**0.26 J**	**0.27 J**	**0.28 J**	**0.22 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	**0.31 J**	< 0.24 U	< 1.1 U	**0.25 J**	**0.28 J**	**0.10 J**	**0.19 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.40**	< 0.27 U	< 0.24 U	**0.093 J**	**0.22 J**	< 0.24 U	**0.49 J**	**0.15 J**	**0.20 J**	**0.45**	**0.21 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.91**	**0.085 J**	< 0.24 U	**0.14 J**	**0.53**	< 0.24 U	**1.3**	**0.51**	**0.67**	**1.1**	**0.35**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.63**	< 0.27 U	< 0.24 U	**0.087 J**	**0.16 J**	< 0.24 U	< 1.1 U	**0.44**	**0.44**	**0.79**	**0.45**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.78 U	< 0.54 U	**0.35 J**	< 0.42 U	< 0.69 U	< 0.48 U	< 2.2 U	**0.24 J**	**0.22 J**	**0.13 J**	**0.18 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	< 1.1 U	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	< 0.34 U	< 0.24 U	**0.64 J**	< 0.36 U	< 0.33 U	< 0.30 U	< 0.30 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.39 U	< 0.27 U	< 0.24 U	< 0.21 U	**0.19 J**	< 0.24 U	**1.4**	< 0.36 U	**0.14 J**	**0.095 J**	< 0.30 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	003-SD	003-SD	004A-R	004A-R	004A-SD	004A-SD	004A-SD	005-NS	005-NS	005-R	005-R
				Sample ID	003-SD-0-2	003-SD-2-12	004A-R-0-2	004A-R-2-12	004A-SD-0-2	004A-SD-2-12	FD-11292023	005-NS-0-2	005-NS-2-12	005-R-0-2	005-R-2-12
				Sample Date	11/28/2023 12:15:00 PM	11/28/2023 12:20:00 PM	11/29/2023 2:00:00 PM	11/29/2023 2:05:00 PM	11/29/2023 1:30:00 PM	11/29/2023 1:35:00 PM	11/29/2023 1:35:00 PM	11/9/2023 3:15:00 PM	11/9/2023 3:20:00 PM	11/9/2023 3:55:00 PM	11/9/2023 4:00:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD77742-17	JD77742-18	JD77883-18	JD77883-19	JD77883-15	JD77883-16	JD77883-17	JD76818-14	JD76818-15	JD76818-18	JD76818-19
				Sample Type	N	N	N	N	N	N	FD	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**80.7**	**85.3**	**70.7**	**63.2**	**77.8**	**78.7**	**79.1**	**75.1**	**75.4**	**78.0**	**84.8**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.97 U	< 0.92 U	< 1.1 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.94 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.97 U	< 0.92 U	< 1.1 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.94 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.97 U	< 0.92 U	< 1.1 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.94 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.97 U	< 0.92 U	< 1.1 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.94 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.1 U	< 5.7 U	< 7.1 U	< 7.9 U	< 6.3 U	< 6.2 U	< 6.2 U	< 6.5 U	< 6.6 U	< 6.4 U	< 5.9 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.1 U	< 5.7 U	< 7.1 U	< 7.9 U	< 6.3 U	< 6.2 U	< 6.2 U	< 6.5 U	< 6.6 U	< 6.4 U	< 5.9 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.2 UJ	< 1.1 UJ	< 1.4 UJ	< 1.6 UJ	< 1.3 UJ	< 1.2 UJ	< 1.2 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.2 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.97 U	< 0.92 U	< 1.1 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.94 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.97 U	< 0.92 U	< 1.1 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.94 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.97 U	< 0.92 U	< 1.1 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.94 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.4 U	< 2.3 U	< 2.8 U	< 3.2 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.6 U	< 2.7 U	< 2.6 UJ	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 UJ	< 0.26 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.4 U	< 2.3 U	< 2.8 U	< 3.2 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.6 U	< 2.7 U	< 2.6 UJ	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.49 U	< 0.46 U	< 0.57 U	< 0.63 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.52 U	< 0.53 U	< 0.51 U	< 0.47 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.49 U	< 0.46 U	< 0.57 U	< 0.63 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.52 U	< 0.53 U	< 0.51 U	< 0.47 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.49 UJ	< 0.46 UJ	< 0.57 UJ	< 0.63 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.52 U	< 0.53 U	< 0.51 U	< 0.47 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.49 U	< 0.46 U	< 0.57 U	< 0.63 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.52 U	< 0.53 U	< 0.51 U	< 0.47 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.24 U	< 0.23 U	**0.14 J**	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.17 J**	< 0.92 U	< 1.1 UJ	< 1.3 UJ	< 1.0 UJ	< 1.0 UJ	< 0.99 UJ	< 1.0 U	< 1.1 U	**0.25 J**	**0.16 J**
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.13 J**	< 0.23 U	**0.14 J**	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	**0.10 J**	< 0.26 U	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.24 UJ	< 0.23 UJ	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.24 U	**0.073 J**	**0.29**	**0.22 J**	**0.11 J**	**0.12 J**	**0.13 J**	< 0.26 U	**0.083 J**	**0.091 J**	**0.12 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.24 U	**0.038 J**	**0.18 J**	**0.19 J**	**0.057 J**	**0.063 J**	**0.054 J**	< 0.26 U	**0.043 J**	< 0.26 U	**0.052 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.15 J**	**0.18 J**	**0.40**	**0.39**	**0.10 J**	< 0.25 U	**0.074 J**	< 0.26 U	< 0.27 U	**0.12 J**	**0.075 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.25**	**0.18 J**	**0.95**	**0.58**	**0.22 J**	**0.22 J**	**0.14 J**	**0.074 J**	**0.17 J**	**0.17 J**	**0.15 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		< 0.24 U	**0.096 J**	**0.63**	**0.58**	**0.12 J**	**0.14 J**	**0.12 J**	< 0.26 U	< 0.27 U	**0.15 J**	**0.15 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.49 U	< 0.46 U	< 0.57 U	< 0.63 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.52 U	< 0.53 U	< 0.51 U	< 0.47 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.24 U	< 0.23 U	< 0.28 U	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.10 J**	< 0.23 U	**0.15 J**	< 0.32 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.27 U	**0.11 J**	< 0.24 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	005-SD	005-SD	006-R	006-R	006-SD	006-SD	007-R	007-R	007-SD	007-SD	007-SD
				Sample ID	005-SD-0-2	005-SD-2-12	006-R-0-2	006-R-2-12	006-SD-0-2	006-SD-2-12	007-R-0-2	007-R-2-12	007-SD-0-2	007-SD-2-12	FD-11072023
				Sample Date	11/9/2023 3:35:00 PM	11/9/2023 3:40:00 PM	11/9/2023 1:30:00 PM	11/9/2023 1:35:00 PM	11/9/2023 1:05:00 PM	11/9/2023 1:10:00 PM	11/7/2023 9:15:00 AM	11/7/2023 9:20:00 AM	11/7/2023 8:55:00 AM	11/7/2023 9:00:00 AM	11/7/2023 9:00:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in
				Lab Sample ID	JD76818-16	JD76818-17	JD76818-12	JD76818-13	JD76818-10	JD76818-11	JD76288-15	JD76288-16	JD76288-12	JD76288-13	JD76288-14
				Sample Type	N	N	N	N	N	N	N	N	N	N	FD
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**74.7**	**81.2**	**53.9**	**65.1**	**56.0**	**69.2**	**74.8**	**82.9**	**69.0**	**85.6**	**84.9**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 0.97 U	< 1.5 U	< 1.2 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.92 U	< 0.94 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 0.97 U	< 1.5 U	< 1.2 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.92 U	< 0.94 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 0.97 U	< 1.5 U	< 1.2 UJ	< 1.4 U	< 1.2 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.92 U	< 0.94 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 0.97 U	< 1.5 U	< 1.2 UJ	< 1.4 U	R	< 1.0 U	< 0.95 U	< 1.1 U	< 0.92 U	< 0.94 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.7 UJ	< 6.0 U	< 9.3 U	< 7.5 U	< 8.8 U	< 7.2 U	< 6.6 U	< 5.9 U	< 7.1 U	< 5.7 U	< 5.9 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.7 UJ	< 6.0 U	< 9.3 U	< 7.5 U	< 8.8 U	< 7.2 U	< 6.6 U	< 5.9 U	< 7.1 U	< 5.7 U	< 5.9 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.2 U	< 1.9 U	< 1.5 UJ	< 1.8 U	< 1.4 U	< 1.3 UJ	< 1.2 UJ	< 1.4 UJ	< 1.1 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 0.97 U	< 1.5 U	< 1.2 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.92 U	< 0.94 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 0.97 U	< 1.5 U	< 1.2 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.92 U	< 0.94 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 UJ	< 0.97 U	< 1.5 U	< 1.2 UJ	< 1.4 U	< 1.2 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.92 U	< 0.94 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 UJ	R	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 UJ	< 0.35 UJ	< 0.29 UJ	< 0.26 UJ	< 0.24 U	< 0.28 UJ	< 0.23 UJ	< 0.24 UJ
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.7 UJ	< 2.4 U	< 3.7 U	< 3.0 UJ	< 3.5 UJ	R	< 2.6 U	< 2.4 U	< 2.8 UJ	< 2.3 U	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.27 U	< 0.24 UJ	< 0.37 U	< 0.30 UJ	R	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 UJ	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.7 U	< 2.4 U	< 3.7 U	< 3.0 UJ	< 3.5 UJ	< 2.9 UJ	< 2.6 U	< 2.4 U	< 2.8 U	< 2.3 U	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.54 UJ	< 0.48 U	< 0.74 U	< 0.60 U	< 0.70 U	< 0.58 U	< 0.52 U	< 0.47 U	< 0.57 U	< 0.46 U	< 0.47 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.54 UJ	< 0.48 U	< 0.74 U	< 0.60 U	< 0.70 U	< 0.58 U	< 0.52 U	< 0.47 U	< 0.57 U	< 0.46 U	< 0.47 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.54 UJ	< 0.48 U	< 0.74 U	< 0.60 UJ	< 0.70 U	< 0.58 U	< 0.52 UJ	< 0.47 UJ	< 0.57 UJ	< 0.46 UJ	< 0.47 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.54 UJ	< 0.48 U	< 0.74 U	< 0.60 UJ	< 0.70 U	< 0.58 U	< 0.52 U	< 0.47 U	< 0.57 U	< 0.46 U	< 0.47 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.23 J**	**0.25 J**	< 1.5 U	**0.33 J**	**0.56 J**	**0.32 J**	R	< 0.95 UJ	R	< 0.92 UJ	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 UJ	< 0.24 U	< 0.28 UJ	< 0.23 UJ	< 0.24 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	R	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.27 UJ	**0.086 J**	**0.16 J**	< 0.30 UJ	**0.38**	< 0.29 UJ	**0.45**	**0.11 J**	**0.098 J**	< 0.23 U	< 0.24 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.27 UJ	< 0.24 U	< 0.37 U	< 0.30 U	**0.10 J**	< 0.29 U	< 0.26 U	**0.083 J**	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.15 J**	**0.073 J**	< 0.37 U	< 0.30 UJ	**0.40 J**	< 0.29 UJ	**0.18 J**	**0.068 J**	**0.091 J**	**0.096 J**	**0.071 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.20 J**	**0.21 J**	**0.28 J**	**0.27 J**	< 0.35 UJ	< 0.29 UJ	**0.20 J**	**0.12 J**	**0.23 J**	**0.084 J**	**0.15 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		< 0.27 U	**0.14 J**	< 0.37 U	**0.25 J**	**0.56 J**	< 0.29 UJ	< 0.26 U	**0.27**	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.27 U	< 0.24 U	< 0.37 U	< 0.30 U	< 0.35 UJ	< 0.29 UJ	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.54 UJ	< 0.48 U	< 0.74 U	< 0.60 UJ	< 0.70 U	< 0.58 U	< 0.52 U	**0.16 J**	< 0.57 U	< 0.46 U	< 0.47 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.27 UJ	< 0.24 U	< 0.37 U	< 0.30 UJ	R	R	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.27 UJ	< 0.24 U	< 0.37 U	< 0.30 UJ	R	R	< 0.26 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.098 J**	< 0.24 U	< 0.37 U	< 0.30 U	**0.29 J**	< 0.29 UJ	**0.10 J**	< 0.24 U	< 0.28 U	< 0.23 U	< 0.24 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	008A-NS	008A-NS	008A-R	008A-R	008A-SD	008A-SD	009D-R	009D-R	009D-SD	009D-SD	010C-R
				Sample ID	008A-NS-0-2	008A-NS-2-12	008A-R-0-2	008A-R-2-12	008A-SD-0-2	008A-SD-2-12	009D-R-0-2	009D-R-2-12	009D-SD-0-2	009D-SD-2-12	010C-R-0-2
				Sample Date	11/30/2023 8:30:00 AM	11/30/2023 8:35:00 AM	11/30/2023 9:00:00 AM	11/30/2023 9:05:00 AM	11/30/2023 8:45:00 AM	11/30/2023 8:50:00 AM	12/4/2023 2:05:00 PM	12/4/2023 2:10:00 PM	12/4/2023 1:50:00 PM	12/4/2023 1:55:00 PM	11/29/2023 11:05:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD77883-21	JD77883-22	JD77883-25	JD77883-26	JD77883-23	JD77883-24	JD78193-9	JD78193-10	JD78193-7	JD78193-8	JD77883-9
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%		**80.2**	**81.2**	**43.8**	**39.1**	**86.3**	**72.1**	**24.5**	**55.0**	**22.6**	**53.5**	**74.0**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg		< 0.98 U	< 0.97 U	< 1.8 U	< 2.0 U	< 0.93 U	< 1.1 U	< 3.3 U	< 1.4 U	< 3.5 U	< 1.5 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg		< 0.98 U	< 0.97 U	< 1.8 U	< 2.0 U	< 0.93 U	< 1.1 U	< 3.3 U	< 1.4 U	< 3.5 U	< 1.5 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg		< 0.98 U	< 0.97 U	< 1.8 U	< 2.0 U	< 0.93 U	< 1.1 U	< 3.3 U	< 1.4 U	< 3.5 U	< 1.5 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg		< 0.98 U	< 0.97 U	< 1.8 U	< 2.0 U	< 0.93 U	< 1.1 U	< 3.3 U	< 1.4 U	< 3.5 U	< 1.5 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg		< 6.1 U	< 6.0 U	< 11 U	< 13 U	< 5.8 U	< 6.9 U	< 20 U	< 8.9 U	< 22 U	< 9.3 U	< 6.8 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg		< 6.1 U	< 6.0 U	< 11 U	< 13 U	< 5.8 U	< 6.9 U	< 20 U	< 8.9 U	< 22 U	< 9.3 U	< 6.8 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg		< 1.2 UJ	< 1.2 UJ	< 2.3 UJ	< 2.5 UJ	< 1.2 UJ	< 1.4 UJ	< 4.1 UJ	< 1.8 UJ	< 4.3 UJ	< 1.9 UJ	< 1.4 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg		< 0.98 U	< 0.97 U	< 1.8 U	< 2.0 U	< 0.93 U	< 1.1 U	< 3.3 U	< 1.4 U	< 3.5 U	< 1.5 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg		< 0.98 U	< 0.97 U	< 1.8 U	< 2.0 U	< 0.93 U	< 1.1 U	< 3.3 U	< 1.4 U	< 3.5 U	< 1.5 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg		< 0.98 U	< 0.97 U	< 1.8 U	< 2.0 U	< 0.93 U	< 1.1 U	< 3.3 U	< 1.4 U	< 3.5 U	< 1.5 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg		< 2.4 U	< 2.4 U	< 4.6 U	< 5.0 U	< 2.3 U	< 2.8 U	< 8.2 U	< 3.6 U	< 8.7 U	< 3.7 U	< 2.7 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 UJ	< 0.36 UJ	< 0.87 UJ	< 0.37 UJ	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg		< 2.4 U	< 2.4 U	< 4.6 U	< 5.0 U	< 2.3 U	< 2.8 U	< 8.2 U	< 3.6 U	< 8.7 U	< 3.7 U	< 2.7 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg		< 0.49 U	< 0.48 U	< 0.91 U	< 1.0 U	< 0.46 U	< 0.55 U	< 1.6 U	< 0.71 U	< 1.7 U	< 0.75 U	< 0.54 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg		< 0.49 U	< 0.48 U	< 0.91 U	< 1.0 U	< 0.46 U	< 0.55 U	< 1.6 U	< 0.71 U	< 1.7 U	< 0.75 U	**0.043 J**
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg		< 0.49 UJ	< 0.48 UJ	< 0.91 UJ	< 1.0 UJ	< 0.46 UJ	< 0.55 UJ	< 1.6 UJ	< 0.71 UJ	< 1.7 UJ	< 0.75 UJ	< 0.54 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg		< 0.49 U	< 0.48 U	< 0.91 UJ	< 1.0 UJ	< 0.46 U	< 0.55 U	< 1.6 UJ	< 0.71 U	< 1.7 UJ	< 0.75 U	< 0.54 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	**0.53 J**	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg		< 0.98 UJ	< 0.97 UJ	R	R	< 0.93 U	**0.36 J**	R	< 1.4 UJ	R	< 1.5 UJ	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg		**0.090 J**	< 0.24 U	**0.35 J**	**0.42 J**	< 0.23 U	< 0.28 U	**0.90**	< 0.36 U	< 0.87 U	< 0.37 U	**0.18 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	**0.55 J**	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg		**0.12 J**	**0.12 J**	**0.27 J**	**0.38 J**	**0.15 J**	**0.26 J**	**1.5**	**0.26 J**	**0.32 J**	**0.30 J**	**0.18 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg		**0.048 J**	< 0.24 U	**0.082 J**	**0.21 J**	< 0.23 U	**0.15 J**	**1.1**	< 0.36 U	< 0.87 U	**0.18 J**	< 0.27 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg		**0.14 J**	**0.088 J**	< 0.46 U	**0.49 J**	**0.079 J**	**0.19 J**	**2.4**	**0.14 J**	**0.38 J**	**0.23 J**	**0.17 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	**0.11 J**	**0.15 J**	**0.54**	**0.77**	**0.16 J**	**0.29**	**6.2**	**0.50**	**0.55 J**	**0.68**	**0.23 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	< 0.24 U	< 0.24 U	< 0.46 U	**0.42 J**	**0.11 J**	**0.44**	**3.5**	**0.52**	< 0.87 U	**0.79**	**0.18 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg		< 0.49 U	< 0.48 U	< 0.91 UJ	< 1.0 UJ	< 0.46 U	**0.13 J**	**2.5 J**	**0.30 J**	**0.62 J**	**0.28 J**	< 0.54 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	< 0.82 U	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg		< 0.24 U	< 0.24 U	< 0.46 U	< 0.50 U	< 0.23 U	< 0.28 U	**0.43 J**	< 0.36 U	< 0.87 U	< 0.37 U	< 0.27 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg		< 0.24 U	< 0.24 U	**0.20 J**	**0.50**	< 0.23 U	< 0.28 U	**1.0**	< 0.36 U	< 0.87 U	< 0.37 U	**0.094 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	010C-R	010C-SD	010C-SD	011-R	011-R	011-SD	011-SD	012-R	012-R	012-SD	012-SD
				Sample ID	010C-R-2-12	010C-SD-0-2	010C-SD-2-12	011-R-0-2	011-R-2-12	011-SD-0-2	011-SD-2-12	012-R-0-2	012-R-2-12	012-SD-0-2	012-SD-2-12
				Sample Date	11/29/2023 11:10:00 AM	11/29/2023 10:45:00 AM	11/29/2023 10:50:00 AM	11/8/2023 12:45:00 PM	11/8/2023 12:50:00 PM	11/8/2023 12:20:00 PM	11/8/2023 12:25:00 PM	11/8/2023 11:00:00 AM	11/8/2023 11:05:00 AM	11/8/2023 10:45:00 AM	11/8/2023 10:50:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD77883-10	JD77883-7	JD77883-8	JD76441-12	JD76441-13	JD76441-10	JD76441-11	JD76441-8	JD76441-9	JD76441-6	JD76441-7
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**77.9**	**75.6**	**81.7**	**73.1**	**85.4**	**80.2**	**81.0**	**90.9**	**70.3**	**63.0**	**88.3**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.0 U	< 1.0 U	< 0.96 U	< 1.1 U	< 0.92 U	< 1.0 U	< 0.99 U	< 0.88 U	< 1.1 U	< 1.2 U	< 0.91 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.0 U	< 1.0 U	< 0.96 U	< 1.1 U	< 0.92 U	< 1.0 U	< 0.99 U	< 0.88 U	< 1.1 U	< 1.2 U	< 0.91 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.0 U	< 1.0 U	< 0.96 U	< 1.1 U	< 0.92 U	< 1.0 U	< 0.99 U	< 0.88 U	< 1.1 U	< 1.2 U	< 0.91 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.0 U	< 1.0 U	< 0.96 UJ	< 1.1 U	< 0.92 U	< 1.0 U	< 0.99 U	< 0.88 U	< 1.1 U	< 1.2 U	< 0.91 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.3 U	< 6.5 U	< 6.0 U	< 6.8 U	< 5.7 U	< 6.2 U	< 6.2 U	< 5.5 U	< 7.1 U	< 7.8 U	< 5.7 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.3 U	< 6.5 U	< 6.0 U	< 6.8 U	< 5.7 U	< 6.2 U	< 6.2 U	< 5.5 U	< 7.1 U	< 7.8 U	< 5.7 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.3 UJ	< 1.2 UJ	< 1.4 UJ	< 1.1 UJ	< 1.2 U	< 1.2 U	< 1.1 U	< 1.4 U	< 1.6 UJ	< 1.1 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.0 U	< 1.0 U	< 0.96 U	< 1.1 U	< 0.92 U	< 1.0 U	< 0.99 U	< 0.88 U	< 1.1 U	< 1.2 U	< 0.91 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.0 U	< 1.0 U	< 0.96 U	< 1.1 U	< 0.92 U	< 1.0 U	< 0.99 U	< 0.88 U	< 1.1 U	< 1.2 U	< 0.91 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.0 U	< 1.0 U	< 0.96 U	< 1.1 U	< 0.92 U	< 1.0 U	< 0.99 U	< 0.88 U	< 1.1 U	< 1.2 U	< 0.91 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 2.6 U	< 2.4 U	< 2.7 U	< 2.3 U	< 2.5 U	< 2.5 U	< 2.2 U	< 2.8 U	< 3.1 U	< 2.3 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 U	< 2.6 U	< 2.4 U	< 2.7 U	< 2.3 U	< 2.5 U	< 2.5 U	< 2.2 U	< 2.8 U	< 3.1 U	< 2.3 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.50 U	< 0.52 U	< 0.48 U	< 0.55 U	< 0.46 U	< 0.50 U	< 0.49 U	< 0.44 U	< 0.57 U	< 0.62 U	< 0.45 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.50 U	< 0.52 U	< 0.48 U	< 0.55 U	< 0.46 U	< 0.50 U	< 0.49 U	< 0.44 U	< 0.57 U	< 0.62 U	< 0.45 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.50 UJ	< 0.52 UJ	< 0.48 UJ	< 0.55 UJ	< 0.46 UJ	< 0.50 U	< 0.49 U	< 0.44 U	< 0.57 U	< 0.62 UJ	< 0.45 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.50 UJ	< 0.52 U	< 0.48 UJ	< 0.55 UJ	< 0.46 UJ	< 0.50 U	< 0.49 U	< 0.44 U	< 0.57 U	< 0.62 UJ	< 0.45 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	< 1.0 UJ	R	R	R	< 1.0 U	< 0.99 U	**0.51 J**	**0.21 J**	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.25 U	**0.11 J**	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	**0.12 J**	< 0.23 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 UJ	< 0.23 UJ	< 0.25 UJ	< 0.25 UJ	< 0.22 UJ	< 0.28 UJ	< 0.31 UJ	< 0.23 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.15 J**	**0.13 J**	**0.098 J**	**0.13 J**	**0.084 J**	< 0.25 U	< 0.25 U	**0.13 J**	**0.13 J**	< 0.31 U	**0.12 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.25 U	**0.079 J**	< 0.24 U	< 0.27 U	**0.060 J**	< 0.25 U	< 0.25 U	**0.052 J**	**0.065 J**	< 0.31 U	< 0.23 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.13 J**	**0.16 J**	**0.062 J**	**0.12 J**	**0.072 J**	< 0.25 U	< 0.25 U	**0.11 J**	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.22 J**	**0.16 J**	**0.14 J**	**0.20 J**	**0.13 J**	**0.088 J**	< 0.25 U	**0.23**	**0.24 J**	**0.30 J**	< 0.23 U
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.24 J**	**0.13 J**	< 0.24 U	< 0.27 U	**0.12 J**	< 0.25 U	< 0.25 U	**0.14 J**	**0.13 J**	< 0.31 U	**0.14 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.50 UJ	< 0.52 U	< 0.48 UJ	< 0.55 UJ	< 0.46 UJ	< 0.50 U	< 0.49 U	**0.11 J**	< 0.57 U	**0.35 J**	< 0.45 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.22 U	< 0.28 U	< 0.31 U	< 0.23 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.25 U	< 0.26 U	< 0.24 U	**0.14 J**	< 0.23 U	< 0.25 U	< 0.25 U	**0.099 J**	< 0.28 U	**0.18 J**	< 0.23 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	013-R	013-R	013-SD	013-SD	014-NS	014-NS	014-R	014-R	014-SD	014-SD	015B-R
				Sample ID	013-R-0-2	013-R-2-12	013-SD-0-2	013-SD-2-12	014-NS-0-2	014-NS-2-12	014-R-0-2	014-R-2-12	014-SD-0-2	014-SD-2-12	015B-R-0-2
				Sample Date	11/28/2023 2:40:00 PM	11/28/2023 2:45:00 PM	11/28/2023 3:00:00 PM	11/28/2023 3:05:00 PM	11/8/2023 2:30:00 PM	11/8/2023 2:35:00 PM	11/8/2023 2:00:00 PM	11/8/2023 2:05:00 PM	11/8/2023 1:45:00 PM	11/8/2023 1:50:00 PM	11/8/2023 8:30:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD77742-26	JD77742-27	JD77742-28	JD77742-29	JD76441-18	JD76441-19	JD76441-16	JD76441-17	JD76441-14	JD76441-15	JD76441-4
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**72.6**	**75.6**	**74.7**	**84.3**	**94.8**	**90.7**	**72.5**	**83.8**	**71.8**	**88.5**	**52.3**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 0.93 U	< 0.84 U	< 0.86 U	< 1.1 U	< 0.94 U	< 1.1 U	< 0.90 U	< 1.5 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 0.93 U	< 0.84 U	< 0.86 U	< 1.1 U	< 0.94 U	< 1.1 U	< 0.90 U	< 1.5 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 0.93 U	< 0.84 U	< 0.86 U	< 1.1 U	< 0.94 U	< 1.1 U	< 0.90 U	< 1.5 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 0.93 U	< 0.84 U	< 0.86 U	< 1.1 U	< 0.94 U	< 1.1 U	< 0.90 U	< 1.5 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.8 U	< 6.6 U	< 6.6 U	< 5.8 U	< 5.3 U	< 5.4 U	< 6.8 U	< 5.8 U	< 6.8 U	< 5.6 U	< 9.4 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.8 U	< 6.6 U	< 6.6 U	< 5.8 U	< 5.3 U	< 5.4 U	< 6.8 U	< 5.8 U	< 6.8 U	< 5.6 U	< 9.4 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.4 U	< 1.3 U	< 1.3 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.4 U	< 1.2 U	< 1.4 U	< 1.1 U	< 1.9 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 0.93 U	< 0.84 U	< 0.86 U	< 1.1 U	< 0.94 U	< 1.1 U	< 0.90 U	< 1.5 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 0.93 U	< 0.84 U	< 0.86 U	< 1.1 U	< 0.94 U	< 1.1 U	< 0.90 U	< 1.5 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 0.93 U	< 0.84 U	< 0.86 U	< 1.1 U	< 0.94 U	< 1.1 U	< 0.90 U	< 1.5 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 UJ	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.7 U	< 2.6 U	< 2.6 U	< 2.3 U	< 2.1 U	< 2.2 U	< 2.7 U	< 2.3 U	< 2.7 U	< 2.3 U	< 3.7 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 UJ	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.7 U	< 2.6 U	< 2.6 U	< 2.3 U	< 2.1 U	< 2.2 U	< 2.7 U	< 2.3 U	< 2.7 U	< 2.3 U	< 3.7 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.54 U	< 0.53 U	< 0.52 U	< 0.47 U	< 0.42 U	< 0.43 U	< 0.54 U	< 0.47 U	< 0.55 U	< 0.45 U	< 0.75 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.54 U	< 0.53 U	< 0.52 U	< 0.47 U	< 0.42 U	< 0.43 U	< 0.54 U	< 0.47 U	< 0.55 U	< 0.45 U	< 0.75 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.54 U	< 0.53 U	< 0.52 U	< 0.47 U	< 0.42 U	< 0.43 U	< 0.54 U	< 0.47 U	< 0.55 U	< 0.45 U	< 0.75 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.54 U	< 0.53 U	< 0.52 U	< 0.47 U	< 0.42 U	< 0.43 U	< 0.54 U	< 0.47 U	< 0.55 U	< 0.45 U	< 0.75 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	**0.083 J**	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 0.93 U	< 0.84 UJ	< 0.86 U	**0.62 J**	**0.26 J**	< 1.1 UJ	**0.29 J**	**0.27 J**
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	**0.15 J**	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.27 UJ	< 0.26 UJ	< 0.26 UJ	< 0.23 UJ	< 0.21 U	< 0.22 UJ	< 0.27 UJ	< 0.23 UJ	< 0.27 UJ	< 0.23 U	< 0.37 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.12 J**	**0.10 J**	**0.12 J**	< 0.23 U	< 0.21 U	< 0.22 U	**0.16 J**	**0.13 J**	**0.11 J**	**0.12 J**	**0.23 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	**0.78**	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.27 U	**0.063 J**	< 0.26 U	< 0.23 U	**0.17 J**	< 0.22 U	< 0.27 U	**0.064 J**	< 0.27 U	< 0.23 U	**0.091 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.24 J**	**0.19 J**	**0.15 J**	**0.088 J**	< 0.21 U	**0.086 J**	**0.14 J**	**0.11 J**	**0.086 J**	**0.098 J**	**0.15 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.59**	**0.46**	**0.31**	**0.22 J**	**10.8**	**0.15 J**	**0.47**	**0.29**	**0.10 J**	**0.13 J**	**0.16 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		< 0.27 U	**0.18 J**	**0.24 J**	**0.11 J**	**0.11 J**	< 0.22 U	< 0.27 U	**0.20 J**	< 0.27 U	**0.18 J**	< 0.37 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.54 U	< 0.53 U	< 0.52 U	< 0.47 U	< 0.42 U	< 0.43 U	< 0.54 U	< 0.47 U	< 0.55 U	**0.084 J**	< 0.75 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	< 0.27 U	< 0.23 U	< 0.27 U	< 0.23 U	< 0.37 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.22 U	**0.17 J**	< 0.23 U	**0.19 J**	< 0.23 U	**0.16 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	015B-R	015B-SD	015B-SD	015B-SD	016E-R	016E-R	016E-SD	016E-SD	017C-R	017C-R	017C-SD
				Sample ID	015B-R-2-12	015B-SD-0-2	015B-SD-2-12	FD-11082023	016E-R-0-2	016E-R-2-12	016E-SD-0-2	016E-SD-2-12	017C-R-0-2	017C-R-2-12	017C-SD-0-2
				Sample Date	11/8/2023 8:35:00 AM	11/8/2023 8:10:00 AM	11/8/2023 8:15:00 AM	11/8/2023 8:15:00 AM	11/9/2023 10:20:00 AM	11/9/2023 10:25:00 AM	11/9/2023 10:00:00 AM	11/9/2023 10:05:00 AM	11/29/2023 12:25:00 PM	11/29/2023 12:30:00 PM	11/29/2023 12:15:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD76441-5	JD76441-1	JD76441-2	JD76441-3	JD76818-3	JD76818-4	JD76818-1	JD76818-2	JD77883-13	JD77883-14	JD77883-11
				Sample Type	N	N	N	FD	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**73.5**	**48.3**	**67.7**	**64.0**	**55.3**	**75.8**	**66.4**	**77.5**	**67.6**	**72.2**	**71.6**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 1.6 U	< 1.2 U	< 1.2 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 1.6 U	< 1.2 U	< 1.2 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 1.6 U	< 1.2 U	< 1.2 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 1.6 U	< 1.2 U	< 1.2 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.8 U	< 10 U	< 7.4 U	< 7.7 U	< 9.0 U	< 6.6 U	< 7.5 U	< 6.3 U	< 7.3 U	< 6.8 U	< 6.8 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.8 U	< 10 U	< 7.4 U	< 7.7 U	< 9.0 U	< 6.6 U	< 7.5 U	< 6.3 U	< 7.3 U	< 6.8 U	< 6.8 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.4 U	< 2.0 U	< 1.5 U	< 1.5 U	< 1.8 U	< 1.3 U	< 1.5 U	< 1.3 U	< 1.5 UJ	< 1.4 UJ	< 1.4 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 1.6 U	< 1.2 U	< 1.2 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 1.6 U	< 1.2 U	< 1.2 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 1.6 U	< 1.2 U	< 1.2 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.7 U	< 4.1 U	< 3.0 U	< 3.1 U	< 3.6 U	< 2.6 U	< 3.0 U	< 2.5 U	< 2.9 U	< 2.7 U	< 2.7 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.7 U	< 4.1 U	< 3.0 U	< 3.1 U	< 3.6 U	< 2.6 U	< 3.0 U	< 2.5 U	< 2.9 U	< 2.7 U	< 2.7 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.54 U	< 0.81 U	< 0.59 U	< 0.61 U	< 0.72 U	< 0.53 U	< 0.60 U	< 0.51 U	< 0.58 U	< 0.54 U	< 0.55 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.54 U	< 0.81 U	< 0.59 U	< 0.61 U	< 0.72 U	< 0.53 U	< 0.60 U	< 0.51 U	< 0.58 U	< 0.54 U	< 0.55 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.54 U	< 0.81 U	< 0.59 U	< 0.61 U	< 0.72 U	< 0.53 U	< 0.60 U	< 0.51 U	< 0.58 UJ	< 0.54 UJ	< 0.55 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.54 U	< 0.81 U	< 0.59 U	< 0.61 U	< 0.72 U	< 0.53 U	< 0.60 U	< 0.51 U	< 0.58 U	< 0.54 U	< 0.55 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	**0.13 J**	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.29 J**	**0.78 J**	< 1.2 U	**0.23 J**	**1.5**	**0.31 J**	**1.6 J**	< 1.0 U	< 1.2 UJ	< 1.1 UJ	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	**0.27 J**	< 0.25 U	**0.19 J**	**0.14 J**	**0.18 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.27 UJ	< 0.41 UJ	< 0.30 UJ	< 0.31 UJ	< 0.36 UJ	< 0.26 UJ	< 0.30 UJ	< 0.25 UJ	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.13 J**	**0.19 J**	**0.095 J**	**0.12 J**	**0.53**	**0.13 J**	**0.55**	**0.10 J**	**0.20 J**	**0.22 J**	**0.11 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.089 J**	< 0.41 U	< 0.30 U	< 0.31 U	**0.36**	< 0.26 U	**0.24 J**	< 0.25 U	< 0.29 U	**0.17 J**	< 0.27 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.076 J**	**0.17 J**	< 0.30 U	< 0.31 U	**0.49**	**0.072 J**	**0.70**	< 0.25 U	**0.20 J**	**0.30**	**0.20 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.11 J**	**0.24 J**	**0.14 J**	**0.25 J**	**1.2**	**0.17 J**	**0.93**	< 0.25 U	**0.58**	**0.48**	**0.44**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		< 0.27 U	**0.16 J**	< 0.30 U	< 0.31 U	**1.3**	**0.16 J**	**0.91**	**0.11 J**	**0.26 J**	**0.54**	**0.16 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.54 U	**0.14 J**	< 0.59 U	< 0.61 U	**0.35 J**	< 0.53 U	**0.34 J**	< 0.51 U	**0.22 J**	**0.13 J**	**0.40 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.27 U	< 0.41 U	< 0.30 U	< 0.31 U	< 0.36 U	< 0.26 U	< 0.30 U	< 0.25 U	< 0.29 U	< 0.27 U	< 0.27 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.27 U	**0.19 J**	< 0.30 U	< 0.31 U	**0.22 J**	< 0.26 U	**0.24 J**	< 0.25 U	**0.18 J**	< 0.27 U	**0.085 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	017C-SD	018-R	018-R	018-SD	018-SD	019B-NS	019B-NS	019B-R	019B-R	019B-SD	019B-SD
				Sample ID	017C-SD-2-12	018-R-0-2	018-R-2-12	018-SD-0-2	018-SD-2-12	019B-NS-0-2	019B-NS-2-12	019B-R-0-2	019B-R-2-12	019B-SD-0-2	019B-SD-2-12
				Sample Date	11/29/2023 12:20:00 PM	11/30/2023 11:05:00 AM	11/30/2023 11:10:00 AM	11/30/2023 10:50:00 AM	11/30/2023 10:55:00 AM	11/29/2023 9:00:00 AM	11/29/2023 9:05:00 AM	11/29/2023 9:30:00 AM	11/29/2023 9:35:00 AM	11/29/2023 9:15:00 AM	11/29/2023 9:20:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD77883-12	JD77883-33	JD77883-34	JD77883-31	JD77883-32	JD77883-1	JD77883-2	JD77883-5	JD77883-6	JD77883-3	JD77883-4
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**78.0**	**72.0**	**75.6**	**72.4**	**78.4**	**70.8**	**79.3**	**64.4**	**73.2**	**73.7**	**77.9**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.3 U	< 6.9 U	< 6.6 U	< 6.9 U	< 6.4 U	< 6.9 U	< 6.2 U	< 7.6 U	< 6.7 U	< 6.7 U	< 6.4 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.3 U	< 6.9 U	< 6.6 U	< 6.9 U	< 6.4 U	< 6.9 U	< 6.2 U	< 7.6 U	< 6.7 U	< 6.7 U	< 6.4 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.4 UJ	< 1.3 UJ	< 1.4 UJ	< 1.3 UJ	< 1.4 UJ	< 1.2 UJ	< 1.5 UJ	< 1.3 UJ	< 1.3 UJ	< 1.3 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 2.8 U	< 2.6 U	< 2.8 U	< 2.6 U	< 2.8 U	< 2.5 U	< 3.0 U	< 2.7 U	< 2.7 U	< 2.6 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 U	< 2.8 U	< 2.6 U	< 2.8 U	< 2.6 U	< 2.8 U	< 2.5 U	< 3.0 U	< 2.7 U	< 2.7 U	< 2.6 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.50 U	< 0.56 U	< 0.53 U	< 0.55 U	< 0.51 U	< 0.55 U	< 0.49 U	< 0.61 U	< 0.54 U	< 0.53 U	< 0.51 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.50 U	< 0.56 U	< 0.53 U	< 0.55 U	< 0.51 U	< 0.55 U	< 0.49 U	< 0.61 U	< 0.54 U	< 0.53 U	< 0.51 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.50 UJ	< 0.56 UJ	< 0.53 UJ	< 0.55 UJ	< 0.51 UJ	< 0.55 UJ	< 0.49 UJ	< 0.61 UJ	< 0.54 UJ	< 0.53 UJ	< 0.51 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.50 U	< 0.56 U	< 0.53 U	< 0.55 U	< 0.51 U	< 0.55 U	< 0.49 U	< 0.61 UJ	< 0.54 U	< 0.53 U	< 0.51 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.25 J**	< 1.1 UJ	< 1.1 UJ	**0.52 J**	< 1.0 UJ	< 1.1 UJ	< 0.99 UJ	R	R	< 1.1 UJ	< 1.0 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.12 J**	< 0.28 U	< 0.26 U	**0.12 J**	< 0.26 U	**0.16 J**	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	**0.19 J**	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.13 J**	**0.16 J**	**0.13 J**	**0.21 J**	**0.12 J**	< 0.28 U	< 0.25 U	**0.19 J**	**0.14 J**	**0.15 J**	**0.11 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.058 J**	**0.11 J**	< 0.26 U	**0.17 J**	**0.11 J**	**0.050 J**	< 0.25 U	**0.15 J**	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.12 J**	**0.20 J**	**0.14 J**	**0.22 J**	**0.11 J**	**0.081 J**	< 0.25 U	**0.21 J**	**0.098 J**	**0.10 J**	**0.10 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.42**	**0.38**	**0.13 J**	**0.59**	**0.41**	**0.18 J**	**0.14 J**	**0.21 J**	**0.19 J**	**0.55**	**0.28**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.17 J**	**0.18 J**	**0.19 J**	**0.33**	**0.25 J**	< 0.28 U	**0.11 J**	**0.19 J**	**0.13 J**	**0.17 J**	**0.16 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.50 U	**0.18 J**	< 0.53 U	**0.13 J**	< 0.51 U	< 0.55 U	< 0.49 U	< 0.61 UJ	< 0.54 U	< 0.53 U	< 0.51 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.11 J**	< 0.28 U	< 0.26 U	**0.085 J**	< 0.26 U	**0.085 J**	< 0.25 U	< 0.30 U	< 0.27 U	< 0.27 U	< 0.26 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	020B-R	020B-R	020B-SD	020B-SD	020B-SD	021-R	021-R	021-SD	021-SD	022A-R	022A-R
				Sample ID	020B-R-0-2	020B-R-2-12	020B-SD-0-2	020B-SD-2-12	FD-11282023	021-R-0-2	021-R-2-12	021-SD-0-2	021-SD-2-12	022A-R-0-2	022A-R-2-12
				Sample Date	11/28/2023 1:40:00 PM	11/28/2023 1:45:00 PM	11/28/2023 1:25:00 PM	11/28/2023 1:30:00 PM	11/28/2023 1:30:00 PM	11/6/2023 4:00:00 PM	11/6/2023 4:05:00 PM	11/6/2023 3:45:00 PM	11/6/2023 3:50:00 PM	11/10/2023 9:35:00 AM	11/10/2023 9:40:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD77742-24	JD77742-25	JD77742-21	JD77742-22	JD77742-23	JD76288-9	JD76288-10	JD76288-7	JD76288-8	JD76818-23	JD76818-24
				Sample Type	N	N	N	N	FD	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**36.6**	**56.7**	**70.1**	**72.0**	**76.0**	**62.1**	**73.8**	**90.0**	**90.4**	**71.2**	**81.3**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 2.2 U	< 1.4 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.88 U	< 1.1 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 2.2 U	< 1.4 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.88 U	< 1.1 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 2.2 U	< 1.4 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.88 U	< 1.1 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 2.2 U	< 1.4 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.88 U	< 1.1 U	< 0.98 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 14 U	< 8.6 U	< 7.1 U	< 6.9 U	< 6.4 U	< 7.9 U	< 6.8 U	< 5.4 U	< 5.5 U	< 7.0 U	< 6.2 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 14 U	< 8.6 U	< 7.1 U	< 6.9 U	< 6.4 U	< 7.9 U	< 6.8 U	< 5.4 U	< 5.5 U	< 7.0 U	< 6.2 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 2.7 UJ	< 1.7 UJ	< 1.4 U	< 1.4 U	< 1.3 U	< 1.6 UJ	< 1.4 UJ	< 1.1 UJ	< 1.1 UJ	< 1.4 U	< 1.2 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 2.2 U	< 1.4 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.88 U	< 1.1 U	< 0.98 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 2.2 U	< 1.4 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.88 U	< 1.1 U	< 0.98 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 2.2 U	< 1.4 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.88 U	< 1.1 U	< 0.98 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 UJ	< 0.27 UJ	< 0.22 UJ	< 0.22 UJ	< 0.28 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 5.5 U	< 3.5 U	< 2.9 U	< 2.8 U	< 2.6 U	< 3.2 UJ	< 2.7 UJ	< 2.2 U	< 2.2 UJ	< 2.8 UJ	< 2.5 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 5.5 U	< 3.5 U	< 2.9 U	< 2.8 U	< 2.6 U	< 3.2 U	< 2.7 U	< 2.2 U	< 2.2 U	< 2.8 U	< 2.5 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 1.1 U	< 0.69 U	< 0.57 U	< 0.56 U	< 0.52 U	< 0.63 U	< 0.54 U	< 0.44 U	< 0.44 U	< 0.56 U	< 0.49 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 1.1 U	< 0.69 U	< 0.57 U	< 0.56 U	< 0.52 U	< 0.63 U	< 0.54 U	< 0.44 U	< 0.44 U	< 0.56 U	< 0.49 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 1.1 UJ	< 0.69 UJ	< 0.57 U	< 0.56 U	< 0.52 U	< 0.63 UJ	< 0.54 UJ	< 0.44 UJ	< 0.44 UJ	< 0.56 U	< 0.49 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 1.1 UJ	< 0.69 UJ	< 0.57 U	< 0.56 U	< 0.52 U	< 0.63 U	< 0.54 U	< 0.44 U	< 0.44 U	< 0.56 U	< 0.49 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			**0.28 J**	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	**0.15 J**	< 0.27 U	**0.54**	**0.48**	< 0.28 U	< 0.25 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	**0.37 J**	< 1.1 UJ	< 1.1 U	< 1.0 U	R	R	**0.38 J**	**0.47 J**	**0.22 J**	**0.15 J**
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.32 J**	< 0.35 U	**0.12 J**	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	**0.098 J**	< 0.22 U	**0.19 J**	< 0.25 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.55 UJ	< 0.35 UJ	< 0.29 UJ	< 0.28 UJ	< 0.26 UJ	< 0.32 UJ	< 0.27 UJ	< 0.22 UJ	< 0.22 UJ	< 0.28 U	< 0.25 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.58**	**0.21 J**	**0.097 J**	**0.12 J**	**0.10 J**	**0.33**	< 0.27 U	**0.13 J**	< 0.22 U	< 0.28 U	**0.12 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.52 J**	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	**0.36**	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.76**	**0.21 J**	**0.23 J**	**0.14 J**	**0.17 J**	**0.27 J**	< 0.27 U	**0.15 J**	< 0.22 U	**0.12 J**	**0.11 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	**1.8**	**0.40**	**0.33**	**0.26 J**	**0.21 J**	**0.80**	**0.10 J**	**0.28**	**0.090 J**	**0.26 J**	**0.28 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	**1.2**	**0.37**	< 0.29 U	**0.13 J**	**0.13 J**	**1.0**	< 0.27 U	< 0.22 U	**0.097 J**	< 0.28 U	**0.24 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 U	< 0.25 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.92 J**	**0.12 J**	< 0.57 U	< 0.56 U	< 0.52 U	**0.42 J**	< 0.54 U	**0.30 J**	**0.33 J**	< 0.56 U	< 0.49 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.55 U	< 0.35 UJ	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 UJ	< 0.25 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.55 U	< 0.35 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.22 U	< 0.22 U	< 0.28 UJ	< 0.25 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.39 J**	< 0.35 U	< 0.29 U	**0.086 J**	< 0.26 U	< 0.32 U	< 0.27 U	**0.16 J**	< 0.22 U	**0.22 J**	< 0.25 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	022A-SD	022A-SD	023-R	023-R	023-SD	023-SD	024-NS	024-NS	024–R	024–R	024-SD
				Sample ID	022A-SD-0-2	022A-SD-2-12	023-R-0-2	023-R-2-12	023-SD-0-2	023-SD-2-12	024-NS-0-2	024-NS-2-12	024–R-0-2	024–R-2-12	024-SD-0-2
				Sample Date	11/10/2023 9:10:00 AM	11/10/2023 9:15:00 AM	11/30/2023 10:00:00 AM	11/30/2023 10:05:00 AM	11/30/2023 9:45:00 AM	11/30/2023 9:50:00 AM	11/28/2023 9:05:00 AM	11/28/2023 9:10:00 AM	11/28/2023 9:35:00 AM	11/28/2023 9:40:00 AM	11/28/2023 9:20:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD76818-21	JD76818-22	JD77883-29	JD77883-30	JD77883-27	JD77883-28	JD77742-11	JD77742-12	JD77742-15	JD77742-16	JD77742-13
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**57.7**	**76.6**	**57.5**	**66.7**	**77.7**	**83.6**	**80.0**	**76.6**	**23.8**	**78.0**	**81.3**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.4 U	< 1.0 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.94 U	< 0.98 U	< 1.0 U	< 3.4 U	< 1.0 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.4 U	< 1.0 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.94 U	< 0.98 U	< 1.0 U	< 3.4 U	< 1.0 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.4 UJ	< 1.0 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.94 U	< 0.98 U	< 1.0 U	< 3.4 U	< 1.0 UJ	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.4 U	< 1.0 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.94 U	< 0.98 U	< 1.0 U	< 3.4 U	< 1.0 U	< 0.98 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 8.7 U	< 6.5 U	< 8.5 U	< 7.5 U	< 6.4 U	< 5.9 U	< 6.1 U	< 6.5 U	< 21 U	< 6.4 UJ	< 6.2 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 8.7 U	< 6.5 U	< 8.5 U	< 7.5 U	< 6.4 U	< 5.9 U	< 6.1 U	< 6.5 U	< 21 U	< 6.4 UJ	< 6.2 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.7 U	< 1.3 U	< 1.7 UJ	< 1.5 UJ	< 1.3 UJ	< 1.2 UJ	< 1.2 UJ	< 1.3 UJ	< 4.2 UJ	R	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.4 U	< 1.0 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.94 U	< 0.98 U	< 1.0 U	< 3.4 U	< 1.0 U	< 0.98 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.4 U	< 1.0 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.94 U	< 0.98 U	< 1.0 U	< 3.4 U	< 1.0 U	< 0.98 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.4 U	< 1.0 U	< 1.4 U	< 1.2 U	< 1.0 U	< 0.94 U	< 0.98 U	< 1.0 U	< 3.4 U	< 1.0 UJ	< 0.98 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 UJ	< 0.26 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.5 U	< 2.6 U	< 3.4 U	< 3.0 U	< 2.6 U	< 2.3 U	< 2.5 U	< 2.6 U	< 8.4 UJ	< 2.6 U	< 2.5 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.5 U	< 2.6 U	< 3.4 U	< 3.0 U	< 2.6 U	< 2.3 U	< 2.5 U	< 2.6 U	< 8.4 U	< 2.6 U	< 2.5 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.69 U	< 0.52 U	< 0.68 U	< 0.60 U	< 0.51 U	< 0.47 U	< 0.49 U	< 0.52 U	< 1.7 U	< 0.51 UJ	< 0.49 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.69 U	< 0.52 U	< 0.68 U	< 0.60 U	< 0.51 U	< 0.47 U	< 0.49 U	< 0.52 U	< 1.7 U	< 0.51 UJ	< 0.49 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.69 U	< 0.52 U	< 0.68 UJ	< 0.60 UJ	< 0.51 UJ	< 0.47 UJ	< 0.49 UJ	< 0.52 UJ	< 1.7 UJ	R	< 0.49 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.69 U	< 0.52 U	< 0.68 UJ	< 0.60 UJ	< 0.51 U	< 0.47 U	< 0.49 UJ	< 0.52 U	< 1.7 UJ	R	< 0.49 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.43 J**	**0.30 J**	R	< 1.2 U	< 1.0 UJ	< 0.94 UJ	R	**0.41 J**	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.35 U	< 0.26 U	**0.25 J**	**0.19 J**	**0.12 J**	< 0.23 U	**0.13 J**	**0.099 J**	**0.93**	< 0.26 U	**0.19 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 UJ	< 0.26 UJ	< 0.84 UJ	< 0.26 UJ	< 0.25 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.31 J**	**0.17 J**	**0.43**	**0.26 J**	< 0.26 U	**0.14 J**	< 0.25 U	**0.33**	**1.7**	**0.15 J**	**0.27**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 UJ	< 0.25 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.17 J**	**0.045 J**	**0.20 J**	**0.12 J**	**0.089 J**	**0.10 J**	< 0.25 U	**0.19 J**	< 0.84 U	**0.078 J**	**0.12 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.38**	**0.12 J**	**0.58**	**0.30**	**0.23 J**	**0.070 J**	**0.27**	**0.30**	**2.4**	**0.14 J**	**0.36**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.42 J**	**0.17 J**	**1.2**	**0.77**	**0.45**	**0.24**	**0.50**	**0.56**	**6.2**	**0.21 J**	**0.63**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.59**	**0.29**	**0.57**	**0.36**	**0.20 J**	**0.23**	**0.11 J**	**0.74**	**2.1**	**0.20 J**	**0.35**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.69 U	< 0.52 U	**0.47 J**	**0.19 J**	**0.14 J**	< 0.47 U	**1.2 J**	**0.16 J**	**2.1 J**	R	< 0.49 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.35 U	< 0.26 U	< 0.34 U	< 0.30 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.84 U	< 0.26 U	< 0.25 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.14 J**	**0.080 J**	**0.33 J**	**0.18 J**	< 0.26 U	< 0.23 U	**0.14 J**	< 0.26 U	**0.83 J**	< 0.26 U	**0.14 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	024-SD	025-NS	025-NS	025-R	025-R	025-SD	025-SD	026-R	026-R	026-SD	026-SD
				Sample ID	024-SD-2-12	025-NS-0-2	025-NS-2-12	025-R-0-2	025-R-2-12	025-SD-0-2	025-SD-2-12	026-R-0-2	026-R-2-12	026-SD-0-2	026-SD-2-12
				Sample Date	11/28/2023 9:25:00 AM	11/7/2023 12:45:00 PM	11/7/2023 12:50:00 PM	11/7/2023 1:20:00 PM	11/7/2023 1:25:00 PM	11/7/2023 1:00:00 PM	11/7/2023 1:05:00 PM	10/12/2023 2:25:00 PM	10/12/2023 2:30:00 PM	10/12/2023 2:15:00 PM	10/12/2023 2:20:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD77742-14	JD76288-21	JD76288-22	JD76288-25	JD76288-26	JD76288-23	JD76288-24	JD74737-70	JD74737-71	JD74737-68	JD74737-69
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**82.7**	**72.1**	**90.3**	**26.1**	**68.7**	**23.8**	**69.7**	**74.8**	**82.5**	**76.7**	**84.3**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.95 U	< 1.1 U	< 0.89 U	< 3.1 U	< 1.2 U	< 3.4 U	< 1.1 U	< 1.1 U	< 0.97 U	< 1.0 U	< 0.95 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.95 U	< 1.1 U	< 0.89 U	< 3.1 U	< 1.2 U	< 3.4 U	< 1.1 U	< 1.1 U	< 0.97 U	< 1.0 U	< 0.95 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.95 U	< 1.1 U	< 0.89 U	< 3.1 U	< 1.2 U	< 3.4 U	< 1.1 U	< 1.1 U	< 0.97 U	< 1.0 U	< 0.95 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.95 U	< 1.1 U	< 0.89 U	< 3.1 U	< 1.2 U	< 3.4 U	< 1.1 U	< 1.1 U	< 0.97 U	< 1.0 U	< 0.95 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 5.9 U	< 6.8 U	< 5.5 U	< 19 U	< 7.3 U	< 21 U	< 7.0 U	< 6.7 U	< 6.1 U	< 6.4 U	< 5.9 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 5.9 U	< 6.8 U	< 5.5 U	< 19 U	< 7.3 U	< 21 U	< 7.0 U	< 6.7 U	< 6.1 U	< 6.4 U	< 5.9 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.2 UJ	< 1.4 UJ	< 1.1 UJ	R	< 1.5 UJ	R	< 1.4 UJ	< 1.3 UJ	< 1.2 UJ	< 1.3 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.95 U	< 1.1 U	< 0.89 U	< 3.1 U	< 1.2 U	< 3.4 U	< 1.1 U	< 1.1 U	< 0.97 U	< 1.0 U	< 0.95 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.95 U	< 1.1 U	< 0.89 U	< 3.1 U	< 1.2 U	< 3.4 U	< 1.1 U	< 1.1 U	< 0.97 U	< 1.0 U	< 0.95 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.95 U	< 1.1 U	< 0.89 U	< 3.1 U	< 1.2 U	< 3.4 U	< 1.1 U	< 1.1 U	< 0.97 U	< 1.0 U	< 0.95 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 UJ	< 0.24 U	< 0.26 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.4 U	< 2.7 U	< 2.2 U	< 7.7 U	< 2.9 U	< 8.4 U	< 2.8 U	< 2.7 UJ	< 2.4 U	< 2.6 U	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 UJ	< 0.24 U	< 0.26 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.4 U	< 2.7 U	< 2.2 U	< 7.7 U	< 2.9 U	< 8.4 U	< 2.8 U	< 2.7 U	< 2.4 U	< 2.6 U	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.47 U	< 0.54 U	< 0.44 U	< 1.5 U	< 0.58 U	< 1.7 U	< 0.56 U	< 0.53 U	< 0.48 U	< 0.51 U	< 0.47 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.47 U	< 0.54 U	< 0.44 U	< 1.5 U	< 0.58 U	< 1.7 U	< 0.56 U	< 0.53 U	< 0.48 U	< 0.51 U	< 0.47 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.47 UJ	< 0.54 UJ	< 0.44 UJ	R	< 0.58 UJ	R	< 0.56 UJ	< 0.53 UJ	< 0.48 UJ	< 0.51 UJ	< 0.47 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.47 UJ	< 0.54 U	< 0.44 U	R	< 0.58 U	R	< 0.56 U	< 0.53 U	< 0.48 U	< 0.51 U	< 0.47 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	**0.15 J**	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	R	R	R	R	R	R	**1.3 J**	< 0.97 UJ	< 1.0 UJ	< 0.95 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	**0.60 J**	< 0.29 U	**0.59 J**	< 0.28 U	**0.95**	**0.11 J**	< 0.26 U	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.24 UJ	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 UJ	< 0.24 UJ	< 0.26 UJ	< 0.24 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	**0.52 J**	< 0.29 U	**0.53 J**	< 0.28 U	**0.14 J**	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.11 J**	< 0.27 U	< 0.22 U	**0.64 J**	**0.21 J**	**0.67 J**	< 0.28 U	**0.41**	**0.083 J**	< 0.26 U	< 0.24 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	**0.33**	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.078 J**	**0.26 J**	< 0.22 U	< 0.77 U	**0.21 J**	< 0.84 U	**0.11 J**	**0.36**	**0.077 J**	**0.053 J**	< 0.24 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 UJ	< 0.24 UJ	< 0.26 UJ	< 0.24 UJ
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.080 J**	< 0.27 U	< 0.22 U	**0.88**	**0.26 J**	**1.2**	**0.13 J**	**0.58**	**0.093 J**	**0.097 J**	**0.11 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		< 0.24 U	**0.16 J**	**0.071 J**	**2.0**	**0.49**	**2.1**	**0.59**	**2.8**	**0.25**	**0.22 J**	**0.24**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.12 J**	< 0.27 U	< 0.22 U	< 0.77 U	**0.45**	**0.39 J**	**0.44**	**2.0**	**0.29**	< 0.26 U	< 0.24 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.47 UJ	**14.0**	< 0.44 U	R	< 0.58 U	R	< 0.56 U	**28.5**	**3.2**	< 0.51 U	< 0.47 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	< 0.77 U	< 0.29 U	< 0.84 U	< 0.28 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.24 U	< 0.27 U	< 0.22 U	**0.64 J**	< 0.29 U	**0.48 J**	< 0.28 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.24 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.24 U	**0.15 J**	< 0.22 U	**1.3**	**0.10 J**	**1.1**	< 0.28 U	**0.25 J**	< 0.24 U	< 0.26 U	< 0.24 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	027c-R	027c-R	027c-SD	027c-SD	028A-NS	028A-NS	028A-R	028A-R	028A-SD	028A-SD	029c-R
				Sample ID	027c-R-0-2	027c-R-2-12	027c-SD-0-2	027c-SD-2-12	028A-NS-0-2	028A-NS-2-12	028A-R-0-2	028A-R-2-12	028A-SD-0-2	028A-SD-2-12	029c-R-0-2
				Sample Date	10/11/2023 3:20:00 PM	10/11/2023 3:25:00 PM	10/11/2023 3:10:00 PM	10/11/2023 3:15:00 PM	10/16/2023 9:50:00 AM	10/16/2023 9:55:00 AM	10/16/2023 10:10:00 AM	10/16/2023 10:15:00 AM	10/16/2023 10:00:00 AM	10/16/2023 10:05:00 AM	10/10/2023 12:27:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD74737-46	JD74737-47	JD74737-44	JD74737-45	JD74986-1	JD74986-2	JD74986-5	JD74986-6	JD74986-3	JD74986-4	JD74737-11
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%		**77.8**	**82.4**	**68.7**	**85.2**	**60.4**	**65.2**	**59.4**	**64.1**	**60.2**	**67.9**	**66.9**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg		< 1.0 U	< 0.97 U	< 1.1 U	< 0.94 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg		< 1.0 U	< 0.97 U	< 1.1 U	< 0.94 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg		< 1.0 U	< 0.97 U	< 1.1 U	< 0.94 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg		< 1.0 U	< 0.97 U	< 1.1 U	< 0.94 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg		< 6.3 U	< 6.1 U	< 7.0 U	< 5.9 U	< 8.1 U	< 7.7 U	< 8.4 U	< 7.6 U	< 8.1 U	< 7.2 U	< 7.3 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg		< 6.3 U	< 6.1 U	< 7.0 U	< 5.9 U	< 8.1 U	< 7.7 U	< 8.4 U	< 7.6 U	< 8.1 U	< 7.2 U	< 7.3 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg		R	R	< 1.4 UJ	< 1.2 UJ	< 1.6 UJ	< 1.5 UJ	< 1.7 UJ	< 1.5 UJ	< 1.6 UJ	< 1.4 UJ	< 1.5 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg		< 1.0 U	< 0.97 U	< 1.1 U	< 0.94 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg		< 1.0 U	< 0.97 U	< 1.1 U	< 0.94 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg		< 1.0 UJ	< 0.97 U	< 1.1 UJ	< 0.94 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 UJ
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg		< 2.5 U	< 2.4 U	< 2.8 U	< 2.3 U	< 3.2 U	< 3.1 U	< 3.4 U	< 3.1 U	< 3.3 U	< 2.9 U	< 2.9 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg		< 2.5 U	< 2.4 U	< 2.8 UJ	< 2.3 UJ	< 3.2 U	< 3.1 U	< 3.4 U	< 3.1 U	< 3.3 U	< 2.9 U	< 2.9 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg		< 0.50 U	< 0.49 U	< 0.56 U	< 0.47 U	< 0.65 U	< 0.61 U	< 0.67 U	< 0.61 U	< 0.65 U	< 0.58 U	< 0.59 UJ
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg		< 0.50 U	< 0.49 U	< 0.56 U	< 0.47 U	< 0.65 U	< 0.61 U	< 0.67 U	< 0.61 U	< 0.65 U	< 0.58 U	< 0.59 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg		R	R	< 0.56 UJ	< 0.47 UJ	< 0.65 UJ	< 0.61 UJ	< 0.67 UJ	< 0.61 UJ	< 0.65 UJ	< 0.58 UJ	< 0.59 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg		R	R	< 0.56 UJ	< 0.47 U	< 0.65 U	< 0.61 U	< 0.67 U	< 0.61 U	< 0.65 U	< 0.58 U	< 0.59 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg		R	R	R	**0.38 J**	< 1.3 UJ	**0.35 J**	< 1.3 UJ	**0.43 J**	< 1.3 UJ	< 1.2 UJ	< 1.2 U
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg		**0.12 J**	< 0.24 U	**0.51**	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg		< 0.25 UJ	< 0.24 UJ	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg		< 0.25 U	< 0.24 U	**0.29**	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 UJ	< 0.23 UJ	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg		**0.24 J**	**0.16 J**	**0.25 J**	**0.12 J**	**0.15 J**	**0.13 J**	**0.13 J**	**0.16 J**	**0.20 J**	**0.13 J**	**0.10 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg		**0.36**	**0.16 J**	**0.25 J**	**0.10 J**	**0.18 J**	**0.20 J**	**0.090 J**	**0.19 J**	**0.19 J**	< 0.29 U	**0.065 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 UJ	< 0.23 UJ	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg		**0.27**	**0.24**	**0.54 J**	**0.24 J**	**0.24 J**	**0.11 J**	**0.16 J**	**0.18 J**	**0.33**	**0.17 J**	**0.21 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	**1.5**	**0.52**	**2.2**	**1.1**	**0.27 J**	**0.36**	**0.26 J**	**0.47**	**0.54**	**0.30**	**0.57**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	**0.57**	**0.70**	**0.64 J**	**0.60 J**	**0.42**	**0.33**	**0.28 J**	**0.35**	**0.48**	**0.38**	**0.57 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg		R	R	**0.53 J**	**0.10 J**	< 0.65 U	**0.13 J**	< 0.67 U	< 0.61 U	**0.18 J**	< 0.58 U	< 0.59 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg		< 0.25 U	< 0.24 U	< 0.28 U	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg		< 0.25 UJ	< 0.24 UJ	**0.41**	< 0.23 U	< 0.32 U	< 0.31 U	< 0.34 U	< 0.31 U	< 0.33 U	< 0.29 U	< 0.29 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg		**0.21 J**	< 0.24 U	**0.84**	**0.072 J**	< 0.32 U	< 0.31 U	**0.10 J**	**0.11 J**	< 0.33 U	< 0.29 U	< 0.29 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	029c-R	029c-SD	029c-SD	030-NS	030-NS	030-R	030-R	030-SD	030-SD	031A-R	031A-R
				Sample ID	029c-R-2-12	029c-SD-0-2	029c-SD-2-12	030-NS-0-2	030-NS-2-12	030-R-0-2	030-R-2-12	030-SD-0-2	030-SD-2-12	031A-R-0-2	FD-10122023
				Sample Date	10/10/2023 12:35:00 PM	10/10/2023 12:10:00 PM	10/10/2023 12:15:00 PM	10/10/2023 1:55:00 PM	10/10/2023 2:00:00 PM	10/10/2023 2:15:00 PM	10/10/2023 2:20:00 PM	10/10/2023 2:05:00 PM	10/10/2023 2:10:00 PM	10/12/2023 12:55:00 PM	10/12/2023 12:55:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in
				Lab Sample ID	JD74737-12	JD74737-9	JD74737-10	JD74737-13	JD74737-14	JD74737-17	JD74737-18	JD74737-15	JD74737-16	JD74737-65	JD74737-66
				Sample Type	N	N	N	N	N	N	N	N	N	N	FD
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%		**76.5**	**65.7**	**74.0**	**86.3**	**91.9**	**81.6**	**89.4**	**83.4**	**91.5**	**81.8**	**82.2**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg		< 1.0 U	< 1.2 U	< 1.1 U	< 0.91 U	< 0.85 U	< 0.96 U	< 0.88 U	< 0.94 U	< 0.86 U	< 0.98 U	< 0.97 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg		< 1.0 U	< 1.2 U	< 1.1 U	< 0.91 U	< 0.85 U	< 0.96 U	< 0.88 U	< 0.94 U	< 0.86 U	< 0.98 U	< 0.97 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg		< 1.0 U	< 1.2 U	< 1.1 U	< 0.91 UJ	< 0.85 U	< 0.96 U	< 0.88 U	< 0.94 U	< 0.86 U	< 0.98 UJ	< 0.97 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg		< 1.0 U	< 1.2 U	< 1.1 U	< 0.91 U	< 0.85 U	< 0.96 U	< 0.88 U	< 0.94 U	< 0.86 U	< 0.98 U	< 0.97 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg		< 6.4 U	< 7.5 U	< 6.8 U	< 5.7 U	< 5.3 U	< 6.0 U	< 5.5 U	< 5.9 U	< 5.4 U	< 6.1 UJ	< 6.1 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg		< 6.4 U	< 7.5 U	< 6.8 U	< 5.7 U	< 5.3 U	< 6.0 U	< 5.5 U	< 5.9 U	< 5.4 U	< 6.1 UJ	< 6.1 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg		< 1.3 UJ	< 1.5 U	< 1.4 U	< 1.1 UJ	< 1.1 UJ	< 1.2 UJ	< 1.1 UJ	< 1.2 UJ	< 1.1 UJ	R	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg		< 1.0 U	< 1.2 U	< 1.1 U	< 0.91 U	< 0.85 U	< 0.96 U	< 0.88 U	< 0.94 U	< 0.86 U	< 0.98 U	< 0.97 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg		< 1.0 U	< 1.2 U	< 1.1 U	< 0.91 U	< 0.85 U	< 0.96 U	< 0.88 U	< 0.94 U	< 0.86 U	< 0.98 U	< 0.97 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg		< 1.0 U	< 1.2 U	< 1.1 U	< 0.91 U	< 0.85 U	< 0.96 U	< 0.88 U	< 0.94 U	< 0.86 U	< 0.98 UJ	< 0.97 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg		< 0.26 UJ	< 0.30 U	< 0.27 U	< 0.23 UJ	< 0.21 UJ	< 0.24 UJ	< 0.22 U	< 0.24 UJ	< 0.21 UJ	< 0.24 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg		< 2.6 U	< 3.0 U	< 2.7 U	< 2.3 U	< 2.1 U	< 2.4 U	< 2.2 U	< 2.4 U	< 2.1 U	< 2.4 U	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 UJ	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg		< 2.6 U	< 3.0 U	< 2.7 U	< 2.3 U	< 2.1 U	< 2.4 U	< 2.2 U	< 2.4 U	< 2.1 U	< 2.4 U	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg		< 0.51 UJ	< 0.60 U	< 0.54 U	< 0.45 UJ	< 0.43 UJ	< 0.48 UJ	< 0.44 U	< 0.47 UJ	< 0.43 UJ	< 0.49 UJ	< 0.49 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg		< 0.51 U	< 0.60 U	< 0.54 U	< 0.45 U	< 0.43 U	< 0.48 U	< 0.44 U	< 0.47 U	< 0.43 U	< 0.49 U	< 0.49 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg		< 0.51 UJ	< 0.60 U	< 0.54 U	< 0.45 UJ	< 0.43 UJ	< 0.48 UJ	< 0.44 UJ	< 0.47 UJ	< 0.43 UJ	R	< 0.49 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg		< 0.51 U	< 0.60 U	< 0.54 U	< 0.45 U	< 0.43 UJ	< 0.48 U	< 0.44 U	< 0.47 UJ	< 0.43 UJ	R	< 0.49 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg		< 1.0 UJ	**0.31 J**	**0.21 J**	< 0.91 UJ	R	R	**0.14 J**	R	R	R	< 0.97 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	**0.097 J**	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 UJ	< 0.24 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg		**0.066 J**	**0.087 J**	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	**0.11 J**	< 0.21 U	**0.077 J**	**0.086 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg		**0.071 J**	**0.086 J**	**0.075 J**	< 0.23 U	< 0.21 U	**0.054 J**	**0.043 J**	**0.11 J**	**0.080 J**	< 0.24 UJ	**0.085 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg		< 0.26 U	< 0.30 UJ	< 0.27 UJ	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 UJ
E1633	Perfluorononanoic acid (PFNA)	ug/kg		**0.13 J**	**0.16 J**	**0.078 J**	< 0.23 U	**0.066 J**	**0.15 J**	**0.058 J**	**0.085 J**	**0.11 J**	**0.19 J**	**0.17 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 UJ	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	**0.33**	**0.52**	**0.25 J**	**0.16 J**	**0.15 J**	**0.32**	**0.21 J**	**0.28**	**0.14 J**	**0.40**	**0.40**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	**0.60 J**	**0.59**	**0.39**	**0.14 J**	**0.13 J**	**0.17 J**	**0.17 J**	**0.36 J**	**0.26 J**	**0.21 J**	**0.23 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 UJ	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg		< 0.51 U	< 0.60 U	< 0.54 U	< 0.45 U	< 0.43 UJ	< 0.48 U	< 0.44 U	**0.13 J**	**0.091 J**	R	< 0.49 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 U	< 0.24 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	< 0.24 UJ	< 0.24 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg		< 0.26 U	< 0.30 U	< 0.27 U	< 0.23 U	< 0.21 U	< 0.24 U	< 0.22 U	< 0.24 U	< 0.21 U	**0.12 J**	**0.092 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	031A-R	031A-SD	031A-SD	033c-R	033c-R	033c-SD	033c-SD	034-R	034-R	034-SD	034-SD
				Sample ID	031A-R-2-12	031A-SD-0-2	031A-SD-2-12	033c-R-0-2	033c-R-2-12	033c-SD-0-2	033c-SD-2-12	034-R-0-2	034-R-2-12	034-SD-0-2	034-SD-2-12
				Sample Date	10/12/2023 1:00:00 PM	10/12/2023 12:45:00 PM	10/12/2023 12:50:00 PM	10/10/2023 9:00:00 AM	10/10/2023 9:00:00 AM	10/10/2023 8:50:00 AM	10/10/2023 8:50:00 AM	10/10/2023 3:40:00 PM	10/10/2023 3:45:00 PM	10/10/2023 3:25:00 PM	10/10/2023 3:30:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74737-67	JD74737-63	JD74737-64	JD74737-3	JD74737-4	JD74737-1	JD74737-2	JD74737-22	JD74737-23	JD74737-19	JD74737-20
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**89.0**	**77.3**	**88.9**	**83.0**	**77.8**	**84.9**	**87.5**	**88.8**	**93.8**	**85.9**	**92.8**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.88 U	< 1.0 U	< 0.88 U	< 0.94 U	< 1.0 U		< 0.90 U	< 0.90 U	< 0.84 U	< 0.93 U	< 0.86 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.88 U	< 1.0 U	< 0.88 U	< 0.94 U	< 1.0 U		< 0.90 U	< 0.90 U	< 0.84 U	< 0.93 U	< 0.86 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.88 U	< 1.0 U	< 0.88 U	< 0.94 U	< 1.0 U		< 0.90 U	< 0.90 U	< 0.84 U	< 0.93 U	< 0.86 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.88 U	< 1.0 U	< 0.88 U	< 0.94 U	< 1.0 U		< 0.90 U	< 0.90 U	< 0.84 U	< 0.93 U	< 0.86 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 5.5 UJ	< 6.3 U	< 5.5 UJ	< 5.9 U	< 6.3 U		< 5.6 U	< 5.6 U	< 5.2 U	< 5.8 U	< 5.4 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 5.5 UJ	< 6.3 U	< 5.5 UJ	< 5.9 U	< 6.3 U		< 5.6 U	< 5.6 U	< 5.2 U	< 5.8 U	< 5.4 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			R	R	R	< 1.2 U	< 1.3 U		< 1.1 U	< 1.1 UJ	< 1.0 UJ	< 1.2 UJ	< 1.1 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.88 U	< 1.0 U	< 0.88 U	< 0.94 U	< 1.0 U		< 0.90 U	< 0.90 U	< 0.84 U	< 0.93 U	< 0.86 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.88 U	< 1.0 U	< 0.88 U	< 0.94 U	< 1.0 U		< 0.90 U	< 0.90 U	< 0.84 U	< 0.93 U	< 0.86 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.88 UJ	< 1.0 UJ	< 0.88 UJ	< 0.94 U	< 1.0 U		< 0.90 U	< 0.90 U	< 0.84 U	< 0.93 U	< 0.86 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 UJ	**0.058 J**	< 0.23 UJ	< 0.22 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 U	< 2.5 U		< 2.2 U	< 2.3 U	< 2.1 U	< 2.3 U	< 2.2 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 U	< 2.5 U		< 2.2 U	< 2.3 U	< 2.1 U	< 2.3 U	< 2.2 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.44 UJ	< 0.51 U	< 0.44 UJ	< 0.47 U	< 0.50 U		< 0.45 U	< 0.45 UJ	< 0.42 UJ	< 0.47 UJ	< 0.43 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.44 U	< 0.51 U	< 0.44 U	< 0.47 U	< 0.50 U		< 0.45 U	< 0.45 U	< 0.42 U	< 0.47 U	< 0.43 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			R	R	R	< 0.47 U	< 0.50 U		< 0.45 U	< 0.45 UJ	< 0.42 UJ	< 0.47 UJ	< 0.43 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			R	R	R	< 0.47 U	< 0.50 U		< 0.45 U	< 0.45 U	< 0.42 UJ	< 0.47 U	< 0.43 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.22 UJ	< 0.25 U	< 0.22 U	**0.17 J**	**0.25**		**0.33**	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	R	R	< 0.94 U	**0.15 J**		**0.24 J**	< 0.90 UJ	R	**0.55 J**	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		**0.093 J**	**0.15 J**	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.22 UJ	< 0.25 UJ	< 0.22 UJ	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.081 J**	**0.15 J**	**0.085 J**	< 0.24 U	< 0.25 U		< 0.22 U	**0.086 J**	< 0.21 U	**0.13 J**	< 0.22 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.13 J**	**0.15 J**	< 0.22 UJ	**0.067 J**	**0.15 J**		**0.10 J**	**0.077 J**	< 0.21 U	**0.11 J**	< 0.22 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 UJ	< 0.25 UJ		< 0.22 UJ	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 UJ
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.12 J**	**0.11 J**	< 0.22 U	< 0.24 U	**0.094 J**		**0.082 J**	**0.13 J**	**0.095 J**	**0.15 J**	**0.085 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.31**	**0.38**	**0.24**	**0.23 J**	**0.62**		**0.40**	**0.82**	**0.49**	**0.57**	**0.27**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.37**	**0.44**	**0.22**	**0.13 J**	**0.30**		**0.21 J**	**0.091 J**	**0.11 J**	**0.38 J**	**0.21 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			R	R	R	< 0.47 U	< 0.50 U		**0.086 J**	< 0.45 U	< 0.42 UJ	< 0.47 U	< 0.43 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.22 UJ	< 0.25 UJ	< 0.22 UJ	< 0.24 U	< 0.25 U		< 0.22 U	< 0.23 U	< 0.21 U	< 0.23 U	< 0.22 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.22 U	< 0.25 U	< 0.22 U	< 0.24 U	< 0.25 U		**0.075 J**	**0.15 J**	**0.087 J**	**0.083 J**	< 0.22 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	034-SD	035B-NS	035B-NS	035B-R	035B-R	035B-SD	035B-SD	036-R	036-R	036-SD	036-SD
				Sample ID	FD-10102023	035B-NS-0-2	035B-NS-2-12	035B-R-0-2	035B-R-2-12	035B-SD-0-2	035B-SD-2-12	036-R-0-2	036-R-2-12	036-SD-0-2	036-SD-2-12
				Sample Date	10/10/2023 3:30:00 PM	10/12/2023 9:50:00 AM	10/12/2023 9:49:00 AM	10/12/2023 10:10:00 AM	10/12/2023 10:15:00 AM	10/12/2023 10:00:00 AM	10/12/2023 10:05:00 AM	10/13/2023 10:55:00 AM	10/13/2023 11:00:00 AM	10/13/2023 10:45:00 AM	10/13/2023 10:50:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74737-21	JD74737-53	JD74737-54	JD74737-57	JD74737-58	JD74737-55	JD74737-56	JD74836-9	JD74836-10	JD74836-7	JD74836-8
				Sample Type	FD	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**91.9**	**78.8**	**82.7**	**66.5**	**78.2**	**74.4**	**82.0**	**88.0**	**91.0**	**87.0**	**88.8**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.87 U	< 1.0 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.1 U	< 0.96 U	< 0.89 U	< 0.86 U	< 0.92 U	< 0.90 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.87 U	< 1.0 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.1 U	< 0.96 U	< 0.89 U	< 0.86 U	< 0.92 U	< 0.90 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.87 U	< 1.0 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.1 U	< 0.96 U	< 0.89 UJ	< 0.86 U	< 0.92 U	< 0.90 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.87 U	< 1.0 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.1 U	< 0.96 U	< 0.89 U	< 0.86 U	< 0.92 U	< 0.90 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 5.4 U	< 6.3 UJ	< 6.0 U	< 7.4 U	< 6.3 U	< 6.7 U	< 6.0 UJ	< 5.6 U	< 5.4 U	< 5.7 U	< 5.6 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 5.4 U	< 6.3 UJ	< 6.0 U	< 7.4 U	< 6.3 U	< 6.7 U	< 6.0 UJ	< 5.6 U	< 5.4 U	< 5.7 U	< 5.6 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.1 UJ	R	< 1.2 U	< 1.5 U	R	R	R	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.87 U	< 1.0 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.1 U	< 0.96 U	< 0.89 U	< 0.86 U	< 0.92 U	< 0.90 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.87 U	< 1.0 U	R	< 1.2 U	< 1.0 U	< 1.1 U	< 0.96 U	< 0.89 U	< 0.86 U	< 0.92 U	< 0.90 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.87 U	< 1.0 UJ	< 0.97 UJ	< 1.2 U	< 1.0 UJ	< 1.1 UJ	< 0.96 UJ	< 0.89 U	< 0.86 U	< 0.92 U	< 0.90 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.22 UJ	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 UJ
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.2 U	< 2.5 U	< 2.4 U	< 2.9 U	< 2.5 U	< 2.7 U	< 2.4 U	< 2.2 U	< 2.2 U	< 2.3 U	< 2.3 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 UJ	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.2 U	< 2.5 U	< 2.4 U	< 2.9 U	< 2.5 U	< 2.7 U	< 2.4 U	< 2.2 UJ	< 2.2 U	< 2.3 U	< 2.3 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.44 UJ	< 0.51 U	< 0.48 U	< 0.59 U	< 0.50 U	< 0.54 U	< 0.48 UJ	< 0.45 U	< 0.43 U	< 0.46 U	< 0.45 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.44 U	< 0.51 U	< 0.48 U	< 0.59 U	< 0.50 U	< 0.54 U	< 0.48 U	< 0.45 U	< 0.43 U	< 0.46 U	< 0.45 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.44 UJ	R	R	< 0.59 U	R	R	R	< 0.45 U	< 0.43 U	< 0.46 U	< 0.45 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.44 U	R	R	< 0.59 U	R	R	R	< 0.45 U	< 0.43 U	< 0.46 U	< 0.45 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 0.87 UJ	R	R	< 1.2 UJ	R	R	R	**0.32 J**	**0.24 J**	< 0.92 UJ	< 0.90 U
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	**0.11 J**	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.22 U	< 0.25 UJ	< 0.24 UJ	< 0.29 UJ	< 0.25 UJ	< 0.27 UJ	< 0.24 UJ	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.075 J**	**0.081 J**	**0.064 J**	< 0.29 U	**0.095 J**	< 0.27 U	**0.11 J**	< 0.22 U	**0.084 J**	**0.066 J**	**0.058 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.050 J**	< 0.25 UJ	< 0.24 U	< 0.29 U	**0.097 J**	< 0.27 U	< 0.24 UJ	**0.13 J**	**0.046 J**	**0.091 J**	**0.058 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.086 J**	**0.15 J**	**0.12 J**	**0.083 J**	**0.11 J**	**0.17 J**	**0.12 J**	**0.12 J**	**0.067 J**	**0.074 J**	< 0.23 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	**0.84**	< 0.22 U	**0.63**	**0.39**
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.36**	**0.88**	**0.60**	**0.40**	**0.24 J**	**0.34**	**0.27**	**0.47**	**0.23**	**1.1**	**0.63**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.26 J**	**0.24 J**	**0.24**	**0.15 J**	**0.20 J**	**0.14 J**	**0.22 J**	**0.11 J**	**0.21 J**	**0.19 J**	**0.16 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.44 U	R	R	< 0.59 U	R	R	R	**0.14 J**	**0.19 J**	< 0.46 U	< 0.45 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.22 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.25 UJ	< 0.27 U	< 0.24 U	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.22 U	< 0.25 UJ	< 0.24 UJ	< 0.29 UJ	< 0.25 U	< 0.27 UJ	< 0.24 UJ	< 0.22 U	< 0.22 U	< 0.23 U	< 0.23 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.22 U	**0.091 J**	**0.075 J**	< 0.29 U	< 0.25 U	< 0.27 U	< 0.24 U	**0.11 J**	< 0.22 U	< 0.23 U	< 0.23 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	037-R	037-R	037-SD	037-SD	038-R	038-R	038-SD	038-SD	039-R	039-R	039-R
				Sample ID	037-R-0-2	037-R-2-12	037-SD-0-2	037-SD-2-12	038-R-0-2	038-R-2-12	038-SD-0-2	038-SD-2-12	039-R-0-2	039-R-2-12	FD-10112023
				Sample Date	10/10/2023 11:05:00 AM	10/10/2023 11:10:00 AM	10/10/2023 10:45:00 AM	10/10/2023 10:50:00 AM	10/11/2023 10:40:00 AM	10/11/2023 10:45:00 AM	10/11/2023 10:30:00 AM	10/11/2023 10:35:00 AM	10/11/2023 1:50:00 PM	10/11/2023 1:55:00 PM	10/11/2023 1:55:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in
				Lab Sample ID	JD74737-7	JD74737-8	JD74737-5	JD74737-6	JD74737-31	JD74737-32	JD74737-29	JD74737-30	JD74737-41	JD74737-42	JD74737-43
				Sample Type	N	N	N	N	N	N	N	N	N	N	FD
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**81.2**	**88.5**	**78.0**	**85.9**	**68.9**	**80.9**	**82.5**	**89.8**	**64.4**	**72.9**	**72.2**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.99 U	< 0.90 U	< 1.0 U	< 0.91 U	< 1.1 U	< 0.97 U	< 0.95 U	< 0.87 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.99 U	< 0.90 U	< 1.0 U	< 0.91 U	< 1.1 U	< 0.97 U	< 0.95 U	< 0.87 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.99 U	< 0.90 U	< 1.0 U	< 0.91 U	< 1.1 U	< 0.97 U	< 0.95 UJ	< 0.87 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.99 U	< 0.90 U	< 1.0 U	< 0.91 U	< 1.1 U	< 0.97 U	< 0.95 U	< 0.87 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.2 U	< 5.6 U	< 6.4 U	< 5.7 U	< 7.0 U	< 6.1 U	< 5.9 U	< 5.5 U	< 7.5 U	< 6.9 U	< 6.8 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.2 U	< 5.6 U	< 6.4 U	< 5.7 U	< 7.0 U	< 6.1 U	< 5.9 U	< 5.5 U	< 7.5 U	< 6.9 U	< 6.8 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.2 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.4 UJ	< 1.2 UJ	< 1.2 UJ	< 1.1 UJ	< 1.5 UJ	< 1.4 UJ	< 1.4 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.99 U	< 0.90 U	< 1.0 U	< 0.91 U	< 1.1 U	< 0.97 U	< 0.95 U	< 0.87 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.99 U	< 0.90 U	< 1.0 U	< 0.91 U	< 1.1 U	< 0.97 U	< 0.95 U	< 0.87 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.99 U	< 0.90 U	< 1.0 U	< 0.91 U	< 1.1 U	< 0.97 U	< 0.95 U	< 0.87 U	< 1.2 U	< 1.1 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 UJ	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 2.3 U	< 2.6 U	< 2.3 U	< 2.8 U	< 2.4 U	< 2.4 U	< 2.2 U	< 3.0 U	< 2.7 U	< 2.7 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 U	< 2.3 U	< 2.6 U	< 2.3 U	< 2.8 U	< 2.4 UJ	< 2.4 UJ	< 2.2 UJ	< 3.0 UJ	< 2.7 UJ	< 2.7 UJ
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.49 U	< 0.45 U	< 0.51 U	< 0.46 U	< 0.56 U	< 0.48 U	< 0.48 U	< 0.44 U	< 0.60 U	< 0.55 U	< 0.54 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.49 U	< 0.45 U	< 0.51 U	< 0.46 U	< 0.56 U	< 0.48 U	< 0.48 U	< 0.44 U	< 0.60 U	< 0.55 U	< 0.54 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.49 U	< 0.45 U	< 0.51 U	< 0.46 U	< 0.56 UJ	< 0.48 UJ	< 0.48 UJ	< 0.44 UJ	< 0.60 UJ	< 0.55 UJ	< 0.54 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.49 U	< 0.45 U	< 0.51 U	< 0.46 U	< 0.56 UJ	< 0.48 U	< 0.48 UJ	< 0.44 U	< 0.60 U	< 0.55 U	< 0.54 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.25 U	< 0.23 U	**0.35**	< 0.23 U	**0.17 J**	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	**0.16 J**	**0.14 J**
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 0.99 U	**0.14 J**	**0.19 J**	**0.19 J**	R	**0.35 J**	**0.66 J**	< 0.87 UJ	R	R	**1.1 J**
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.25 U	< 0.23 U	**0.099 J**	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	**0.37**	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 UJ	< 0.24 UJ	< 0.24 UJ	< 0.22 UJ	< 0.30 UJ	< 0.27 UJ	< 0.27 UJ
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	**0.33**	< 0.24 U	**0.094 J**	< 0.22 U	**0.15 J**	**0.22 J**	**0.24 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	**0.16 J**	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.25 U	**0.047 J**	**0.048 J**	**0.078 J**	**0.38**	**0.13 J**	**0.099 J**	< 0.22 U	**0.39**	**0.58**	**0.50**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 UJ	< 0.23 UJ	< 0.26 UJ	< 0.23 UJ	< 0.28 UJ	< 0.24 UJ	< 0.24 UJ	< 0.22 UJ	< 0.30 UJ	< 0.27 UJ	< 0.27 UJ
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.070 J**	< 0.23 U	**0.21 J**	**0.15 J**	**0.24 J**	< 0.24 UJ	**0.095 J**	< 0.22 UJ	**0.20 J**	**0.29 J**	**0.27 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	**0.12 J**	< 0.22 U	**0.31**	**0.12 J**	**0.16 J**
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.19 J**	**0.22 J**	**0.71**	**0.28**	**1.2**	**0.18 J**	**0.71**	**0.52**	**0.51**	**0.66**	**0.39**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.13 J**	**0.16 J**	**0.31**	**0.14 J**	**1.3 J**	**0.39 J**	**0.24 J**	< 0.22 UJ	**0.65 J**	**1.2 J**	**1.1 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.49 U	< 0.45 U	< 0.51 U	< 0.46 U	**0.38 J**	< 0.48 U	**0.18 J**	< 0.44 U	**0.42 J**	**0.52 J**	**0.52 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U	< 0.24 U	< 0.22 U	< 0.30 U	< 0.27 U	< 0.27 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.25 U	< 0.23 U	< 0.26 U	< 0.23 U	**0.089 J**	< 0.24 U	**0.19 J**	< 0.22 U	**0.12 J**	< 0.27 U	< 0.27 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	039-SD	039-SD	040G-NS	040G-NS	040G-NS	040G-R	040G-R	040G-SD	040G-SD	041-R	041-R
				Sample ID	039-SD-0-2	039-SD-2-12	040G-NS-0-2	040G-NS-2-12	FD-12062023	040G-R-0-2	040G-R-2-12	040G-SD-0-2	040G-SD-2-12	041-R-0-2	041-R-2-12
				Sample Date	10/11/2023 1:35:00 PM	10/11/2023 1:40:00 PM	12/6/2023 7:55:00 AM	12/6/2023 8:00:00 AM	12/6/2023 8:00:00 AM	12/6/2023 8:35:00 AM	12/6/2023 8:40:00 AM	12/6/2023 8:10:00 AM	12/6/2023 8:15:00 AM	10/11/2023 9:40:00 AM	10/11/2023 9:45:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74737-39	JD74737-40	JD78296-6	JD78296-7	JD78296-8	JD78296-11	JD78296-12	JD78296-9	JD78296-10	JD74737-27	JD74737-28
				Sample Type	N	N	N	N	FD	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**72.1**	**77.5**	**74.1**	**73.8**	**72.9**	**67.3**	**80.9**	**67.1**	**76.8**	**48.5**	**64.6**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.2 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.6 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.2 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.6 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.2 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.6 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.2 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.6 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.7 U	< 6.5 U	< 6.6 U	< 6.6 U	< 6.7 U	< 7.3 U	< 6.1 U	< 7.3 U	< 6.4 U	< 9.9 U	< 7.4 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.7 U	< 6.5 U	< 6.6 U	< 6.6 U	< 6.7 U	< 7.3 U	< 6.1 U	< 7.3 U	< 6.4 U	< 9.9 U	< 7.4 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.3 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.5 U	< 1.2 U	< 1.5 U	< 1.3 U	< 2.0 UJ	< 1.5 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.2 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.6 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.2 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.6 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.2 U	< 0.97 U	< 1.2 U	< 1.0 U	< 1.6 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.7 U	< 2.6 U	< 2.6 U	< 2.7 U	< 2.7 U	< 2.9 U	< 2.4 U	< 2.9 U	< 2.6 U	< 4.0 UJ	< 3.0 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.7 UJ	< 2.6 UJ	< 2.6 U	< 2.7 U	< 2.7 U	< 2.9 U	< 2.4 U	< 2.9 U	< 2.6 U	< 4.0 UJ	< 3.0 UJ
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.53 U	< 0.52 U	< 0.53 U	< 0.53 U	< 0.54 U	< 0.58 U	< 0.48 U	< 0.58 U	< 0.51 U	< 0.79 U	< 0.60 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.53 U	< 0.52 U	< 0.53 U	< 0.53 U	< 0.54 U	< 0.58 U	< 0.48 U	< 0.58 U	< 0.51 U	< 0.79 U	< 0.60 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.53 UJ	< 0.52 UJ	< 0.53 U	< 0.53 U	< 0.54 U	< 0.58 U	< 0.48 U	< 0.58 U	< 0.51 U	< 0.79 UJ	< 0.60 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.53 U	< 0.52 U	< 0.53 U	< 0.53 U	< 0.54 U	< 0.58 U	< 0.48 U	< 0.58 U	< 0.51 U	< 0.79 UJ	< 0.60 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.1 UJ	< 1.0 UJ	< 1.1 UJ	< 1.1 U	**0.17 J**	**0.43 J**	**0.22 J**	< 1.2 UJ	**0.32 J**	R	< 1.2 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.27 UJ	< 0.26 UJ	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 UJ	< 0.30 UJ
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.072 J**	**0.078 J**	< 0.26 U	**0.12 J**	< 0.27 U	**0.090 J**	**0.080 J**	< 0.29 U	**0.090 J**	< 0.40 U	< 0.30 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.079 J**	**0.10 J**	< 0.26 U	< 0.27 U	< 0.27 U	**0.068 J**	**0.064 J**	**0.089 J**	**0.063 J**	< 0.40 U	< 0.30 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.27 UJ	< 0.26 UJ	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 UJ	< 0.30 UJ
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.13 J**	**0.12 J**	< 0.26 U	< 0.27 U	< 0.27 U	**0.15 J**	**0.078 J**	**0.20 J**	**0.13 J**	**0.24 J**	< 0.30 UJ
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			**0.12 J**	**0.14 J**	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	**0.32 J**	**0.19 J**
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.42**	**0.37**	**0.10 J**	**0.12 J**	**0.12 J**	**0.29**	**0.20 J**	**0.36**	**0.34**	**0.55**	**0.27 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.28 J**	**0.36 J**	< 0.26 U	**0.16 J**	**0.15 J**	**0.14 J**	**0.25**	**0.18 J**	**0.19 J**	**0.33 J**	**0.13 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	**0.21 J**	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.53 U	**0.14 J**	< 0.53 U	< 0.53 U	< 0.54 U	< 0.58 U	< 0.48 U	< 0.58 U	< 0.51 U	< 0.79 UJ	< 0.60 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.40 U	< 0.30 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.27 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.27 U	**0.11 J**	< 0.24 U	**0.15 J**	**0.097 J**	< 0.40 U	< 0.30 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	041-SD	041-SD	042C-R	042C-R	042C-SD	042C-SD	043-NS	043-NS	043-R	043-R	043-SD
				Sample ID	041-SD-0-2	041-SD-2-12	042C-R-0-2	042C-R-2-12	042C-SD-0-2	042C-SD-2-12	043-NS-0-2	043-NS-2-12	043-R-0-2	043-R-2-12	043-SD-0-2
				Sample Date	10/11/2023 9:25:00 AM	10/11/2023 9:30:00 AM	10/12/2023 11:50:00 AM	10/12/2023 11:55:00 AM	10/12/2023 11:40:00 AM	10/12/2023 11:45:00 AM	10/11/2023 11:30:00 AM	10/11/2023 11:35:00 AM	10/11/2023 12:05:00 PM	10/11/2023 12:07:00 PM	10/11/2023 11:50:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD74737-25	JD74737-26	JD74737-61	JD74737-62	JD74737-59	JD74737-60	JD74737-33	JD74737-34	JD74737-37	JD74737-38	JD74737-35
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**68.6**	**71.2**	**85.2**	**87.8**	**86.0**	**93.2**	**77.9**	**81.6**	**61.1**	**69.4**	**72.7**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 1.1 U	< 0.92 U	< 0.89 U	< 0.91 U	< 0.86 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.2 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 0.92 U	< 0.89 U	< 0.91 U	< 0.86 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.2 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 0.92 UJ	< 0.89 U	< 0.91 U	< 0.86 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.2 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 0.92 U	< 0.89 U	< 0.91 U	< 0.86 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.2 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.1 U	< 7.0 U	< 5.8 UJ	< 5.6 U	< 5.7 U	< 5.4 U	< 6.3 U	< 6.0 U	< 8.2 U	< 7.2 U	< 6.7 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.1 U	< 7.0 U	< 5.8 UJ	< 5.6 U	< 5.7 U	< 5.4 U	< 6.3 U	< 6.0 U	< 8.2 U	< 7.2 U	< 6.7 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.4 UJ	< 1.4 UJ	R	< 1.1 UJ	< 1.1 U	< 1.1 UJ	< 1.3 UJ	< 1.2 UJ	< 1.6 UJ	< 1.4 UJ	< 1.3 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 1.1 U	< 0.92 U	< 0.89 U	< 0.91 U	< 0.86 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.2 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 1.1 U	< 0.92 U	< 0.89 U	< 0.91 U	< 0.86 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.2 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 1.1 U	< 0.92 UJ	< 0.89 U	< 0.91 U	< 0.86 UJ	< 1.0 U	< 0.96 U	< 1.3 U	< 1.2 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.29 UJ	< 0.28 UJ	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	**0.22 J**
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.9 U	< 2.8 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.1 U	< 2.5 U	< 2.4 U	< 3.3 U	< 2.9 U	< 2.7 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	**0.20 J**
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.9 U	< 2.8 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.1 U	< 2.5 UJ	< 2.4 UJ	< 3.3 UJ	< 2.9 UJ	< 2.7 UJ
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.57 UJ	< 0.56 UJ	< 0.46 UJ	< 0.45 U	< 0.46 U	< 0.43 U	< 0.50 U	< 0.48 U	< 0.65 U	< 0.58 U	< 0.54 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.57 U	< 0.56 U	< 0.46 U	< 0.45 U	< 0.46 U	< 0.43 U	< 0.50 U	< 0.48 U	< 0.65 U	< 0.58 U	< 0.54 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.57 UJ	< 0.56 UJ	R	< 0.45 UJ	< 0.46 U	< 0.43 UJ	< 0.50 UJ	< 0.48 UJ	< 0.65 UJ	< 0.58 UJ	< 0.54 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.57 U	< 0.56 U	R	< 0.45 UJ	< 0.46 U	< 0.43 UJ	< 0.50 UJ	< 0.48 UJ	< 0.65 UJ	< 0.58 U	< 0.54 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.1 UJ	< 1.1 UJ	R	R	< 0.91 UJ	R	R	R	R	< 1.2 UJ	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	**0.23 J**	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	**0.14 J**	**0.088 J**	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 UJ	< 0.22 UJ	< 0.23 UJ	< 0.21 UJ	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 UJ	< 0.24 UJ	< 0.33 UJ	< 0.29 UJ	< 0.27 UJ
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.29 U	< 0.28 U	**0.085 J**	< 0.22 U	**0.076 J**	**0.060 J**	< 0.25 U	< 0.24 U	**0.14 J**	**0.11 J**	**0.12 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	**0.050 J**	**0.089 J**	**0.088 J**	**0.055 J**	**0.073 J**	< 0.29 U	< 0.27 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 UJ	< 0.24 UJ	< 0.33 UJ	< 0.29 UJ	< 0.27 UJ
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.14 J**	**0.073 J**	**0.081 J**	**0.072 J**	**0.077 J**	**0.068 J**	**0.16 J**	**0.095 J**	**0.27 J**	**0.16 J**	**0.14 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	**0.51**	**0.29**	**0.15 J**	**0.10 J**	**0.27**
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.34**	**0.28**	**0.22 J**	**0.19 J**	**0.12 J**	**0.13 J**	**0.86**	**0.53**	**0.80**	**0.87**	**0.44**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.15 J**	**0.20 J**	**0.14 J**	**0.20 J**	< 0.23 U	**0.13 J**	**0.16 J**	**0.16 J**	**0.29 J**	**0.49 J**	**0.14 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.57 U	< 0.56 U	R	< 0.45 UJ	< 0.46 U	< 0.43 U	< 0.50 UJ	< 0.48 UJ	< 0.65 UJ	< 0.58 U	< 0.54 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 UJ	< 0.21 UJ	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 UJ	< 0.22 UJ	< 0.23 U	< 0.21 U	< 0.25 U	< 0.24 U	< 0.33 U	< 0.29 U	< 0.27 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.29 U	< 0.28 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.21 U	**0.097 J**	**0.081 J**	**0.19 J**	**0.089 J**	**0.15 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	043-SD	044-R	044-R	044-SD	044-SD	045F-NS	045F-NS	045F-R	045F-R	045F-SD	045F-SD
				Sample ID	043-SD-2-12	044-R-0-2	044-R-2-12	044-SD-0-2	044-SD-2-12	045F-NS-0-2	045F-NS-2-12	045F-R-0-2	045F-R-2-12	045F-SD-0-2	045F-SD-2-12
				Sample Date	10/11/2023 11:55:00 AM	10/16/2023 11:50:00 AM	10/16/2023 11:56:00 AM	10/16/2023 12:15:00 PM	10/16/2023 12:20:00 PM	12/6/2023 10:20:00 AM	12/6/2023 10:25:00 AM	12/6/2023 11:00:00 AM	12/6/2023 11:05:00 AM	12/6/2023 10:35:00 AM	12/6/2023 10:40:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74737-36	JD74986-9	JD74986-10	JD74986-7	JD74986-8	JD78296-13	JD78296-14	JD78296-17	JD78296-18	JD78296-15	JD78296-16
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**77.0**	**62.9**	**75.8**	**69.0**	**76.2**	**56.4**	**82.1**	**58.2**	**71.6**	**68.1**	**80.4**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.0 U	< 1.3 U	< 1.0 U	< 1.2 U	< 1.0 U	< 1.4 U	< 0.97 U	< 1.3 U	< 1.1 U	< 1.2 U	< 0.96 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.0 U	< 1.3 U	< 1.0 U	< 1.2 U	< 1.0 U	< 1.4 U	< 0.97 U	< 1.3 U	< 1.1 U	< 1.2 U	< 0.96 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.0 U	< 1.3 U	< 1.0 U	< 1.2 U	< 1.0 U	< 1.4 U	< 0.97 U	< 1.3 U	< 1.1 U	< 1.2 U	< 0.96 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.0 U	< 1.3 U	< 1.0 U	< 1.2 U	< 1.0 U	< 1.4 U	< 0.97 U	< 1.3 U	< 1.1 U	< 1.2 U	< 0.96 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.4 U	< 7.9 U	< 6.5 U	< 7.2 U	< 6.4 U	< 8.9 U	< 6.1 U	< 8.4 U	< 6.8 U	< 7.2 U	< 6.0 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.4 U	< 7.9 U	< 6.5 U	< 7.2 U	< 6.4 U	< 8.9 U	< 6.1 U	< 8.4 U	< 6.8 U	< 7.2 U	< 6.0 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.6 UJ	< 1.3 UJ	< 1.4 UJ	< 1.3 UJ	< 1.8 UJ	< 1.2 UJ	< 1.7 UJ	< 1.4 UJ	< 1.4 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.0 U	< 1.3 U	< 1.0 U	< 1.2 U	< 1.0 U	< 1.4 U	< 0.97 U	< 1.3 U	< 1.1 U	< 1.2 U	< 0.96 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.0 U	< 1.3 U	< 1.0 U	< 1.2 U	< 1.0 U	< 1.4 U	< 0.97 U	< 1.3 U	< 1.1 U	< 1.2 U	< 0.96 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.0 U	< 1.3 U	< 1.0 U	< 1.2 U	< 1.0 U	< 1.4 U	< 0.97 U	< 1.3 U	< 1.1 U	< 1.2 U	< 0.96 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 3.2 U	< 2.6 U	< 2.9 U	< 2.6 U	< 3.5 U	< 2.4 U	< 3.4 U	< 2.7 U	< 2.9 U	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 UJ	< 3.2 U	< 2.6 U	< 2.9 U	< 2.6 U	< 3.5 U	< 2.4 U	< 3.4 U	< 2.7 U	< 2.9 U	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.51 U	< 0.64 U	< 0.52 U	< 0.58 U	< 0.51 U	< 0.71 U	< 0.49 U	< 0.67 U	< 0.55 U	< 0.58 U	< 0.48 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.51 U	< 0.64 U	< 0.52 U	< 0.58 U	< 0.51 U	< 0.71 U	< 0.49 U	< 0.67 U	< 0.55 U	< 0.58 U	< 0.48 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.51 UJ	< 0.64 UJ	< 0.52 UJ	< 0.58 UJ	< 0.51 UJ	< 0.71 UJ	< 0.49 UJ	< 0.67 UJ	< 0.55 UJ	< 0.58 UJ	< 0.48 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.51 UJ	< 0.64 U	< 0.52 U	< 0.58 U	< 0.51 U	< 0.71 U	< 0.49 UJ	< 0.67 U	< 0.55 U	< 0.58 U	< 0.48 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	**0.13 J**	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	< 1.3 UJ	< 1.0 UJ	**0.26 J**	< 1.0 UJ	< 1.4 UJ	< 0.97 UJ	**1.4 J**	**0.25 J**	< 1.2 UJ	< 0.96 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 UJ	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.068 J**	< 0.32 U	**0.14 J**	**0.073 J**	**0.15 J**	< 0.35 U	< 0.24 U	**0.45**	**0.11 J**	**0.17 J**	**0.12 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.075 J**	< 0.32 U	< 0.26 U	< 0.29 U	**0.083 J**	**0.099 J**	< 0.24 U	**0.29 J**	**0.062 J**	**0.066 J**	**0.070 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 UJ	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.15 J**	**0.14 J**	**0.11 J**	**0.095 J**	**0.18 J**	< 0.35 U	< 0.24 U	**0.36**	< 0.27 U	**0.13 J**	**0.073 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			**0.19 J**	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.42**	**0.29 J**	**0.23 J**	**0.11 J**	**0.30**	**0.26 J**	**0.094 J**	**0.80**	**0.10 J**	**0.40**	**0.23 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.14 J**	**0.16 J**	**0.22 J**	< 0.29 U	**0.18 J**	< 0.35 U	< 0.24 U	**0.88**	< 0.27 U	**0.14 J**	**0.15 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.51 UJ	**0.27 J**	**0.18 J**	< 0.58 U	**0.15 J**	**0.19 J**	< 0.49 UJ	**0.48 J**	< 0.55 U	< 0.58 U	< 0.48 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.32 U	< 0.26 UJ	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	< 0.34 U	< 0.27 U	< 0.29 U	< 0.24 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.12 J**	**0.14 J**	< 0.26 U	< 0.29 U	< 0.26 U	< 0.35 U	< 0.24 U	**0.13 J**	< 0.27 U	< 0.29 U	< 0.24 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	046-R	046-R	046-R	046-SD	046-SD	047-R	047-R	047-SD	047-SD	048B-R	048B-R
				Sample ID	046-R-0-2	FD-10132023	046-R-2-12	046-SD-0-2	046-SD-2-12	047-R-0-2	047-R-2-12	047-SD-0-2	047-SD-2-12	048B-R-0-2	048B-R-2-12
				Sample Date	10/13/2023 1:05:00 PM	10/13/2023 1:05:00 PM	10/13/2023 1:10:00 PM	10/13/2023 12:55:00 PM	10/13/2023 1:00:00 PM	10/13/2023 2:45:00 PM	10/13/2023 2:50:00 PM	10/13/2023 2:35:00 PM	10/13/2023 2:40:00 PM	10/12/2023 8:45:00 AM	10/12/2023 8:50:00 AM
				Depth Interval	0 - 2 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74836-13	JD74836-14	JD74836-15	JD74836-11	JD74836-12	JD74836-18	JD74836-19	JD74836-16	JD74836-17	JD74737-51	JD74737-52
				Sample Type	N	FD	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**79.2**	**78.2**	**82.1**	**78.9**	**79.7**	**62.5**	**72.7**	**65.5**	**68.8**	**79.3**	**85.9**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.99 U	< 0.98 U	< 0.94 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.1 U	< 0.99 U	< 0.91 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.99 U	< 0.98 U	< 0.94 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.1 U	< 0.99 U	< 0.91 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.99 UJ	< 0.98 UJ	< 0.94 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.1 U	< 0.99 U	< 0.91 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.99 U	< 0.98 UJ	< 0.94 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.1 U	< 0.99 U	< 0.91 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.2 U	< 6.1 U	< 5.9 UJ	< 6.3 U	< 6.2 U	< 7.8 U	< 6.9 U	< 7.3 U	< 7.1 U	< 6.2 U	< 5.7 UJ
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.2 U	< 6.1 U	< 5.9 UJ	< 6.3 U	< 6.2 U	< 7.8 U	< 6.9 U	< 7.3 U	< 7.1 U	< 6.2 U	< 5.7 UJ
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.2 U	< 1.2 UJ	< 1.2 UJ	< 1.3 UJ	< 1.2 UJ	< 1.6 U	< 1.4 U	< 1.5 U	< 1.4 U	< 1.2 U	R
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.99 U	< 0.98 U	< 0.94 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.1 U	< 0.99 U	< 0.91 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.99 U	< 0.98 U	< 0.94 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.1 U	< 0.99 U	< 0.91 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.99 U	< 0.98 U	< 0.94 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.1 U	< 0.99 U	< 0.91 UJ
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.25 UJ	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 UJ	< 0.28 UJ	< 0.25 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 2.5 UJ	< 2.3 U	< 2.5 U	< 2.5 U	< 3.1 U	< 2.8 U	< 2.9 UJ	< 2.8 U	< 2.5 U	< 2.3 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.25 UJ	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 UJ	< 0.28 U	< 0.29 UJ	< 0.28 UJ	< 0.25 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 UJ	< 2.5 UJ	< 2.3 U	< 2.5 U	< 2.5 U	< 3.1 U	< 2.8 U	< 2.9 UJ	< 2.8 UJ	< 2.5 U	< 2.3 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.50 U	< 0.49 U	< 0.47 U	< 0.51 U	< 0.49 U	< 0.63 U	< 0.55 U	< 0.59 U	< 0.57 U	< 0.49 U	< 0.46 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.50 U	< 0.49 U	< 0.47 U	< 0.51 U	< 0.49 U	< 0.63 U	< 0.55 U	< 0.59 U	< 0.57 U	< 0.49 U	< 0.46 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.50 U	< 0.49 UJ	< 0.47 UJ	< 0.51 UJ	< 0.49 UJ	< 0.63 U	< 0.55 U	< 0.59 U	< 0.57 U	< 0.49 U	R
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.50 U	< 0.49 UJ	< 0.47 U	< 0.51 U	< 0.49 U	< 0.63 U	< 0.55 U	< 0.59 U	< 0.57 U	< 0.49 U	R
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.70 J**	R	< 0.94 UJ	< 1.0 UJ	< 0.98 UJ	**0.79 J**	< 1.1 UJ	< 1.2 UJ	< 1.1 UJ	**0.32 J**	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.25 U	**0.12 J**	< 0.23 U	**0.11 J**	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 UJ	< 0.23 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.13 J**	**0.17 J**	**0.066 J**	**0.17 J**	**0.17 J**	**0.27 J**	< 0.28 U	**0.089 J**	**0.11 J**	**0.087 J**	**0.081 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.20 J**	**0.26**	**0.17 J**	**0.11 J**	**0.15 J**	**0.35**	**0.069 J**	**0.14 J**	**0.16 J**	**0.083 J**	**0.12 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.26**	**0.29**	< 0.23 U	**0.20 J**	**0.088 J**	**0.36**	< 0.28 U	**0.20 J**	**0.16 J**	**0.24 J**	**0.071 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			**0.90**	**1.2**	**0.21 J**	< 0.25 U	< 0.25 U	**0.25 J**	< 0.28 U	**0.89**	**0.73**	< 0.25 U	< 0.23 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.56 J**	**0.89 J**	**0.23**	**0.45**	**0.38**	**1.4**	**0.13 J**	**0.65**	**0.55**	**0.38**	**0.26**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.26**	**0.37**	**0.28**	**0.15 J**	**0.47**	**0.93**	**0.12 J**	**0.20 J**	**0.23 J**	**0.23 J**	**0.34**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.30 J**	**0.29 J**	**0.092 J**	**0.38 J**	**0.11 J**	**0.31 J**	< 0.55 U	**0.10 J**	< 0.57 U	< 0.49 U	R
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 UJ	< 0.23 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.25 U	< 0.23 U	< 0.25 U	< 0.25 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 UJ
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.12 J**	**0.20 J**	< 0.23 U	**0.16 J**	< 0.25 U	**0.14 J**	< 0.28 U	< 0.29 U	< 0.28 U	< 0.25 U	< 0.23 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	048B-SD	048B-SD	049E-R	049E-R	049E-SD	049E-SD	050-NS	050-NS	050-R	050-R	050-SD
				Sample ID	048B-SD-0-2	048B-SD-2-12	049E-R-0-2	049E-R-2-12	049E-SD-0-2	049E-SD-2-12	050-NS-0-2	050-NS-2-12	050-R-0-2	050-R-2-12	050-SD-0-2
				Sample Date	10/12/2023 8:35:00 AM	10/12/2023 8:40:00 AM	12/6/2023 1:00:00 PM	12/6/2023 1:05:00 PM	12/6/2023 12:45:00 PM	12/6/2023 12:50:00 PM	10/13/2023 9:15:00 AM	10/13/2023 9:20:00 AM	10/13/2023 9:35:00 AM	10/13/2023 9:40:00 AM	10/13/2023 9:25:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD74737-49	JD74737-50	JD78296-21	JD78296-22	JD78296-19	JD78296-20	JD74836-1	JD74836-2	JD74836-5	JD74836-6	JD74836-3
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%		**84.6**	**85.6**	**67.5**	**76.8**	**59.5**	**71.8**	**86.2**	**89.9**	**77.6**	**84.2**	**89.7**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg		< 0.93 U	< 0.93 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.91 U	< 0.89 U	< 1.0 U	< 0.91 U	< 0.86 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg		< 0.93 U	< 0.93 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.91 U	< 0.89 U	< 1.0 U	< 0.91 U	< 0.86 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg		< 0.93 U	< 0.93 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.91 U	< 0.89 U	< 1.0 U	< 0.91 U	< 0.86 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg		< 0.93 U	< 0.93 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.91 U	< 0.89 U	< 1.0 U	< 0.91 U	< 0.86 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg		< 5.8 UJ	< 5.8 UJ	< 7.3 U	< 6.4 U	< 8.4 U	< 6.8 U	< 5.7 U	< 5.6 U	< 6.4 U	< 5.7 U	< 5.4 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg		< 5.8 UJ	< 5.8 UJ	< 7.3 U	< 6.4 U	< 8.4 U	< 6.8 U	< 5.7 U	< 5.6 U	< 6.4 U	< 5.7 U	< 5.4 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg		R	< 1.2 UJ	< 1.5 UJ	< 1.3 UJ	< 1.7 UJ	< 1.4 UJ	< 1.1 UJ	< 1.1 U	< 1.3 U	< 1.1 U	< 1.1 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg		< 0.93 U	< 0.93 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.91 U	< 0.89 U	< 1.0 U	< 0.91 U	< 0.86 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg		< 0.93 U	< 0.93 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.91 U	< 0.89 U	< 1.0 U	< 0.91 U	< 0.86 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg		< 0.93 UJ	< 0.93 UJ	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 0.91 U	< 0.89 U	< 1.0 U	< 0.91 U	< 0.86 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg		< 2.3 U	< 2.3 U	< 2.9 U	< 2.6 U	< 3.4 U	< 2.7 U	< 2.3 U	< 2.2 U	< 2.6 U	< 2.3 U	< 2.1 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg		< 2.3 U	< 2.3 U	< 2.9 U	< 2.6 U	< 3.4 U	< 2.7 U	< 2.3 U	< 2.2 U	< 2.6 U	< 2.3 U	< 2.1 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg		< 0.46 UJ	< 0.47 UJ	< 0.58 U	< 0.51 U	< 0.67 U	< 0.55 U	< 0.45 U	< 0.44 U	< 0.52 U	< 0.46 U	< 0.43 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg		< 0.46 U	< 0.47 U	< 0.58 U	< 0.51 U	< 0.67 U	< 0.55 U	< 0.45 U	< 0.44 U	< 0.52 U	< 0.46 U	< 0.43 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg		R	< 0.47 UJ	< 0.58 UJ	< 0.51 UJ	< 0.67 UJ	< 0.55 UJ	< 0.45 UJ	< 0.44 U	< 0.52 U	< 0.46 U	< 0.43 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg		R	< 0.47 UJ	< 0.58 U	< 0.51 U	< 0.67 U	< 0.55 U	< 0.45 UJ	< 0.44 U	< 0.52 U	< 0.46 U	< 0.43 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg		R	R	< 1.2 UJ	< 1.0 UJ	**0.21 J**	< 1.1 UJ	R	< 0.89 UJ	**0.68 J**	**0.87 J**	< 0.86 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	**0.15 J**	< 0.23 U	< 0.21 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg		< 0.23 UJ	< 0.23 UJ	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg		< 0.23 U	< 0.23 U	**0.17 J**	**0.094 J**	**0.18 J**	**0.12 J**	< 0.23 U	< 0.22 U	**0.23 J**	**0.18 J**	< 0.21 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg		< 0.23 UJ	< 0.23 UJ	**0.10 J**	**0.048 J**	**0.10 J**	**0.049 J**	< 0.23 U	< 0.22 U	**0.26**	**0.22 J**	**0.064 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg		< 0.23 U	< 0.23 U	**0.16 J**	**0.097 J**	**0.15 J**	**0.080 J**	**0.094 J**	< 0.22 U	**0.28**	**0.15 J**	< 0.21 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	**0.56**	**0.63**	**1.0**	**0.18 J**	**0.68**
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	**0.14 J**	**0.22 J**	**0.67**	**0.20 J**	**0.34**	**0.15 J**	**0.41**	**0.40**	**0.78**	**0.35**	**0.19 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	< 0.23 U	< 0.23 U	**0.34**	**0.13 J**	**0.35**	**0.23 J**	< 0.23 U	< 0.22 U	**0.45**	**0.46**	< 0.21 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg		R	< 0.47 UJ	< 0.58 U	< 0.51 U	< 0.67 U	< 0.55 U	< 0.45 UJ	**0.12 J**	**0.17 J**	**0.19 J**	< 0.43 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg		< 0.23 UJ	< 0.23 UJ	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.21 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg		< 0.23 U	< 0.23 U	< 0.29 U	< 0.26 U	< 0.34 U	< 0.27 U	< 0.23 U	< 0.22 U	**0.16 J**	< 0.23 U	< 0.21 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	050-SD	052A-R	052A-R	052A-SD	052A-SD	053B-NS	053B-NS	053B-R	053B-R	053B-SD	053B-SD
				Sample ID	050-SD-2-12	052A-R-0-2	052A-R-2-12	052A-SD-0-2	052A-SD-2-12	053B-NS-0-2	053B-NS-2-12	053B-R-0-2	053B-R-2-12	053B-SD-0-2	053B-SD-2-12
				Sample Date	10/13/2023 9:30:00 AM	10/26/2023 9:40:00 AM	10/26/2023 9:45:00 AM	10/26/2023 9:15:00 AM	10/26/2023 9:20:00 AM	10/25/2023 1:35:00 PM	10/25/2023 1:40:00 PM	10/25/2023 2:05:00 PM	10/25/2023 2:10:00 PM	10/25/2023 1:50:00 PM	10/25/2023 1:55:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74836-4	JD75674-3	JD75674-4	JD75674-1	JD75674-2	JD75523-14	JD75523-15	JD75523-18	JD75523-19	JD75523-16	JD75523-17
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**93.7**	**65.9**	**79.6**	**63.8**	**77.4**	**87.7**	**92.4**	**58.6**	**75.8**	**91.5**	**93.0**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.82 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.0 U	< 0.89 U	< 0.85 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.84 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.82 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.0 U	< 0.89 U	< 0.85 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.84 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.82 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.0 U	< 0.89 U	< 0.85 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.84 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.82 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.0 U	< 0.89 U	< 0.85 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.84 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 5.1 U	< 7.6 U	< 6.3 U	< 7.7 U	< 6.3 U	< 5.6 U	< 5.3 U	< 8.4 U	< 6.6 U	< 5.5 U	< 5.3 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 5.1 U	< 7.6 U	< 6.3 U	< 7.7 U	< 6.3 U	< 5.6 U	< 5.3 U	< 8.4 U	< 6.6 U	< 5.5 U	< 5.3 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.0 U	< 1.5 UJ	< 1.3 UJ	< 1.5 UJ	< 1.3 UJ	< 1.1 UJ	< 1.1 UJ	< 1.7 U	< 1.3 UJ	< 1.1 UJ	< 1.1 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.82 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.0 U	< 0.89 U	< 0.85 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.84 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.82 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.0 U	< 0.89 U	< 0.85 U	< 1.3 U	< 1.1 U	< 0.87 U	< 0.84 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.82 U	< 1.2 U	< 1.0 U	< 1.2 U	< 1.0 U	< 0.89 UJ	< 0.85 U	< 1.3 U	< 1.1 U	< 0.87 UJ	< 0.84 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.1 U	< 3.0 U	< 2.5 U	< 3.1 U	< 2.5 U	< 2.2 U	< 2.1 UJ	< 3.3 U	< 2.6 U	< 2.2 U	< 2.1 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.1 U	< 3.0 U	< 2.5 U	< 3.1 U	< 2.5 U	< 2.2 U	< 2.1 U	< 3.3 U	< 2.6 U	< 2.2 U	< 2.1 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.41 U	< 0.61 U	< 0.50 U	< 0.61 U	< 0.51 U	< 0.45 U	< 0.42 U	< 0.67 U	< 0.53 U	< 0.44 U	< 0.42 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.41 U	< 0.61 U	< 0.50 U	< 0.61 U	< 0.51 U	< 0.45 U	< 0.42 U	< 0.67 U	< 0.53 U	< 0.44 U	< 0.42 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.41 U	< 0.61 UJ	< 0.50 UJ	< 0.61 UJ	< 0.51 UJ	< 0.45 UJ	< 0.42 UJ	< 0.67 U	< 0.53 UJ	< 0.44 UJ	< 0.42 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.41 U	< 0.61 U	< 0.50 U	< 0.61 U	< 0.51 U	< 0.45 UJ	< 0.42 UJ	< 0.67 U	< 0.53 UJ	< 0.44 UJ	< 0.42 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	**0.57**	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 0.82 UJ	< 1.2 UJ	< 1.0 UJ	< 1.2 UJ	**0.58 J**	R	R	< 1.3 UJ	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.21 U	**0.15 J**	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	**0.28 J**	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	**0.15 J**	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.21 U	**0.21 J**	**0.064 J**	**0.17 J**	**0.19 J**	< 0.22 U	< 0.21 U	**0.14 J**	**0.10 J**	< 0.22 U	**0.069 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.042 J**	**0.13 J**	**0.083 J**	**0.080 J**	**0.27**	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			< 0.21 U	**0.36**	**0.12 J**	**0.18 J**	**0.12 J**	< 0.22 U	**0.069 J**	**0.29 J**	**0.084 J**	**0.064 J**	< 0.21 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			**0.51**	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.068 J**	**1.3**	**0.45**	**0.33**	**0.36**	**0.19 J**	**0.13 J**	**1.0**	**0.14 J**	**0.078 J**	< 0.21 U
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		< 0.21 U	**0.52**	**0.28**	**0.25 J**	**0.49**	< 0.22 U	< 0.21 U	**0.84**	**0.31**	< 0.22 U	**0.11 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.41 U	< 0.61 U	< 0.50 U	< 0.61 U	**0.22 J**	< 0.45 UJ	< 0.42 UJ	< 0.67 U	< 0.53 UJ	< 0.44 UJ	< 0.42 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.21 U	< 0.30 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.22 U	< 0.21 U	< 0.33 U	< 0.26 U	< 0.22 U	< 0.21 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.21 U	**0.17 J**	< 0.25 U	< 0.31 U	< 0.25 U	**0.21 J**	**0.066 J**	**0.24 J**	< 0.26 U	< 0.22 U	< 0.21 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	054A-R	054A-R	054A-SD	054A-SD	055-R	055-R	055-SD	055-SD	057-R	057-R	057-SD
				Sample ID	054A-R-0-2	054A-R-2-12	054A-SD-0-2	054A-SD-2-12	055-R-0-2	055-R-2-12	055-SD-0-2	055-SD-2-12	057-R-0-2	057-R-2-12	057-SD-0-2
				Sample Date	10/25/2023 9:00:00 AM	10/25/2023 9:05:00 AM	10/25/2023 8:45:00 AM	10/25/2023 8:50:00 AM	10/24/2023 9:55:00 AM	10/24/2023 10:00:00 AM	10/24/2023 9:25:00 AM	10/24/2023 9:30:00 AM	10/19/2023 4:50:00 PM	10/19/2023 4:55:00 PM	10/19/2023 4:35:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD75523-3	JD75523-4	JD75523-1	JD75523-2	JD75433-19	JD75433-20	JD75433-17	JD75433-18	JD75251-18	JD75251-19	JD75251-16
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**71.8**	**80.0**	**75.5**	**70.3**	**63.8**	**79.1**	**78.8**	**84.2**	**56.4**	**73.7**	**65.4**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.95 U	< 1.4 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.95 U	< 1.4 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 1.0 UJ	< 1.0 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.95 U	< 1.4 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.95 U	< 1.4 U	< 1.1 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.8 U	< 6.3 UJ	< 6.5 U	< 7.1 U	< 7.7 U	< 6.3 U	< 6.2 U	< 5.9 U	< 8.9 U	< 6.8 U	< 7.6 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.8 U	< 6.3 UJ	< 6.5 U	< 7.1 U	< 7.7 U	< 6.3 U	< 6.2 U	< 5.9 U	< 8.9 U	< 6.8 U	< 7.6 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.4 U	R	< 1.3 U	< 1.4 U	< 1.5 U	< 1.3 U	< 1.2 UJ	< 1.2 U	< 1.8 UJ	< 1.4 UJ	< 1.5 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.95 U	< 1.4 U	< 1.1 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.95 U	< 1.4 U	< 1.1 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 1.0 UJ	< 1.0 U	< 1.1 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.95 U	< 1.4 U	< 1.1 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.27 U	< 0.25 UJ	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.7 U	< 2.5 UJ	< 2.6 U	< 2.8 U	< 3.1 U	< 2.5 U	< 2.5 U	< 2.4 U	< 3.5 U	< 2.7 U	< 3.1 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.27 U	< 0.25 UJ	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 UJ	< 0.27 UJ	< 0.31 UJ
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.7 U	< 2.5 U	< 2.6 U	< 2.8 U	< 3.1 U	< 2.5 U	< 2.5 U	< 2.4 U	< 3.5 U	< 2.7 U	< 3.1 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.55 U	< 0.50 UJ	< 0.52 U	< 0.57 U	< 0.61 U	< 0.51 U	< 0.50 U	< 0.48 U	< 0.71 U	< 0.54 U	< 0.61 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.55 U	< 0.50 UJ	< 0.52 U	< 0.57 U	< 0.61 U	< 0.51 U	< 0.50 U	< 0.48 U	< 0.71 U	< 0.54 U	< 0.61 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.55 U	R	< 0.52 U	< 0.57 U	< 0.61 U	< 0.51 U	< 0.50 UJ	< 0.48 U	< 0.71 UJ	< 0.54 UJ	< 0.61 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.55 U	R	< 0.52 U	< 0.57 U	< 0.61 U	< 0.51 U	< 0.50 UJ	< 0.48 U	< 0.71 U	< 0.54 U	< 0.61 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	**0.17 J**	< 0.25 U	< 0.25 U	**0.12 J**	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.1 UJ	R	< 1.0 UJ	< 1.1 UJ	< 1.2 UJ	< 1.0 UJ	R	< 0.95 UJ	R	**0.65 J**	< 1.2 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.21 J**	< 0.25 U	**0.18 J**	< 0.28 U	**0.24 J**	< 0.25 U	< 0.25 U	< 0.24 U	**0.15 J**	< 0.27 U	< 0.31 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 UJ	< 0.27 UJ	< 0.31 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	**0.16 J**	< 0.25 U	**0.13 J**	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.22 J**	**0.079 J**	**0.16 J**	**0.090 J**	**0.51**	**0.11 J**	**0.13 J**	**0.27**	**0.27 J**	**0.23 J**	**0.11 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.27 U	< 0.25 UJ	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.15 J**	< 0.25 U	< 0.26 U	< 0.28 U	**0.34**	< 0.25 U	< 0.25 U	**0.17 J**	**0.13 J**	**0.13 J**	**0.23 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.32**	< 0.25 U	**0.21 J**	< 0.28 U	**0.49**	< 0.25 U	**0.093 J**	**0.16 J**	**0.24 J**	**0.24 J**	**0.13 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.62**	**0.088 J**	**0.33**	**0.094 J**	**1.0**	**0.11 J**	**0.18 J**	**0.69**	**0.69**	**0.38**	**0.40**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.67**	**0.19 J**	**0.50**	**0.26 J**	**1.4**	**0.16 J**	< 0.25 U	**0.95**	**0.17 J**	**0.43**	**0.14 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.19 J**	R	**0.29 J**	**0.15 J**	**0.46 J**	< 0.51 U	< 0.50 UJ	**0.16 J**	**0.18 J**	**0.16 J**	< 0.61 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.31 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.27 U	< 0.25 U	< 0.26 U	< 0.28 U	**0.16 J**	< 0.25 U	**0.12 J**	< 0.24 U	< 0.35 U	< 0.27 U	< 0.31 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.11 J**	< 0.25 U	**0.086 J**	< 0.28 U	**0.37**	< 0.25 U	**0.27**	**0.081 J**	**0.27 J**	**0.13 J**	**0.10 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	057-SD	058-NS	058-NS	058-R	058-R	058-SD	058-SD	059C-NS	059C-NS	059C-NS	059C-R
				Sample ID	057-SD-2-12	058-NS-0-2	058-NS-2-12	058-R-0-2	058-R-2-12	058-SD-0-2	058-SD-2-12	059C-NS-0-2	059C-NS-2-12	FD-10312023	059C-R-0-2
				Sample Date	10/19/2023 4:40:00 PM	10/31/2023 2:35:00 PM	10/31/2023 2:40:00 PM	10/31/2023 3:05:00 PM	10/31/2023 3:10:00 PM	10/31/2023 2:50:00 PM	10/31/2023 2:55:00 PM	10/31/2023 8:35:00 AM	10/31/2023 8:40:00 AM	10/31/2023 8:40:00 AM	10/31/2023 9:15:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD75251-17	JD75822-29	JD75822-30	JD75822-33	JD75822-34	JD75822-31	JD75822-32	JD75822-10	JD75822-11	JD75822-12	JD75822-15
				Sample Type	N	N	N	N	N	N	N	N	N	FD	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**77.9**	**79.5**	**82.7**	**79.7**	**80.1**	**77.1**	**80.0**	**60.3**	**76.0**	**75.6**	**67.9**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.0 U	< 0.99 U	< 0.97 U	< 1.0 U	< 0.98 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.0 U	< 1.0 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.0 U	< 0.99 U	< 0.97 U	< 1.0 U	< 0.98 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.0 U	< 1.0 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.0 U	< 0.99 U	< 0.97 U	< 1.0 U	< 0.98 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.0 U	< 1.0 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.0 U	< 0.99 U	< 0.97 U	< 1.0 U	< 0.98 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.0 U	< 1.0 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.3 U	< 6.2 U	< 6.0 U	< 6.3 U	< 6.1 U	< 6.4 U	< 6.1 U	< 8.3 U	< 6.4 U	< 6.5 U	< 7.2 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.3 U	< 6.2 U	< 6.0 U	< 6.3 U	< 6.1 U	< 6.4 U	< 6.1 U	< 8.3 U	< 6.4 U	< 6.5 U	< 7.2 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.2 U	< 1.2 U	< 1.3 UJ	< 1.2 UJ	< 1.3 UJ	< 1.2 UJ	< 1.7 U	< 1.3 U	< 1.3 U	< 1.4 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.0 U	< 0.99 U	< 0.97 U	< 1.0 U	< 0.98 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.0 U	< 1.0 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.0 U	< 0.99 U	< 0.97 U	< 1.0 U	< 0.98 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.0 U	< 1.0 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.0 U	< 0.99 U	< 0.97 U	< 1.0 U	< 0.98 U	< 1.0 U	< 0.98 U	< 1.3 U	< 1.0 U	< 1.0 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 2.5 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.5 U	< 2.5 U	< 3.3 U	< 2.6 U	< 2.6 U	< 2.9 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 UJ	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 U	< 2.5 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.5 U	< 2.5 U	< 3.3 U	< 2.6 U	< 2.6 U	< 2.9 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.50 U	< 0.49 U	< 0.48 U	< 0.50 U	< 0.49 U	< 0.51 U	< 0.49 U	< 0.66 U	< 0.52 U	< 0.52 U	< 0.58 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.50 U	< 0.49 U	< 0.48 U	< 0.50 U	< 0.49 U	< 0.51 U	< 0.49 U	< 0.66 U	< 0.52 U	< 0.52 U	< 0.58 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.50 UJ	< 0.49 U	< 0.48 U	< 0.50 UJ	< 0.49 UJ	< 0.51 UJ	< 0.49 UJ	< 0.66 U	< 0.52 U	< 0.52 U	< 0.58 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.50 U	< 0.49 U	< 0.48 U	< 0.50 U	< 0.49 U	< 0.51 UJ	< 0.49 U	< 0.66 U	< 0.52 U	< 0.52 U	< 0.58 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.0 UJ	< 0.99 U	< 0.97 U	**1.6 J**	< 0.98 UJ	R	< 0.98 UJ	< 1.3 UJ	< 1.0 UJ	**1.9**	< 1.2 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.25 U	**0.12 J**	< 0.24 U	**0.17 J**	< 0.24 U	**0.12 J**	**0.089 J**	< 0.33 U	< 0.26 U	< 0.26 U	**0.31**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 UJ	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	**0.11 J**	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.25 U	**0.13 J**	**0.11 J**	**0.14 J**	**0.25**	**0.22 J**	**0.16 J**	**0.17 J**	**0.17 J**	**0.16 J**	**0.25 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.24 J**	**0.097 J**	**0.088 J**	**0.12 J**	**0.11 J**	**0.15 J**	**0.12 J**	**0.15 J**	**0.17 J**	**0.17 J**	**0.19 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.14 J**	**0.21 J**	**0.18 J**	**0.26**	**0.24**	**0.28**	**0.22 J**	**0.17 J**	**0.14 J**	**0.13 J**	**0.41**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.21 J**	**0.28**	**0.29**	**0.55**	**0.30**	**0.36**	**0.21 J**	**0.37**	**0.23 J**	**0.24 J**	**0.60**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.26**	**0.25**	**0.39**	**0.36**	**0.78**	**0.19 J**	**0.50**	**0.30 J**	**0.51**	**0.48**	**0.43**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.14 J**	< 0.49 U	< 0.48 U	**0.10 J**	**0.13 J**	**0.24 J**	**0.13 J**	**0.14 J**	**0.17 J**	**0.13 J**	**0.34 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.33 U	< 0.26 U	< 0.26 U	< 0.29 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.078 J**	**0.20 J**	**0.11 J**	**0.20 J**	**0.096 J**	**0.17 J**	**0.10 J**	**0.16 J**	**0.11 J**	**0.14 J**	**0.34**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	059C-R	059C-SD	059C-SD	061-R	061-R	061-SD	061-SD	062C-R	062C-R	062C-SD	062C-SD
				Sample ID	059C-R-2-12	059C-SD-0-2	059C-SD-2-12	061-R-0-2	061-R-2-12	061-SD-0-2	061-SD-2-12	062C-R-0-2	062C-R-2-12	062C-SD-0-2	062C-SD-2-12
				Sample Date	10/31/2023 9:20:00 AM	10/31/2023 8:55:00 AM	10/31/2023 9:00:00 AM	10/30/2023 2:45:00 PM	10/30/2023 2:50:00 PM	10/30/2023 2:25:00 PM	10/30/2023 2:30:00 PM	10/31/2023 10:30:00 AM	10/31/2023 10:35:00 AM	10/31/2023 10:10:00 AM	10/31/2023 10:15:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD75822-16	JD75822-13	JD75822-14	JD75822-7	JD75822-8	JD75822-5	JD75822-6	JD75822-19	JD75822-20	JD75822-17	JD75822-18
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**72.7**	**73.4**	**78.2**	**69.2**	**82.9**	**69.3**	**76.7**	**80.1**	**83.2**	**80.0**	**77.2**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.95 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.95 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.95 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.95 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.7 U	< 6.7 U	< 6.3 U	< 7.2 U	< 5.9 U	< 7.2 U	< 6.5 U	< 6.2 U	< 6.0 U	< 6.3 U	< 6.3 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.7 U	< 6.7 U	< 6.3 U	< 7.2 U	< 5.9 U	< 7.2 U	< 6.5 U	< 6.2 U	< 6.0 U	< 6.3 U	< 6.3 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.3 U	< 1.3 U	< 1.4 U	< 1.2 U	< 1.4 U	< 1.3 U	< 1.2 UJ	< 1.2 UJ	< 1.3 UJ	< 1.3 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.95 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.95 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.95 U	< 1.2 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.7 U	< 2.7 U	< 2.5 U	< 2.9 U	< 2.4 U	< 2.9 U	< 2.6 U	< 2.5 U	< 2.4 U	< 2.5 U	< 2.5 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.7 U	< 2.7 U	< 2.5 U	< 2.9 U	< 2.4 U	< 2.9 U	< 2.6 U	< 2.5 U	< 2.4 U	< 2.5 U	< 2.5 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.54 U	< 0.53 U	< 0.50 U	< 0.58 U	< 0.47 U	< 0.58 U	< 0.52 U	< 0.50 U	< 0.48 U	< 0.50 U	< 0.51 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.54 U	< 0.53 U	< 0.50 U	< 0.58 U	< 0.47 U	< 0.58 U	< 0.52 U	< 0.50 U	< 0.48 U	< 0.50 U	< 0.51 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.54 UJ	< 0.53 U	< 0.50 U	< 0.58 U	< 0.47 U	< 0.58 U	< 0.52 U	< 0.50 UJ	< 0.48 UJ	< 0.50 UJ	< 0.51 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.54 UJ	< 0.53 U	< 0.50 U	< 0.58 U	< 0.47 U	< 0.58 U	< 0.52 U	< 0.50 U	< 0.48 U	< 0.50 UJ	< 0.51 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	**0.11 J**	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	< 1.1 UJ	< 1.0 UJ	< 1.2 UJ	< 0.95 UJ	**1.6 J**	< 1.0 UJ	< 1.0 UJ	< 0.96 UJ	< 1.0 UJ	< 1.0 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.12 J**	< 0.27 U	< 0.25 U	**0.15 J**	**0.13 J**	**0.19 J**	< 0.26 U	**0.10 J**	< 0.24 U	**0.13 J**	< 0.25 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	**0.12 J**	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.21 J**	**0.15 J**	**0.11 J**	**0.23 J**	**0.18 J**	**0.19 J**	**0.37**	**0.10 J**	< 0.24 U	**0.14 J**	**0.15 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.19 J**	< 0.27 U	**0.11 J**	**0.12 J**	**0.13 J**	**0.19 J**	**0.29**	< 0.25 U	**0.038 J**	**0.11 J**	**0.11 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.27 UJ	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.37**	**0.12 J**	**0.13 J**	**0.33**	**0.18 J**	**0.33**	**0.14 J**	**0.094 J**	**0.075 J**	**0.23 J**	**0.17 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.27**	**0.36**	**0.48**	**0.60**	**0.42**	**0.39**	**0.29**	**0.27**	**0.30**	**3.4**	**3.2**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.75**	**0.21 J**	**0.28**	**0.58**	**0.57**	**0.29**	**1.3**	**0.13 J**	**0.17 J**	**0.55**	**0.52**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.54 UJ	< 0.53 U	< 0.50 U	**0.22 J**	**0.14 J**	**0.15 J**	**0.31 J**	< 0.50 U	< 0.48 U	< 0.50 UJ	**0.12 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.27 U	< 0.27 U	< 0.25 U	< 0.29 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.20 J**	**0.098 J**	**0.10 J**	**0.26 J**	**0.11 J**	**0.27 J**	**0.10 J**	**0.16 J**	**0.10 J**	**0.17 J**	**0.13 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	063-R	063-R	063-SD	063-SD	064-R	064-R	064-R	064-SD	064-SD	066-R	066-R
				Sample ID	063-R-0-2	063-R-2-12	063-SD-0-2	063-SD-2-12	064-R-0-2	FD-10252023	064-R-2-12	064-SD-0-2	064-SD-2-12	066-R-0-2	066-R-2-12
				Sample Date	10/24/2023 11:30:00 AM	10/24/2023 11:35:00 AM	10/24/2023 11:10:00 AM	10/24/2023 11:15:00 AM	10/25/2023 12:10:00 PM	10/25/2023 12:10:00 PM	10/25/2023 12:15:00 PM	10/25/2023 11:50:00 AM	10/25/2023 11:55:00 AM	10/26/2023 11:45:00 AM	10/26/2023 11:50:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD75433-23	JD75433-24	JD75433-21	JD75433-22	JD75523-11	JD75523-12	JD75523-13	JD75523-9	JD75523-10	JD75674-7	JD75674-8
				Sample Type	N	N	N	N	N	FD	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**37.9**	**60.1**	**84.8**	**81.4**	**40.0**	**43.1**	**67.2**	**74.1**	**86.1**	**69.4**	**80.1**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 2.1 U	< 1.3 U	< 0.94 U	< 0.98 U	< 2.0 U	< 1.8 U	< 1.2 U	< 1.1 U	< 0.93 U	< 1.1 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 2.1 U	< 1.3 U	< 0.94 U	< 0.98 U	< 2.0 U	< 1.8 U	< 1.2 U	< 1.1 U	< 0.93 U	< 1.1 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 2.1 U	< 1.3 U	< 0.94 U	< 0.98 U	< 2.0 U	< 1.8 U	< 1.2 U	< 1.1 U	< 0.93 U	< 1.1 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 2.1 U	< 1.3 U	< 0.94 U	< 0.98 U	< 2.0 U	< 1.8 U	< 1.2 U	< 1.1 U	< 0.93 U	< 1.1 U	< 0.98 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 13 U	< 8.2 U	< 5.9 U	< 6.1 U	< 13 U	< 11 U	< 7.3 U	< 6.6 U	< 5.8 U	< 7.1 U	< 6.1 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 13 U	< 8.2 U	< 5.9 U	< 6.1 U	< 13 U	< 11 U	< 7.3 U	< 6.6 U	< 5.8 U	< 7.1 U	< 6.1 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 2.6 UJ	< 1.6 U	< 1.2 U	< 1.2 U	< 2.5 U	< 2.3 UJ	< 1.5 U	< 1.3 UJ	< 1.2 UJ	< 1.4 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 2.1 U	< 1.3 U	< 0.94 U	< 0.98 U	< 2.0 U	< 1.8 U	< 1.2 U	< 1.1 U	< 0.93 U	< 1.1 U	< 0.98 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 2.1 U	< 1.3 U	< 0.94 U	< 0.98 U	< 2.0 U	< 1.8 U	< 1.2 U	< 1.1 U	< 0.93 U	< 1.1 U	< 0.98 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 2.1 U	< 1.3 U	< 0.94 U	< 0.98 U	< 2.0 U	< 1.8 U	< 1.2 U	< 1.1 UJ	< 0.93 U	< 1.1 U	< 0.98 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 5.2 U	< 3.3 U	< 2.4 U	< 2.5 U	< 5.0 UJ	< 4.5 UJ	< 2.9 U	< 2.6 UJ	< 2.3 UJ	< 2.8 U	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 5.2 U	< 3.3 U	< 2.4 U	< 2.5 U	< 5.0 U	< 4.5 U	< 2.9 U	< 2.6 U	< 2.3 U	< 2.8 U	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 1.0 U	< 0.65 U	< 0.47 U	< 0.49 U	< 1.0 U	< 0.91 U	< 0.58 U	< 0.53 U	< 0.46 U	< 0.57 U	< 0.49 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 1.0 U	< 0.65 U	< 0.47 U	< 0.49 U	< 1.0 U	< 0.91 U	< 0.58 U	< 0.53 U	< 0.46 U	< 0.57 U	< 0.49 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 1.0 UJ	< 0.65 U	< 0.47 U	< 0.49 U	< 1.0 U	< 0.91 UJ	< 0.58 U	< 0.53 UJ	< 0.46 UJ	< 0.57 UJ	< 0.49 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 1.0 UJ	< 0.65 U	< 0.47 U	< 0.49 U	< 1.0 U	< 0.91 UJ	< 0.58 U	< 0.53 UJ	< 0.46 UJ	< 0.57 U	< 0.49 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.52 U	**0.13 J**	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	< 1.3 UJ	< 0.94 UJ	< 0.98 UJ	**0.81 J**	R	**0.53 J**	R	R	**0.78 J**	< 0.98 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.82**	**0.38**	< 0.24 U	**0.18 J**	**0.63**	**0.50**	**0.20 J**	**0.12 J**	< 0.23 U	**0.16 J**	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			**0.59**	**0.18 J**	< 0.24 U	< 0.25 U	**0.32 J**	**0.28 J**	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.64**	**0.50**	< 0.24 U	**0.26**	**0.47 J**	**0.44 J**	**0.31**	< 0.26 U	< 0.23 U	**0.29**	**0.11 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.52 U	**0.19 J**	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.46 J**	**0.23 J**	< 0.24 U	**0.24 J**	**0.48 J**	**0.43 J**	**0.39**	< 0.26 U	< 0.23 U	**0.27 J**	**0.12 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.92**	**0.69**	< 0.24 U	**0.20 J**	**0.85**	**0.96**	**0.45**	**0.15 J**	**0.10 J**	**0.62**	**0.093 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**3.0**	**1.8**	**0.10 J**	**0.31**	**2.4**	**2.4**	**1.0**	**0.38**	**0.11 J**	**0.92**	**0.42**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**1.2**	**1.1**	< 0.24 U	**0.75**	**2.2**	**1.8**	**1.5**	< 0.26 U	**0.17 J**	**0.77**	**0.40**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.52 U	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	< 0.45 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**1.1 J**	**0.25 J**	< 0.47 U	**0.16 J**	**0.53 J**	**1.0 J**	**0.41 J**	< 0.53 UJ	< 0.46 UJ	**0.32 J**	< 0.49 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			**0.27 J**	< 0.33 U	< 0.24 U	< 0.25 U	< 0.50 U	**0.23 J**	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			**0.73**	**0.23 J**	< 0.24 U	< 0.25 U	**0.32 J**	**0.38 J**	< 0.29 U	< 0.26 U	< 0.23 U	< 0.28 U	< 0.24 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**1.4**	**0.58**	< 0.24 U	**0.17 J**	**0.85**	**0.87**	**0.22 J**	**0.19 J**	< 0.23 U	**0.20 J**	< 0.24 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	066-SD	066-SD	067-R	067-R	067-SD	067-SD	068-R	068-R	068-SD	068-SD	069-R
				Sample ID	066-SD-0-2	066-SD-2-12	067-R-0-2	067-R-2-12	067-SD-0-2	067-SD-2-12	068-R-0-2	068-R-2-12	068-SD-0-2	068-SD-2-12	069-R-0-2
				Sample Date	10/26/2023 11:30:00 AM	10/26/2023 11:35:00 AM	10/25/2023 10:20:00 AM	10/25/2023 10:25:00 AM	10/25/2023 10:05:00 AM	10/25/2023 10:10:00 AM	10/31/2023 1:30:00 PM	10/31/2023 1:35:00 PM	10/31/2023 1:15:00 PM	10/31/2023 1:20:00 PM	10/20/2023 11:35:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD75674-5	JD75674-6	JD75523-7	JD75523-8	JD75523-5	JD75523-6	JD75822-27	JD75822-28	JD75822-25	JD75822-26	JD75251-34
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**63.0**	**70.7**	**78.5**	**77.0**	**81.5**	**84.1**	**75.1**	**76.4**	**72.4**	**79.6**	**76.9**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.3 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.98 U	< 0.93 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.3 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.98 U	< 0.93 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.3 U	< 1.1 U	< 1.0 UJ	< 1.0 U	< 0.98 U	< 0.93 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.3 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.98 U	< 0.93 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.9 U	< 7.1 U	< 6.4 UJ	< 6.4 U	< 6.1 U	< 5.8 U	< 6.5 U	< 6.4 U	< 6.9 U	< 6.3 U	< 6.4 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.9 U	< 7.1 U	< 6.4 UJ	< 6.4 U	< 6.1 U	< 5.8 U	< 6.5 U	< 6.4 U	< 6.9 U	< 6.3 U	< 6.4 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.6 UJ	< 1.4 UJ	R	< 1.3 UJ	R	< 1.2 UJ	< 1.3 UJ	< 1.3 UJ	< 1.4 UJ	< 1.3 UJ	< 1.3 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.3 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.98 U	< 0.93 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.3 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.98 U	< 0.93 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.3 U	< 1.1 U	< 1.0 UJ	< 1.0 UJ	< 0.98 U	< 0.93 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.2 U	< 2.8 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.3 U	< 2.6 U	< 2.6 U	< 2.8 U	< 2.5 U	< 2.5 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.2 U	< 2.8 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.3 U	< 2.6 U	< 2.6 U	< 2.8 U	< 2.5 U	< 2.5 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.63 U	< 0.57 U	< 0.51 UJ	< 0.51 U	< 0.49 U	< 0.47 U	< 0.52 U	< 0.51 U	< 0.55 U	< 0.50 U	< 0.51 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.63 U	< 0.57 U	< 0.51 UJ	< 0.51 U	< 0.49 U	< 0.47 U	< 0.52 U	< 0.51 U	< 0.55 U	< 0.50 U	< 0.51 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.63 UJ	< 0.57 UJ	R	< 0.51 UJ	R	< 0.47 UJ	< 0.52 UJ	< 0.51 UJ	< 0.55 UJ	< 0.50 UJ	< 0.51 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.63 UJ	< 0.57 U	R	< 0.51 UJ	R	< 0.47 UJ	< 0.52 U	< 0.51 U	< 0.55 U	< 0.50 U	< 0.51 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	< 1.1 UJ	R	R	R	R	< 1.0 UJ	< 1.0 UJ	**1.0 J**	< 1.0 UJ	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.26 J**	< 0.28 U	**0.21 J**	**0.094 J**	**0.23 J**	< 0.23 U	**0.20 J**	< 0.26 U	**0.16 J**	< 0.25 U	**0.11 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	**0.11 J**	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.30 J**	**0.10 J**	**0.11 J**	**0.22 J**	**0.070 J**	**0.12 J**	**0.12 J**	**0.12 J**	**0.21 J**	**0.11 J**	**0.13 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.21 J**	**0.10 J**	< 0.25 U	**0.16 J**	< 0.25 U	**0.16 J**	**0.050 J**	**0.11 J**	**0.093 J**	< 0.25 U	**0.060 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.41**	**0.12 J**	**0.37**	**0.22 J**	**0.12 J**	**0.10 J**	**0.17 J**	**0.25 J**	**0.22 J**	**0.096 J**	**0.15 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.89**	**0.26 J**	**0.72**	**0.44**	**0.080 J**	**0.21 J**	**0.48**	**0.30**	**0.48**	**0.27**	**0.31**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.64**	**0.31**	**0.34**	**0.70**	**0.12 J**	**0.20 J**	**0.10 J**	**0.35**	**0.15 J**	**0.11 J**	**0.12 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.38 J**	**0.11 J**	R	< 0.51 UJ	R	< 0.47 UJ	**0.16 J**	**0.14 J**	**0.14 J**	< 0.50 U	< 0.51 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.32 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.23 U	< 0.26 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.25 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.29 J**	< 0.28 U	**0.31**	**0.091 J**	**0.11 J**	< 0.23 U	**0.40**	**0.15 J**	**0.25 J**	**0.097 J**	**0.22 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	069-R	069-SD	069-SD	071-R	071-R	071-SD	071-SD	072-R	072-R	072-SD	072-SD
				Sample ID	069-R-2-12	069-SD-0-2	069-SD-2-12	071-R-0-2	071-R-2-12	071-SD-0-2	071-SD-2-12	072-R-0-2	072-R-2-12	072-SD-0-2	072-SD-2-12
				Sample Date	10/20/2023 11:40:00 AM	10/20/2023 11:15:00 AM	10/20/2023 11:20:00 AM	10/30/2023 12:50:00 PM	10/30/2023 12:55:00 PM	10/30/2023 12:30:00 PM	10/30/2023 12:35:00 PM	10/23/2023 2:55:00 PM	10/23/2023 3:00:00 PM	10/23/2023 2:40:00 PM	10/23/2023 2:45:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD75251-35	JD75251-32	JD75251-33	JD75822-3	JD75822-4	JD75822-1	JD75822-2	JD75433-7	JD75433-8	JD75433-5	JD75433-6
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**86.7**	**63.9**	**77.6**	**80.3**	**78.4**	**76.4**	**82.1**	**60.3**	**73.9**	**70.5**	**78.0**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.92 U	< 1.2 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.92 U	< 1.2 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.92 U	< 1.2 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.92 U	< 1.2 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 5.8 U	< 7.7 U	< 6.3 U	< 6.1 U	< 6.3 U	< 6.4 U	< 6.0 U	< 8.3 U	< 6.6 U	< 7.0 U	< 6.4 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 5.8 U	< 7.7 U	< 6.3 U	< 6.1 U	< 6.3 U	< 6.4 U	< 6.0 U	< 8.3 U	< 6.6 U	< 7.0 U	< 6.4 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.2 UJ	< 1.5 UJ	< 1.3 UJ	< 1.2 U	< 1.3 U	< 1.3 U	< 1.2 U	< 1.7 U	< 1.3 U	< 1.4 U	< 1.3 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.92 U	< 1.2 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.92 U	< 1.2 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.92 U	< 1.2 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.96 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 UJ	< 0.28 U	< 0.26 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.3 U	< 3.1 U	< 2.5 U	< 2.4 U	< 2.5 U	< 2.6 U	< 2.4 U	< 3.3 U	< 2.7 U	< 2.8 U	< 2.6 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.3 U	< 3.1 U	< 2.5 U	< 2.4 U	< 2.5 U	< 2.6 U	< 2.4 U	< 3.3 U	< 2.7 U	< 2.8 U	< 2.6 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.46 U	< 0.61 U	< 0.51 U	< 0.49 U	< 0.50 U	< 0.51 U	< 0.48 U	< 0.66 U	< 0.53 U	< 0.56 U	< 0.51 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.46 U	< 0.61 U	< 0.51 U	< 0.49 U	< 0.50 U	< 0.51 U	< 0.48 U	< 0.66 U	< 0.53 U	< 0.56 U	< 0.51 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.46 UJ	< 0.61 UJ	< 0.51 UJ	< 0.49 U	< 0.50 U	< 0.51 U	< 0.48 U	< 0.66 U	< 0.53 U	< 0.56 U	< 0.51 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.46 UJ	< 0.61 UJ	< 0.51 U	< 0.49 U	< 0.50 U	< 0.51 U	< 0.48 U	< 0.66 U	< 0.53 U	< 0.56 U	< 0.51 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 0.92 UJ	R	< 1.0 UJ	< 0.98 UJ	< 1.0 UJ	< 1.0 UJ	< 0.96 UJ	< 1.3 UJ	< 1.1 UJ	< 1.1 UJ	< 1.0 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.22 J**	**0.14 J**	**0.13 J**	**0.21 J**	**0.14 J**	**0.17 J**	**0.090 J**	**0.26 J**	< 0.27 U	**0.14 J**	**0.17 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.069 J**	< 0.31 U	**0.091 J**	**0.12 J**	**0.099 J**	**0.15 J**	< 0.24 U	< 0.33 U	< 0.27 U	**0.16 J**	**0.14 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.082 J**	**0.14 J**	**0.12 J**	**0.13 J**	**0.13 J**	**0.19 J**	< 0.24 U	**0.31 J**	**0.097 J**	**0.11 J**	**0.19 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.25**	**0.44**	**0.14 J**	**0.26**	**0.15 J**	**0.29**	**0.14 J**	**0.30 J**	**0.20 J**	**0.25 J**	**0.23 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.47**	**0.13 J**	**0.25**	**0.45**	**0.37**	**0.18 J**	**0.14 J**	**0.50**	**0.27**	**0.24 J**	**0.50**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.46 UJ	< 0.61 UJ	< 0.51 U	**0.17 J**	**0.096 J**	**1.1**	< 0.48 U	**0.14 J**	< 0.53 U	**0.12 J**	< 0.51 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.23 U	< 0.31 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.26 U	< 0.24 U	< 0.33 U	< 0.27 U	< 0.28 U	< 0.26 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.23 U	**0.15 J**	< 0.25 U	**0.095 J**	< 0.25 U	**0.15 J**	< 0.24 U	**0.21 J**	**0.14 J**	**0.18 J**	**0.12 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	073-R	073-R	073-SD	073-SD	074D-R	074D-R	074D-SD	074D-SD	076-R	076-R	076-SD
				Sample ID	073-R-0-2	073-R-2-12	073-SD-0-2	073-SD-2-12	074D-R-0-2	074D-R-2-12	074D-SD-0-2	074D-SD-2-12	076-R-0-2	076-R-2-12	076-SD-0-2
				Sample Date	10/24/2023 2:15:00 PM	10/24/2023 2:20:00 PM	10/24/2023 1:50:00 PM	10/24/2023 1:55:00 PM	10/31/2023 11:40:00 AM	10/31/2023 11:45:00 AM	10/31/2023 11:20:00 AM	10/31/2023 11:25:00 AM	10/19/2023 11:20:00 AM	10/19/2023 11:30:00 AM	10/19/2023 11:45:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD75433-27	JD75433-28	JD75433-25	JD75433-26	JD75822-23	JD75822-24	JD75822-21	JD75822-22	JD75251-3	JD75251-4	JD75251-1
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**64.8**	**76.7**	**78.0**	**82.3**	**73.1**	**80.9**	**71.7**	**88.4**	**31.6**	**61.8**	**49.5**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.97 U	< 1.1 U	< 0.90 U	< 2.5 U	< 1.3 U	< 1.6 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.97 U	< 1.1 U	< 0.90 U	< 2.5 U	< 1.3 U	< 1.6 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.97 U	< 1.1 U	< 0.90 U	< 2.5 U	< 1.3 U	< 1.6 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.97 U	< 1.1 U	< 0.90 U	< 2.5 UJ	< 1.3 UJ	< 1.6 UJ
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.6 U	< 6.5 U	< 6.4 U	< 6.1 U	< 6.7 U	< 6.1 U	< 6.8 U	< 5.7 U	< 16 UJ	< 7.9 UJ	< 9.9 UJ
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.6 U	< 6.5 U	< 6.4 U	< 6.1 U	< 6.7 U	< 6.1 U	< 6.8 U	< 5.7 U	< 16 UJ	< 7.9 UJ	< 9.9 UJ
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.5 U	< 1.3 U	< 1.3 U	< 1.2 U	< 1.3 UJ	< 1.2 UJ	< 1.4 UJ	< 1.1 UJ	< 3.1 UJ	< 1.6 UJ	< 2.0 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.97 U	< 1.1 U	< 0.90 U	< 2.5 U	< 1.3 U	< 1.6 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.97 U	< 1.1 U	< 0.90 U	< 2.5 U	< 1.3 U	< 1.6 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.97 U	< 1.1 U	< 0.90 U	< 2.5 U	< 1.3 U	< 1.6 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 UJ	< 0.40 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.0 U	< 2.6 U	< 2.6 U	< 2.4 U	< 2.7 U	< 2.4 U	< 2.7 U	< 2.3 U	< 6.2 UJ	< 3.2 UJ	< 4.0 UJ
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.0 U	< 2.6 U	< 2.6 U	< 2.4 U	< 2.7 U	< 2.4 U	< 2.7 U	< 2.3 U	< 6.2 U	< 3.2 U	< 4.0 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.61 U	< 0.52 U	< 0.51 U	< 0.49 U	< 0.54 U	< 0.48 U	< 0.55 U	< 0.45 U	< 1.2 U	< 0.63 U	< 0.79 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.61 U	< 0.52 U	< 0.51 U	< 0.49 U	< 0.54 U	< 0.48 U	< 0.55 U	< 0.45 U	< 1.2 UJ	< 0.63 UJ	< 0.79 UJ
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.61 U	< 0.52 U	< 0.51 U	< 0.49 U	< 0.54 UJ	< 0.48 UJ	< 0.55 UJ	< 0.45 UJ	< 1.2 UJ	< 0.63 UJ	< 0.79 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.61 U	< 0.52 U	< 0.51 U	< 0.49 U	< 0.54 U	< 0.48 U	< 0.55 U	< 0.45 U	< 1.2 UJ	< 0.63 UJ	< 0.79 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	**0.092 J**	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	**0.25 J**	< 0.32 U	< 0.40 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.2 UJ	< 1.0 UJ	< 1.0 UJ	< 0.97 UJ	< 1.1 UJ	< 0.97 UJ	< 1.1 UJ	< 0.90 UJ	**3.7 J**	< 1.3 UJ	< 1.6 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.41**	**0.16 J**	**0.27**	< 0.24 U	**0.13 J**	< 0.24 U	**0.15 J**	< 0.23 U	**2.6**	< 0.32 U	< 0.40 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			**0.20 J**	< 0.26 U	**0.22 J**	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	**0.36 J**	< 0.32 U	< 0.40 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.23 J**	**0.35**	**0.16 J**	**0.23 J**	**0.20 J**	**0.15 J**	**0.16 J**	**0.13 J**	**1.7**	**0.55**	**0.13 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 UJ	< 0.32 UJ	< 0.40 UJ
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.19 J**	**0.25 J**	**0.17 J**	**0.14 J**	**0.13 J**	**0.13 J**	**0.18 J**	**0.064 J**	**1.6**	**0.35**	< 0.40 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.28 J**	**0.27**	**0.22 J**	**0.33**	**0.25 J**	**0.067 J**	**0.29**	**0.090 J**	**2.6**	**0.37**	**0.27 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	**1.1**	**0.58**	**0.63**	**0.43**	**0.52**	**0.27**	**0.45**	**0.21 J**	**6.0**	**0.59**	**0.36 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	**0.29 J**	**1.7**	**0.27**	**0.72**	**0.31**	**0.49**	**0.40**	**0.38**	**4.2**	**1.3**	**0.25 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 U	< 0.32 U	< 0.40 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.23 J**	**0.20 J**	**0.14 J**	**0.13 J**	**0.12 J**	**0.096 J**	**0.13 J**	< 0.45 U	**1.8**	**0.15 J**	< 0.79 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.30 U	< 0.26 U	< 0.26 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 UJ	< 0.32 UJ	< 0.40 UJ
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			**0.19 J**	< 0.26 U	**0.16 J**	< 0.24 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.23 U	< 0.62 UJ	< 0.32 U	< 0.40 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.59**	**0.10 J**	**0.45**	**0.15 J**	**0.29**	< 0.24 U	**0.25 J**	**0.097 J**	**0.83**	< 0.32 U	< 0.40 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	076-SD	077B-NS	077B-NS	077B-R	077B-R	077B-R	077B-SD	077B-SD	078-NS	078-NS	078-NS
				Sample ID	076-SD-2-12	077B-NS-0-2	077B-NS-2-12	077B-R-0-2	FD-10202023	077B-R-2-12	077B-SD-0-2	077B-SD-2-12	078-NS-0-2	078-NS-2-12	FD-10192023
				Sample Date	10/19/2023 11:50:00 AM	10/20/2023 10:30:00 AM	10/20/2023 10:35:00 AM	10/20/2023 9:45:00 AM	10/20/2023 9:45:00 AM	10/20/2023 9:50:00 AM	10/20/2023 10:10:00 AM	10/20/2023 10:15:00 AM	10/19/2023 1:15:00 PM	10/19/2023 1:20:00 PM	10/19/2023 1:20:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in
				Lab Sample ID	JD75251-2	JD75251-30	JD75251-31	JD75251-25	JD75251-26	JD75251-27	JD75251-28	JD75251-29	JD75251-5	JD75251-6	JD75251-7
				Sample Type	N	N	N	N	FD	N	N	N	N	N	FD
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**62.3**	**79.5**	**80.2**	**51.2**	**54.0**	**81.2**	**75.0**	**80.7**	**68.6**	**75.1**	**69.5**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.3 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.5 U	< 0.99 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.3 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.5 U	< 0.99 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.3 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.5 U	< 0.99 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.3 UJ	< 1.0 U	< 1.0 U	< 1.5 U	< 1.5 U	< 0.99 U	< 1.1 U	< 0.97 U	< 1.1 UJ	< 1.0 UJ	< 1.2 UJ
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 8.0 UJ	< 6.3 U	< 6.2 U	< 9.6 U	< 9.3 U	< 6.2 U	< 6.7 U	< 6.1 U	< 7.1 UJ	< 6.5 UJ	< 7.2 UJ
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 8.0 UJ	< 6.3 U	< 6.2 U	< 9.6 U	< 9.3 U	< 6.2 U	< 6.7 U	< 6.1 U	< 7.1 UJ	< 6.5 UJ	< 7.2 UJ
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.6 UJ	< 1.3 UJ	< 1.2 UJ	< 1.9 UJ	< 1.9 UJ	< 1.2 UJ	< 1.3 UJ	< 1.2 UJ	< 1.4 UJ	**0.43 J**	< 1.4 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.3 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.5 U	< 0.99 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.3 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.5 U	< 0.99 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.3 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.5 U	< 0.99 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.2 UJ	< 2.5 U	< 2.5 U	< 3.8 U	< 3.7 U	< 2.5 U	< 2.7 U	< 2.4 U	< 2.9 UJ	< 2.6 UJ	< 2.9 UJ
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 UJ	< 0.37 UJ	< 0.25 UJ	< 0.27 UJ	< 0.24 UJ	< 0.29 U	< 0.26 U	< 0.29 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.2 U	< 2.5 U	< 2.5 U	< 3.8 U	< 3.7 U	< 2.5 U	< 2.7 U	< 2.4 U	< 2.9 U	< 2.6 U	< 2.9 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.64 U	< 0.50 U	< 0.50 U	< 0.77 U	< 0.74 U	< 0.49 U	< 0.53 U	< 0.49 U	< 0.57 UJ	< 0.52 U	< 0.58 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.64 UJ	< 0.50 U	< 0.50 U	< 0.77 U	< 0.74 U	< 0.49 U	< 0.53 U	< 0.49 U	< 0.57 UJ	< 0.52 UJ	< 0.58 UJ
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.64 UJ	< 0.50 UJ	< 0.50 UJ	< 0.77 UJ	< 0.74 UJ	< 0.49 UJ	< 0.53 UJ	< 0.49 UJ	< 0.57 U	< 0.52 UJ	< 0.58 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.64 UJ	< 0.50 U	< 0.50 U	< 0.77 UJ	< 0.74 UJ	< 0.49 UJ	< 0.53 UJ	< 0.49 UJ	< 0.57 UJ	< 0.52 UJ	< 0.58 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.35 J**	< 1.0 UJ	< 1.0 UJ	R	R	< 0.99 UJ	< 1.1 UJ	< 0.97 UJ	R	< 1.0 UJ	< 1.2 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	**0.25 J**	**0.26 J**	< 0.25 U	**0.12 J**	< 0.24 U	**0.11 J**	< 0.26 U	< 0.29 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	**0.10 J**	< 0.37 UJ	< 0.25 UJ	< 0.27 UJ	< 0.24 UJ	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	**0.19 J**	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.15 J**	< 0.25 U	< 0.25 U	**0.41**	**0.38**	**0.14 J**	**0.24 J**	**0.090 J**	< 0.29 U	**0.090 J**	< 0.29 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.32 UJ	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 UJ	< 0.26 UJ	< 0.29 UJ
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.14 J**	< 0.25 U	< 0.25 U	**0.32 J**	**0.25 J**	**0.16 J**	**0.17 J**	< 0.24 U	< 0.29 U	**0.10 J**	**0.12 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.20 J**	< 0.25 U	**0.092 J**	**0.55**	**0.43**	**0.084 J**	**0.26 J**	< 0.24 U	< 0.29 U	**0.14 J**	**0.21 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.37**	**0.072 J**	**0.30**	**0.95**	**1.1**	**0.22 J**	**0.51**	< 0.24 U	**0.25 J**	**0.29**	**0.15 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.29 J**	< 0.25 U	**0.23 J**	**0.56**	**0.68**	**0.27**	**0.31**	**0.13 J**	**0.18 J**	**0.27**	**0.20 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.64 U	< 0.50 U	< 0.50 U	**0.54 J**	**0.61 J**	< 0.49 U	< 0.53 UJ	< 0.49 UJ	< 0.57 UJ	**0.11 J**	< 0.58 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.32 UJ	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 UJ	< 0.26 UJ	< 0.29 UJ
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.32 U	< 0.25 U	< 0.25 U	< 0.38 U	< 0.37 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.11 J**	< 0.25 U	**0.10 J**	**0.35 J**	**0.41**	< 0.25 U	**0.26 J**	< 0.24 U	< 0.29 U	< 0.26 U	< 0.29 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	078-R	078-R	078-SD	078-SD	079-NS	079-NS	079-R	079-R	079-SD	079-SD	080-NS
				Sample ID	078-R-0-2	078-R-2-12	078-SD-0-2	078-SD-2-12	079-NS-0-2	079-NS-2-12	079-R-0-2	079-R-2-12	079-SD-0-2	079-SD-2-12	080-NS-0-2
				Sample Date	10/19/2023 1:50:00 PM	10/19/2023 1:55:00 PM	10/19/2023 12:50:00 PM	10/19/2023 12:55:00 PM	10/16/2023 4:15:00 PM	10/16/2023 4:20:00 PM	10/16/2023 4:45:00 PM	10/16/2023 4:50:00 PM	10/16/2023 4:30:00 PM	10/16/2023 4:35:00 PM	10/18/2023 12:45:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD75251-10	JD75251-11	JD75251-8	JD75251-9	JD74986-20	JD74986-21	JD74986-24	JD74986-25	JD74986-22	JD74986-23	JD75085-9
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**57.0**	**72.7**	**52.9**	**68.0**	**72.9**	**80.6**	**71.9**	**77.9**	**58.5**	**68.4**	**64.1**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.4 U	< 1.1 U	< 1.5 U	< 1.2 U	< 1.1 U	< 0.99 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.4 U	< 1.1 U	< 1.5 U	< 1.2 U	< 1.1 U	< 0.99 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.4 U	< 1.1 U	< 1.5 U	< 1.2 U	< 1.1 U	< 0.99 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.4 UJ	< 1.1 UJ	< 1.5 UJ	< 1.2 U	< 1.1 U	< 0.99 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 8.6 UJ	< 6.9 UJ	< 9.3 UJ	< 7.2 U	< 6.9 U	< 6.2 U	< 6.8 U	< 6.3 U	< 8.4 U	< 7.2 U	< 7.6 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 8.6 UJ	< 6.9 UJ	< 9.3 UJ	< 7.2 U	< 6.9 U	< 6.2 U	< 6.8 U	< 6.3 U	< 8.4 U	< 7.2 U	< 7.6 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.7 UJ	< 1.4 UJ	< 1.9 UJ	< 1.4 UJ	< 1.4 UJ	< 1.2 UJ	< 1.4 UJ	< 1.3 UJ	< 1.7 UJ	< 1.4 UJ	< 1.5 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.4 U	< 1.1 U	< 1.5 U	< 1.2 U	< 1.1 U	< 0.99 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.4 U	< 1.1 U	< 1.5 U	< 1.2 U	< 1.1 U	< 0.99 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.4 U	< 1.1 U	< 1.5 U	< 1.2 U	< 1.1 U	< 0.99 U	< 1.1 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.4 UJ	< 2.8 UJ	< 3.7 UJ	< 2.9 U	< 2.7 U	< 2.5 U	< 2.7 U	< 2.5 U	< 3.4 U	< 2.9 U	< 3.1 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 UJ	< 0.25 UJ	< 0.27 UJ	< 0.25 UJ	< 0.34 UJ	< 0.29 UJ	< 0.31 UJ
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.4 U	< 2.8 U	< 3.7 U	< 2.9 U	< 2.7 U	< 2.5 U	< 2.7 U	< 2.5 U	< 3.4 U	< 2.9 U	< 3.1 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.69 U	< 0.55 U	< 0.74 U	< 0.58 U	< 0.55 U	< 0.50 U	< 0.55 U	< 0.50 U	< 0.67 U	< 0.57 U	< 0.61 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.69 UJ	< 0.55 U	< 0.74 UJ	< 0.58 U	< 0.55 U	< 0.50 U	< 0.55 U	< 0.50 U	< 0.67 U	< 0.57 U	< 0.61 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.69 UJ	< 0.55 UJ	< 0.74 UJ	< 0.58 UJ	< 0.55 UJ	< 0.50 UJ	< 0.55 UJ	< 0.50 UJ	< 0.67 UJ	< 0.57 UJ	< 0.61 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.69 UJ	< 0.55 UJ	< 0.74 UJ	< 0.58 UJ	< 0.55 U	< 0.50 U	< 0.55 U	< 0.50 U	< 0.67 UJ	< 0.57 UJ	< 0.61 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.80 J**	< 1.1 UJ	**0.42 J**	< 1.2 UJ	R	< 0.99 UJ	**0.24 J**	< 1.0 UJ	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 UJ	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.35**	< 0.28 U	< 0.37 U	< 0.29 U	**0.10 J**	< 0.25 U	< 0.27 U	< 0.25 U	**0.14 J**	< 0.29 U	< 0.31 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			**0.20 J**	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.41**	**0.072 J**	**0.15 J**	**0.081 J**	**0.13 J**	**0.068 J**	**0.093 J**	**0.065 J**	**0.11 J**	< 0.29 U	< 0.31 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.34 UJ	< 0.28 UJ	< 0.37 UJ	< 0.29 UJ	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.30 J**	**0.13 J**	< 0.37 U	**0.10 J**	< 0.27 U	< 0.25 U	**0.042 J**	< 0.25 U	**0.17 J**	< 0.29 U	< 0.31 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 UJ	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.55**	**0.099 J**	**0.22 J**	**0.099 J**	**0.12 J**	**0.15 J**	**0.18 J**	< 0.25 U	**0.24 J**	**0.13 J**	**0.16 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 UJ
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**1.4**	**0.29**	**0.27 J**	**0.33**	**0.26 J**	**0.27**	**0.31**	**0.13 J**	**1.8**	**0.95**	**0.23 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.88**	**0.32**	**0.18 J**	**0.25 J**	< 0.27 U	**0.099 J**	**0.16 J**	**0.11 J**	**0.40**	**0.29**	**0.13 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.34 U	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	< 0.31 UJ
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.53 J**	< 0.55 U	< 0.74 U	< 0.58 U	< 0.55 U	< 0.50 U	< 0.55 U	< 0.50 U	< 0.67 UJ	< 0.57 UJ	**0.16 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.34 UJ	< 0.28 UJ	< 0.37 UJ	< 0.29 UJ	< 0.27 U	< 0.25 U	< 0.27 UJ	< 0.25 UJ	< 0.34 UJ	< 0.29 UJ	< 0.31 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			**0.16 J**	< 0.28 U	< 0.37 U	< 0.29 U	< 0.27 U	< 0.25 U	< 0.27 UJ	< 0.25 UJ	< 0.34 UJ	< 0.29 UJ	< 0.31 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.50**	< 0.28 U	**0.18 J**	< 0.29 U	**0.10 J**	< 0.25 U	< 0.27 U	< 0.25 U	< 0.34 U	< 0.29 U	**0.12 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	080-NS	080-NS	080-R	080-R	080-SD	080-SD	081C-R	081C-R	081C-SD	081C-SD	083B-R
				Sample ID	080-NS-2-12	FD-10182023	080-R-0-2	080-R-2-12	080-SD-0-2	080-SD-2-12	081C-R-0-2	081C-R-2-12	081C-SD-0-2	081C-SD-2-12	083B-R-0-2
				Sample Date	10/18/2023 12:50:00 PM	10/18/2023 12:50:00 PM	10/18/2023 1:05:00 PM	10/18/2023 1:10:00 PM	10/18/2023 12:55:00 PM	10/18/2023 1:00:00 PM	10/18/2023 11:55:00 AM	10/18/2023 12:00:00 PM	10/18/2023 11:45:00 AM	10/18/2023 11:50:00 AM	10/18/2023 2:10:00 PM
				Depth Interval	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD75085-10	JD75085-11	JD75085-14	JD75085-15	JD75085-12	JD75085-13	JD75085-7	JD75085-8	JD75085-5	JD75085-6	JD75085-18
				Sample Type	N	FD	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**78.9**	**87.0**	**63.7**	**77.4**	**61.4**	**71.6**	**61.7**	**70.3**	**59.0**	**69.8**	**57.4**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.0 U	< 0.92 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.4 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.0 U	< 0.92 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.4 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.0 U	< 0.92 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.4 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.0 U	< 0.92 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.4 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.3 U	< 5.7 U	< 7.7 U	< 6.5 U	< 8.0 U	< 6.8 U	< 7.9 U	< 7.0 U	< 8.3 U	< 7.2 U	< 8.7 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.3 U	< 5.7 U	< 7.7 U	< 6.5 U	< 8.0 U	< 6.8 U	< 7.9 U	< 7.0 U	< 8.3 U	< 7.2 U	< 8.7 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.1 UJ	< 1.5 UJ	< 1.3 UJ	< 1.6 UJ	< 1.4 UJ	< 1.6 UJ	< 1.4 UJ	< 1.7 UJ	< 1.4 UJ	< 1.7 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.0 U	< 0.92 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.4 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.0 U	< 0.92 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.4 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.0 U	< 0.92 U	< 1.2 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1.4 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 2.3 U	< 3.1 U	< 2.6 U	< 3.2 U	< 2.7 U	< 3.2 U	< 2.8 U	< 3.3 U	< 2.9 U	< 3.5 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 UJ	< 0.23 UJ	< 0.31 UJ	< 0.26 UJ	< 0.32 UJ	< 0.27 UJ	< 0.32 UJ	< 0.28 UJ	< 0.33 UJ	< 0.29 UJ	< 0.35 UJ
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 U	< 2.3 U	< 3.1 U	< 2.6 U	< 3.2 U	< 2.7 U	< 3.2 U	< 2.8 U	< 3.3 U	< 2.9 U	< 3.5 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.51 U	< 0.46 U	< 0.62 U	< 0.52 U	< 0.64 U	< 0.55 U	< 0.64 U	< 0.56 U	< 0.66 U	< 0.57 U	< 0.70 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.51 U	< 0.46 U	< 0.62 U	< 0.52 U	< 0.64 U	< 0.55 U	< 0.64 U	< 0.56 U	< 0.66 U	< 0.57 U	< 0.70 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.51 UJ	< 0.46 UJ	< 0.62 UJ	< 0.52 UJ	< 0.64 UJ	< 0.55 UJ	< 0.64 UJ	< 0.56 UJ	< 0.66 UJ	< 0.57 UJ	< 0.70 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.51 U	< 0.46 U	< 0.62 U	< 0.52 U	< 0.64 U	< 0.55 U	< 0.64 U	< 0.56 U	< 0.66 U	< 0.57 U	< 0.70 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.0 UJ	< 0.92 UJ	**1.1 J**	**0.46 J**	< 1.3 UJ	**0.60 J**	**1.0 J**	**0.52 J**	< 1.3 UJ	R	< 1.4 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.25 U	< 0.23 U	**0.35**	< 0.26 U	< 0.32 U	< 0.27 U	**0.28 J**	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.23 U	**0.12 J**	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.091 J**	**0.079 J**	**0.35**	**0.14 J**	**0.25 J**	**0.15 J**	**0.32**	**0.18 J**	**0.12 J**	**0.15 J**	**0.16 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.25 U	< 0.23 U	**0.33**	**0.23 J**	< 0.32 U	**0.22 J**	**0.32**	**0.21 J**	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.12 J**	**0.17 J**	**0.56**	**0.24 J**	**0.25 J**	**0.13 J**	**0.42**	**0.19 J**	**0.15 J**	**0.13 J**	**0.15 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.25 UJ	< 0.23 UJ	< 0.31 UJ	< 0.26 UJ	< 0.32 UJ	< 0.27 UJ	< 0.32 UJ	< 0.28 UJ	< 0.33 UJ	< 0.29 UJ	< 0.35 UJ
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		< 0.25 UJ	**0.23 J**	**1.4 J**	**0.51 J**	**0.56 J**	**0.38 J**	**0.88 J**	**0.62 J**	**0.17 J**	**0.37 J**	**0.35 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.15 J**	< 0.23 U	**0.85**	**0.54**	**0.29 J**	**0.34**	**0.62**	**0.56**	< 0.33 U	**0.16 J**	**0.17 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 UJ	< 0.23 UJ	< 0.31 UJ	< 0.26 UJ	< 0.32 UJ	< 0.27 UJ	< 0.32 UJ	< 0.28 UJ	< 0.33 UJ	< 0.29 UJ	< 0.35 UJ
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.51 U	< 0.46 U	**3.0**	**0.12 J**	< 0.64 U	**0.16 J**	**0.28 J**	**0.14 J**	< 0.66 U	< 0.57 UJ	< 0.70 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.23 U	< 0.31 U	< 0.26 U	< 0.32 U	< 0.27 U	< 0.32 U	< 0.28 U	< 0.33 U	< 0.29 U	< 0.35 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.14 J**	**0.12 J**	**0.34**	**0.094 J**	**0.15 J**	**0.085 J**	**0.26 J**	< 0.28 U	**0.18 J**	**0.11 J**	< 0.35 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	083B-R	083B-SD	083B-SD	084-R	084-R	084-SD	084-SD	085A-R	085A-R	085A-SD	085A-SD
				Sample ID	083B-R-2-12	083B-SD-0-2	083B-SD-2-12	084-R-0-2	084-R-2-12	084-SD-0-2	084-SD-2-12	085A-R-0-2	085A-R-2-12	085A-SD-0-2	085A-SD-2-12
				Sample Date	10/18/2023 2:15:00 PM	10/18/2023 2:00:00 PM	10/18/2023 2:05:00 PM	10/19/2023 3:45:00 PM	10/19/2023 3:50:00 PM	10/19/2023 3:30:00 PM	10/19/2023 3:35:00 PM	11/20/2023 3:35:00 PM	11/20/2023 3:40:00 PM	11/20/2023 3:15:00 PM	11/20/2023 3:20:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD75085-19	JD75085-16	JD75085-17	JD75251-14	JD75251-15	JD75251-12	JD75251-13	JD77514-17	JD77514-18	JD77514-15	JD77514-16
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%		**70.2**	**79.5**	**79.6**	**59.3**	**76.9**	**77.3**	**80.7**	**70.0**	**77.3**	**69.4**	**71.5**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg		< 1.1 U	< 0.99 U	< 0.99 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg		< 1.1 U	< 0.99 U	< 0.99 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg		< 1.1 U	< 0.99 U	< 0.99 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg		< 1.1 U	< 0.99 U	< 0.99 U	< 1.3 U	< 1.0 U	< 1.0 UJ	< 0.97 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg		< 7.1 U	< 6.2 U	< 6.2 U	< 8.4 U	< 6.5 U	< 6.3 UJ	< 6.1 U	< 7.1 U	< 6.5 U	< 7.1 U	< 7.0 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg		< 7.1 U	< 6.2 U	< 6.2 U	< 8.4 U	< 6.5 U	< 6.3 UJ	< 6.1 U	< 7.1 U	< 6.5 U	< 7.1 U	< 7.0 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg		< 1.4 UJ	< 1.2 UJ	< 1.2 UJ	< 1.7 UJ	< 1.3 UJ	< 1.3 UJ	< 1.2 UJ	< 1.4 UJ	< 1.3 UJ	< 1.4 UJ	< 1.4 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg		< 1.1 U	< 0.99 U	< 0.99 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg		< 1.1 U	< 0.99 U	< 0.99 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg		< 1.1 U	< 0.99 U	< 0.99 U	< 1.3 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 UJ	< 0.28 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg		< 2.8 U	< 2.5 U	< 2.5 U	< 3.4 U	< 2.6 U	< 2.5 U	< 2.4 U	< 2.9 U	< 2.6 U	< 2.8 U	< 2.8 UJ
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg		< 0.28 U	< 0.25 UJ	< 0.25 UJ	< 0.34 UJ	< 0.26 UJ	< 0.25 UJ	< 0.24 UJ	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg		< 2.8 U	< 2.5 U	< 2.5 U	< 3.4 U	< 2.6 U	< 2.5 U	< 2.4 U	< 2.9 UJ	< 2.6 UJ	< 2.8 U	< 2.8 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg		< 0.57 U	< 0.49 U	< 0.49 U	< 0.67 U	< 0.52 U	< 0.51 U	< 0.49 U	< 0.57 U	< 0.52 U	< 0.57 U	< 0.56 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg		< 0.57 U	< 0.49 U	< 0.49 U	< 0.67 U	< 0.52 U	< 0.51 UJ	< 0.49 U	< 0.57 U	< 0.52 U	< 0.57 U	< 0.56 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg		< 0.57 UJ	< 0.49 UJ	< 0.49 UJ	< 0.67 UJ	< 0.52 UJ	< 0.51 UJ	< 0.49 UJ	< 0.57 UJ	< 0.52 UJ	< 0.57 UJ	< 0.56 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg		< 0.57 UJ	< 0.49 U	< 0.49 U	< 0.67 U	< 0.52 U	< 0.51 UJ	< 0.49 U	< 0.57 U	< 0.52 U	< 0.57 UJ	< 0.56 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg		< 1.1 U	< 0.99 UJ	< 0.99 UJ	< 1.3 U	< 1.0 UJ	< 1.0 UJ	< 0.97 UJ	**1.1 J**	**0.47 J**	R	**0.36 J**
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	**0.18 J**	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	**0.12 J**	< 0.28 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 UJ	< 0.26 UJ	< 0.25 U	< 0.24 UJ	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg		**0.12 J**	**0.074 J**	**0.075 J**	**0.40**	**0.11 J**	**0.10 J**	< 0.24 U	**0.35**	**0.12 J**	**0.18 J**	**0.13 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 UJ	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg		**0.11 J**	**0.061 J**	**0.074 J**	**0.19 J**	< 0.26 U	**0.16 J**	< 0.24 U	**0.32**	**0.13 J**	**0.11 J**	**0.11 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 UJ	< 0.26 UJ	< 0.28 U	< 0.28 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg		**0.19 J**	**0.099 J**	< 0.25 U	**0.36**	**0.15 J**	**0.12 J**	< 0.24 U	**0.39**	**0.11 J**	**0.26 J**	**0.12 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg		< 0.28 UJ	< 0.25 UJ	< 0.25 UJ	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	**0.44**	**0.25 J**	**0.23 J**	**0.88**	**0.19 J**	**0.24 J**	< 0.24 U	**0.64**	**0.32**	**0.58**	**0.30**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	**0.32**	**0.10 J**	**0.12 J**	**0.51**	**0.29**	**0.29**	< 0.24 U	**1.1**	**0.28**	**0.25 J**	**0.36**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg		< 0.28 U	< 0.25 UJ	< 0.25 UJ	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg		< 0.57 U	< 0.49 U	< 0.49 U	**0.27 J**	< 0.52 U	**0.14 J**	< 0.49 U	**0.23 J**	**0.12 J**	**0.14 J**	**0.10 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 UJ	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg		< 0.28 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	< 0.28 U	< 0.28 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg		< 0.28 UJ	< 0.25 U	< 0.25 U	**0.23 J**	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.26 U	**0.15 J**	< 0.28 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	086-R	086-R	086-SD	086-SD	087E-NS	087E-NS	087E-NS	087E-R	087E-R	087E-SD	087E-SD
				Sample ID	086-R-0-2	086-R-2-12	086-SD-0-2	086-SD-2-12	087E-NS-0-2	087E-NS-2-12	FD-10172023	087E-R-0-2	087E-R-2-12	087E-SD-0-2	087E-SD-2-12
				Sample Date	10/20/2023 8:40:00 AM	10/20/2023 8:45:00 AM	10/20/2023 8:25:00 AM	10/20/2023 8:30:00 AM	10/17/2023 12:35:00 PM	10/17/2023 12:24:00 PM	10/17/2023 12:24:00 PM	10/17/2023 1:05:00 PM	10/17/2023 1:10:00 PM	10/17/2023 12:45:00 PM	10/17/2023 12:50:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD75251-23	JD75251-24	JD75251-21	JD75251-22	JD74986-39	JD74986-40	JD74986-41	JD74986-44	JD74986-45	JD74986-42	JD74986-43
				Sample Type	N	N	N	N	N	N	FD	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**71.0**	**78.4**	**61.4**	**85.7**	**72.7**	**84.6**	**77.5**	**59.7**	**80.2**	**71.1**	**84.4**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 1.0 U	< 1.3 U	< 0.93 U	< 1.1 U	< 0.93 U	< 1.0 U	< 1.3 U	< 0.98 U	< 1.1 U	< 0.93 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 1.0 U	< 1.3 U	< 0.93 U	< 1.1 U	< 0.93 U	< 1.0 U	< 1.3 U	< 0.98 U	< 1.1 U	< 0.93 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 1.0 U	< 1.3 U	< 0.93 U	< 1.1 U	< 0.93 U	< 1.0 U	< 1.3 U	**0.36 J**	< 1.1 U	< 0.93 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 1.0 U	< 1.3 U	< 0.93 U	< 1.1 U	< 0.93 U	< 1.0 U	< 1.3 U	< 0.98 U	< 1.1 U	< 0.93 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.0 U	< 6.4 U	< 8.1 U	< 5.8 U	< 6.9 U	< 5.8 U	< 6.3 U	< 8.2 U	**0.80 J**	< 7.0 U	< 5.8 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.0 U	< 6.4 U	< 8.1 U	< 5.8 U	< 6.9 U	< 5.8 U	< 6.3 U	< 8.2 U	**0.93 J**	< 7.0 U	< 5.8 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.4 UJ	< 1.3 UJ	< 1.6 UJ	< 1.2 UJ	< 1.4 UJ	< 1.2 UJ	< 1.3 UJ	< 1.6 UJ	< 1.2 UJ	< 1.4 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 1.0 U	< 1.3 U	< 0.93 U	< 1.1 U	< 0.93 U	< 1.0 U	< 1.3 U	**0.16 J**	< 1.1 U	< 0.93 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 1.0 U	< 1.3 U	< 0.93 U	< 1.1 U	< 0.93 U	< 1.0 U	< 1.3 U	< 0.98 U	< 1.1 U	< 0.93 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 1.0 U	< 1.3 U	< 0.93 U	< 1.1 U	< 0.93 U	< 1.0 U	< 1.3 U	< 0.98 U	< 1.1 U	< 0.93 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	**0.097 J**	< 0.28 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.8 U	< 2.6 U	< 3.3 U	< 2.3 U	< 2.8 U	< 2.3 U	< 2.5 U	< 3.3 U	< 2.4 U	< 2.8 UJ	< 2.3 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	**0.078 J**	< 0.28 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.28 UJ	< 0.26 UJ	< 0.33 UJ	< 0.23 UJ	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.8 U	< 2.6 U	< 3.3 U	< 2.3 U	< 2.8 U	< 2.3 U	< 2.5 U	< 3.3 U	< 2.4 U	< 2.8 U	< 2.3 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.56 U	< 0.51 U	< 0.65 U	< 0.47 U	< 0.55 U	< 0.46 U	< 0.51 U	< 0.66 U	< 0.49 U	< 0.56 U	< 0.46 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.56 U	< 0.51 U	< 0.65 U	< 0.47 U	< 0.55 U	< 0.46 U	< 0.51 U	< 0.66 U	**0.072 J**	< 0.56 U	< 0.46 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.56 UJ	< 0.51 UJ	< 0.65 UJ	< 0.47 UJ	< 0.55 UJ	< 0.46 UJ	< 0.51 UJ	< 0.66 UJ	< 0.49 UJ	< 0.56 UJ	< 0.46 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.56 UJ	< 0.51 U	< 0.65 U	< 0.47 U	< 0.55 U	< 0.46 U	< 0.51 U	< 0.66 UJ	< 0.49 UJ	< 0.56 UJ	< 0.46 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	**0.091 J**	< 0.28 U	< 0.23 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	**0.73 J**	R	< 0.93 UJ	< 1.1 UJ	< 0.93 UJ	< 1.0 UJ	R	R	R	< 0.93 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.55**	< 0.26 U	**0.14 J**	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	**0.19 J**	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.28 UJ	< 0.26 UJ	< 0.33 UJ	< 0.23 UJ	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			**0.28**	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 UJ	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.29**	**0.16 J**	**0.18 J**	< 0.23 U	**0.13 J**	**0.073 J**	**0.096 J**	**0.20 J**	**0.12 J**	< 0.28 U	**0.069 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.20 J**	**0.15 J**	< 0.33 U	< 0.23 U	**0.18 J**	**0.092 J**	**0.14 J**	< 0.33 U	< 0.24 U	< 0.28 U	**0.052 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.49**	**0.16 J**	**0.36**	**0.12 J**	**0.19 J**	**0.22 J**	**0.092 J**	**0.49**	**0.085 J**	< 0.28 U	< 0.23 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 UJ	< 0.23 UJ	< 0.25 UJ	< 0.33 UJ	< 0.24 UJ	< 0.28 UJ	< 0.23 UJ
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**1.5**	**0.26**	**0.42**	**0.096 J**	**0.25 J**	**0.25**	**0.36**	**0.73**	**0.17 J**	**0.081 J**	< 0.23 U
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.19 J**	**0.45**	**0.16 J**	**0.21 J**	**0.25 J**	**0.31**	**0.22 J**	**0.63**	**0.37**	< 0.28 U	< 0.23 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.28 U	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.24 J**	**0.098 J**	< 0.65 U	< 0.47 U	**0.12 J**	**0.096 J**	**0.10 J**	**0.33 J**	**0.13 J**	< 0.56 UJ	< 0.46 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			**0.15 J**	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			**0.25 J**	< 0.26 U	< 0.33 U	< 0.23 U	< 0.28 U	< 0.23 U	< 0.25 U	< 0.33 U	< 0.24 U	< 0.28 U	< 0.23 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.96**	**0.090 J**	**0.26 J**	< 0.23 U	**0.096 J**	< 0.23 UJ	**0.090 J**	**0.26 J**	< 0.24 UJ	< 0.28 UJ	< 0.23 UJ

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	088B-R	088B-R	088B-SD	088B-SD	089C-R	089C-R	089C-SD	089C-SD	090-R	090-R	090-R
				Sample ID	088B-R-0-2	088B-R-2-12	088B-SD-0-2	088B-SD-2-12	089C-R-0-2	089C-R-2-12	089C-SD-0-2	089C-SD-2-12	090-R-0-2	FD-10162023	090-R-2-12
				Sample Date	10/16/2023 2:00:00 PM	10/16/2023 2:05:00 PM	10/16/2023 1:45:00 PM	10/16/2023 1:50:00 PM	10/18/2023 3:40:00 PM	10/18/2023 3:45:00 PM	10/18/2023 3:30:00 PM	10/18/2023 3:35:00 PM	10/16/2023 2:55:00 PM	10/16/2023 2:55:00 PM	10/16/2023 3:00:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74986-13	JD74986-14	JD74986-11	JD74986-12	JD75085-22	JD75085-23	JD75085-20	JD75085-21	JD74986-17	JD74986-18	JD74986-19
				Sample Type	N	N	N	N	N	N	N	N	N	FD	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**65.5**	**76.0**	**71.9**	**75.3**	**79.2**	**67.4**	**62.4**	**75.8**	**64.3**	**66.3**	**80.2**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.2 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.2 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.2 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.2 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.2 U	**0.17 J**
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.5 U	< 6.4 U	< 6.8 U	< 6.6 U	< 6.3 U	< 7.4 U	< 7.9 U	< 6.6 U	< 7.6 U	< 7.5 U	< 6.1 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.5 U	< 6.4 U	< 6.8 U	< 6.6 U	< 6.3 U	< 7.4 U	< 7.9 U	< 6.6 U	< 7.6 U	< 7.5 U	< 6.1 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.5 UJ	< 1.3 UJ	< 1.4 UJ	< 1.3 UJ	< 1.3 UJ	< 1.5 UJ	< 1.6 UJ	< 1.3 UJ	< 1.5 UJ	< 1.5 UJ	R
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.2 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.2 U	< 0.98 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.2 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.2 U	< 0.98 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.2 U	< 1.0 U	< 1.1 U	< 1.1 UJ	< 1.0 U	< 1.2 U	< 1.3 U	< 1.1 U	< 1.2 U	< 1.2 U	< 0.98 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.0 U	< 2.6 U	< 2.7 U	< 2.7 U	< 2.5 U	< 3.0 U	< 3.1 U	< 2.6 U	< 3.0 U	< 3.0 U	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 UJ	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.30 UJ	< 0.26 UJ	< 0.27 UJ	< 0.27 UJ	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 UJ	< 0.30 UJ	< 0.24 UJ
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.0 U	< 2.6 U	< 2.7 U	< 2.7 U	< 2.5 U	< 3.0 U	< 3.1 U	< 2.6 U	< 3.0 U	< 3.0 U	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.60 U	< 0.52 U	< 0.55 U	< 0.53 U	< 0.51 U	< 0.59 U	< 0.63 U	< 0.53 U	< 0.61 U	< 0.60 U	< 0.49 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.60 U	< 0.52 U	< 0.55 U	< 0.53 U	< 0.51 U	< 0.59 U	< 0.63 U	< 0.53 U	< 0.61 U	< 0.60 U	< 0.49 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.60 U	< 0.52 UJ	< 0.55 UJ	< 0.53 UJ	< 0.51 UJ	< 0.59 UJ	< 0.63 UJ	< 0.53 UJ	< 0.61 UJ	< 0.60 UJ	R
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.60 U	< 0.52 UJ	< 0.55 U	< 0.53 UJ	< 0.51 UJ	< 0.59 UJ	< 0.63 UJ	< 0.53 UJ	< 0.61 U	< 0.60 U	R
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.30 UJ	< 0.26 U	< 0.27 U	< 0.27 UJ	**0.10 J**	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.2 UJ	< 1.0 UJ	< 1.1 UJ	< 1.1 UJ	< 1.0 U	< 1.2 U	< 1.3 U	< 1.1 U	< 1.2 UJ	**0.19 J**	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 UJ	**0.17 J**	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.11 J**	**0.12 J**	**0.070 J**	< 0.27 U	**0.31**	**0.16 J**	**0.11 J**	**0.068 J**	**0.13 J**	**0.082 J**	< 0.24 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 UJ	**0.15 J**	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.30 U	< 0.26 U	**0.12 J**	< 0.27 U	**0.21 J**	**0.18 J**	< 0.31 U	**0.092 J**	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.17 J**	**0.18 J**	**0.19 J**	< 0.27 U	**0.50**	**0.18 J**	**0.21 J**	**0.14 J**	**0.25 J**	**0.29 J**	**0.15 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 UJ	< 0.30 UJ	< 0.31 UJ	< 0.26 UJ	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.31**	**0.20 J**	**0.17 J**	< 0.27 U	**0.89**	**0.42**	**0.29 J**	**0.22 J**	**0.26 J**	**0.41**	**0.18 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.23 J**	**0.21 J**	< 0.27 U	< 0.27 U	**0.97**	**0.50**	**0.20 J**	**0.18 J**	**0.26 J**	**0.29 J**	**0.19 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.30 U	< 0.26 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 U	< 0.30 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.15 J**	< 0.52 UJ	< 0.55 U	< 0.53 UJ	**0.23 J**	**0.22 J**	< 0.63 U	< 0.53 U	**0.11 J**	**0.11 J**	R
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.30 UJ	< 0.26 UJ	< 0.27 UJ	< 0.27 UJ	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 UJ	< 0.30 UJ	< 0.24 UJ
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.30 UJ	< 0.26 UJ	< 0.27 UJ	< 0.27 UJ	< 0.25 U	< 0.30 U	< 0.31 U	< 0.26 U	< 0.30 UJ	< 0.30 UJ	< 0.24 UJ
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.15 J**	< 0.26 U	< 0.27 U	< 0.27 U	**0.12 J**	< 0.30 UJ	**0.12 J**	< 0.26 UJ	**0.12 J**	**0.11 J**	< 0.24 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	090-SD	090-SD	091B-R	091B-R	091B-SD	091B-SD	091B-SD	092A-R	092A-R	092A-SD	092A-SD
				Sample ID	090-SD-0-2	090-SD-2-12	091B-R-0-2	091B-R-2-12	091B-SD-0-2	091B-SD-2-12	FD-12052023	092A-R-0-2	092A-R-2-12	092A-SD-0-2	092A-SD-2-12
				Sample Date	10/16/2023 2:40:00 PM	10/16/2023 2:45:00 PM	12/5/2023 2:15:00 PM	12/5/2023 2:20:00 PM	12/5/2023 2:00:00 PM	12/5/2023 2:05:00 PM	12/5/2023 2:05:00 PM	10/23/2023 12:40:00 PM	10/23/2023 12:45:00 PM	10/23/2023 12:20:00 PM	10/23/2023 12:25:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74986-15	JD74986-16	JD78296-4	JD78296-5	JD78296-1	JD78296-2	JD78296-3	JD75433-3	JD75433-4	JD75433-1	JD75433-2
				Sample Type	N	N	N	N	N	N	FD	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**74.8**	**81.3**	**66.9**	**88.9**	**63.7**	**66.8**	**70.1**	**43.2**	**64.8**	**76.7**	**75.2**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 0.98 U	< 1.1 U	< 0.90 U	< 1.3 U	< 1.2 U	< 1.1 U	< 1.9 U	< 1.2 U	< 1.0 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 0.98 U	< 1.1 U	< 0.90 U	< 1.3 U	< 1.2 U	< 1.1 U	< 1.9 U	< 1.2 U	< 1.0 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 0.98 U	< 1.1 U	< 0.90 U	< 1.3 U	< 1.2 U	< 1.1 U	< 1.9 U	< 1.2 U	< 1.0 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 0.98 U	< 1.1 U	< 0.90 U	< 1.3 U	< 1.2 U	< 1.1 U	< 1.9 U	< 1.2 U	< 1.0 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.7 U	< 6.2 U	< 7.2 U	< 5.6 U	< 7.8 U	< 7.3 U	< 7.0 U	< 12 U	< 7.6 U	< 6.4 U	< 6.6 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.7 U	< 6.2 U	< 7.2 U	< 5.6 U	< 7.8 U	< 7.3 U	< 7.0 U	< 12 U	< 7.6 U	< 6.4 U	< 6.6 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.2 UJ	< 1.4 U	< 1.1 UJ	< 1.6 U	< 1.5 U	< 1.4 U	< 2.3 UJ	< 1.5 UJ	< 1.3 UJ	< 1.3 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 0.98 U	< 1.1 U	< 0.90 U	< 1.3 U	< 1.2 U	< 1.1 U	< 1.9 U	< 1.2 U	< 1.0 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 0.98 U	< 1.1 U	< 0.90 U	< 1.3 U	< 1.2 U	< 1.1 U	< 1.9 U	< 1.2 U	< 1.0 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 0.98 U	< 1.1 U	< 0.90 U	< 1.3 U	< 1.2 U	< 1.1 U	< 1.9 UJ	< 1.2 U	< 1.0 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 UJ	< 0.30 UJ	< 0.26 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.7 U	< 2.5 U	< 2.9 U	< 2.2 U	< 3.1 U	< 2.9 U	< 2.8 U	< 4.6 UJ	< 3.0 U	< 2.6 U	< 2.7 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 UJ	< 0.26 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.27 UJ	< 0.25 UJ	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.7 U	< 2.5 U	< 2.9 U	< 2.2 U	< 3.1 U	< 2.9 U	< 2.8 U	< 4.6 U	< 3.0 U	< 2.6 U	< 2.7 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.53 U	< 0.49 U	< 0.57 U	< 0.45 U	< 0.63 U	< 0.59 U	< 0.56 U	< 0.93 U	< 0.61 U	< 0.51 U	< 0.53 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.53 U	< 0.49 U	< 0.57 U	< 0.45 U	< 0.63 U	< 0.59 U	< 0.56 U	< 0.93 U	< 0.61 U	< 0.51 U	< 0.53 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.53 UJ	< 0.49 UJ	< 0.57 U	< 0.45 UJ	< 0.63 U	< 0.59 U	< 0.56 U	< 0.93 UJ	< 0.61 UJ	< 0.51 UJ	< 0.53 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.53 U	< 0.49 U	< 0.57 U	< 0.45 U	< 0.63 U	< 0.59 U	< 0.56 U	< 0.93 UJ	< 0.61 UJ	< 0.51 UJ	< 0.53 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.1 UJ	< 0.98 UJ	< 1.1 UJ	< 0.90 UJ	< 1.3 UJ	< 1.2 UJ	< 1.1 UJ	R	R	R	< 1.1 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	**0.74**	**0.20 J**	< 0.26 U	**0.12 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 UJ	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	**0.31 J**	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.27 U	**0.11 J**	**0.091 J**	**0.10 J**	< 0.31 U	< 0.29 U	< 0.28 U	**0.39 J**	**0.34**	**0.14 J**	**0.14 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.27 U	**0.10 J**	**0.057 J**	**0.060 J**	**0.048 J**	< 0.29 U	< 0.28 U	**0.17 J**	**0.23 J**	< 0.26 U	< 0.27 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			< 0.27 U	**0.063 J**	**0.12 J**	**0.067 J**	**0.13 J**	**0.13 J**	**0.098 J**	**0.54**	**0.26 J**	**0.12 J**	**0.14 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.19 J**	**0.25**	**0.40**	**0.20 J**	**0.30 J**	**0.37**	**0.27 J**	**1.5**	**0.66**	**0.24 J**	**0.23 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.14 J**	**0.27**	**0.15 J**	**0.13 J**	< 0.31 U	**0.15 J**	**0.16 J**	**0.44 J**	**0.91**	**0.13 J**	**0.14 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.27 U	< 0.25 U	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.53 U	**0.34 J**	< 0.57 U	< 0.45 U	**0.23 J**	< 0.59 U	< 0.56 U	< 0.93 UJ	**0.24 J**	< 0.51 UJ	< 0.53 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.27 UJ	< 0.25 UJ	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	< 0.46 U	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.27 UJ	< 0.25 UJ	< 0.29 U	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	**0.38 J**	< 0.30 U	< 0.26 U	< 0.27 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.27 U	< 0.25 U	**0.091 J**	< 0.22 U	< 0.31 U	< 0.29 U	< 0.28 U	**0.94**	**0.12 J**	**0.14 J**	**0.12 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	093-NS	093-NS	093-R	093-R	093-SD	093-SD	094-R	094-R	094-SD	094-SD	095-R
				Sample ID	093-NS-0-2	093-NS-2-12	093-R-0-2	093-R-2-12	093-SD-0-2	093-SD-2-12	094-R-0-2	094-R-2-12	094-SD-0-2	094-SD-2-12	095-R-0-2
				Sample Date	11/20/2023 2:00:00 PM	11/20/2023 2:05:00 PM	11/20/2023 1:25:00 PM	11/20/2023 1:30:00 PM	11/20/2023 1:05:00 PM	11/20/2023 1:10:00 PM	10/18/2023 10:45:00 AM	10/18/2023 10:50:00 AM	10/18/2023 10:35:00 AM	10/18/2023 10:40:00 AM	10/17/2023 8:45:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD77514-13	JD77514-14	JD77514-11	JD77514-12	JD77514-9	JD77514-10	JD75085-3	JD75085-4	JD75085-1	JD75085-2	JD74986-29
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**84.5**	**91.0**	**71.0**	**75.3**	**79.9**	**79.5**	**58.7**	**70.8**	**65.9**	**72.0**	**60.9**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.93 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.1 U	< 1.3 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.93 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.1 U	< 1.3 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.93 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.1 U	< 1.3 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.93 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.1 U	< 1.3 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 5.8 U	< 5.4 U	< 6.9 U	< 6.5 U	< 6.3 U	< 6.3 U	< 8.5 U	< 7.1 U	< 7.6 U	< 6.9 U	< 8.0 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 5.8 U	< 5.4 U	< 6.9 U	< 6.5 U	< 6.3 U	< 6.3 U	< 8.5 U	< 7.1 U	< 7.6 U	< 6.9 U	< 8.0 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.2 UJ	< 1.1 UJ	< 1.4 UJ	< 1.3 UJ	< 1.3 UJ	< 1.3 UJ	< 1.7 UJ	< 1.4 UJ	< 1.5 UJ	< 1.4 UJ	< 1.6 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.93 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.1 U	< 1.3 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.93 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.1 U	< 1.3 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.93 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.4 U	< 1.1 U	< 1.2 U	< 1.1 U	< 1.3 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.3 U	< 2.2 U	< 2.8 U	< 2.6 U	< 2.5 U	< 2.5 U	< 3.4 U	< 2.8 U	< 3.0 U	< 2.8 U	< 3.2 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 UJ	< 0.28 UJ	< 0.30 UJ	< 0.28 UJ	< 0.32 UJ
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.3 U	< 2.2 U	< 2.8 U	< 2.6 U	< 2.5 U	< 2.5 U	< 3.4 U	< 2.8 U	< 3.0 U	< 2.8 U	< 3.2 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.46 U	< 0.43 U	< 0.55 U	< 0.52 U	< 0.50 U	< 0.50 U	< 0.68 U	< 0.56 U	< 0.61 U	< 0.56 U	< 0.64 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.46 U	< 0.43 U	< 0.55 U	< 0.52 U	< 0.50 U	< 0.50 U	< 0.68 U	< 0.56 U	< 0.61 U	< 0.56 U	< 0.64 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.46 UJ	< 0.43 UJ	< 0.55 UJ	< 0.52 UJ	< 0.50 UJ	< 0.50 UJ	< 0.68 UJ	< 0.56 UJ	< 0.61 UJ	< 0.56 UJ	< 0.64 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.46 U	< 0.43 U	< 0.55 U	< 0.52 U	< 0.50 UJ	< 0.50 U	< 0.68 U	< 0.56 U	< 0.61 U	< 0.56 U	< 0.64 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 0.93 UJ	< 0.86 UJ	**0.81 J**	**0.40 J**	R	< 1.0 UJ	< 1.4 UJ	< 1.1 UJ	**0.36 J**	< 1.1 UJ	< 1.3 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	**0.22 J**	< 0.28 U	< 0.30 U	< 0.28 U	**0.13 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.23 U	**0.059 J**	**0.22 J**	**0.083 J**	**0.097 J**	**0.12 J**	**0.36**	**0.15 J**	**0.11 J**	**0.12 J**	**0.17 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.23 U	**0.064 J**	**0.15 J**	**0.11 J**	< 0.25 U	**0.053 J**	**0.36**	< 0.28 U	**0.096 J**	< 0.28 U	**0.15 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.079 J**	**0.12 J**	**0.23 J**	< 0.26 U	**0.13 J**	**0.12 J**	**0.36**	**0.14 J**	**0.12 J**	**0.12 J**	**0.17 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 UJ	< 0.30 UJ	< 0.28 UJ	< 0.32 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.24**	**0.32**	**0.49**	**0.35**	**0.23 J**	**0.13 J**	**0.73 J**	**0.35 J**	**0.39 J**	**0.38 J**	**0.34**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		< 0.23 U	**0.098 J**	**0.55**	**0.29**	**0.21 J**	**0.31**	**0.69**	**0.40**	**0.20 J**	**0.18 J**	**0.18 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 UJ	< 0.28 UJ	< 0.30 UJ	< 0.28 UJ	< 0.32 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.46 U	< 0.43 U	**0.21 J**	< 0.52 U	< 0.50 UJ	< 0.50 U	**0.34 J**	**0.13 J**	< 0.61 U	< 0.56 U	**0.17 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 UJ
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.23 U	< 0.22 U	< 0.28 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.34 U	< 0.28 U	< 0.30 U	< 0.28 U	< 0.32 UJ
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.23 U	< 0.22 U	**0.096 J**	< 0.26 U	< 0.25 U	< 0.25 U	**0.35**	< 0.28 U	**0.12 J**	**0.088 J**	**0.26 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	095-R	095-SD	095-SD	096C-NS	096C-NS	096C-R	096C-R	096C-SD	096C-SD	097A-R	097A-R
				Sample ID	095-R-2-12	095-SD-0-2	095-SD-2-12	096C-NS-0-2	096C-NS-2-12	096C-R-0-2	096C-R-2-12	096C-SD-0-2	096C-SD-2-12	097A-R-0-2	097A-R-2-12
				Sample Date	10/17/2023 8:50:00 AM	10/17/2023 8:30:00 AM	10/17/2023 8:35:00 AM	12/4/2023 9:20:00 AM	12/4/2023 9:25:00 AM	12/4/2023 10:05:00 AM	12/4/2023 10:10:00 AM	12/4/2023 9:45:00 AM	12/4/2023 9:50:00 AM	10/17/2023 10:35:00 AM	10/17/2023 10:40:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD74986-30	JD74986-27	JD74986-28	JD78193-1	JD78193-2	JD78193-5	JD78193-6	JD78193-3	JD78193-4	JD74986-33	JD74986-34
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**66.2**	**57.5**	**80.5**	**78.7**	**83.4**	**66.9**	**74.2**	**73.2**	**76.0**	**56.2**	**68.2**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.2 U	< 1.4 U	< 0.97 U	< 1.0 UJ	< 0.96 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.4 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.2 U	< 1.4 U	< 0.97 U	< 1.0 U	< 0.96 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.4 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.2 U	< 1.4 U	< 0.97 U	< 1.0 U	< 0.96 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.4 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.2 U	< 1.4 U	< 0.97 U	< 1.0 U	< 0.96 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.4 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.6 U	< 8.5 U	< 6.1 U	< 6.4 UJ	< 6.0 U	< 7.5 U	< 6.6 U	< 6.8 U	< 6.4 U	< 8.7 U	< 7.2 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.6 U	< 8.5 U	< 6.1 U	< 6.4 UJ	< 6.0 U	< 7.5 U	< 6.6 U	< 6.8 U	< 6.4 U	< 8.7 U	< 7.2 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.5 UJ	< 1.7 UJ	R	< 1.3 UJ	< 1.2 UJ	< 1.5 UJ	< 1.3 UJ	< 1.4 UJ	< 1.3 UJ	< 1.7 UJ	< 1.4 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.2 U	< 1.4 U	< 0.97 U	< 1.0 UJ	< 0.96 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.4 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.2 U	< 1.4 U	< 0.97 U	< 1.0 UJ	< 0.96 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.4 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.2 U	< 1.4 U	< 0.97 UJ	< 1.0 UJ	< 0.96 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.4 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.0 U	< 3.4 U	< 2.4 U	< 2.5 UJ	< 2.4 U	< 3.0 U	< 2.6 U	< 2.7 U	< 2.6 U	< 3.5 U	< 2.9 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 UJ	< 0.30 UJ	< 0.26 UJ	< 0.27 UJ	< 0.26 UJ	< 0.35 U	< 0.29 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.30 U	< 0.34 UJ	< 0.24 UJ	< 0.25 U	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.0 U	< 3.4 U	< 2.4 U	< 2.5 UJ	< 2.4 U	< 3.0 U	< 2.6 U	< 2.7 U	< 2.6 U	< 3.5 U	< 2.9 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.60 U	< 0.68 U	< 0.49 U	< 0.51 UJ	< 0.48 U	< 0.60 U	< 0.53 U	< 0.55 U	< 0.52 U	< 0.70 U	< 0.58 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.60 U	< 0.68 U	< 0.49 U	< 0.51 UJ	< 0.48 U	< 0.60 U	< 0.53 U	< 0.55 U	< 0.52 U	< 0.70 U	< 0.58 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.60 UJ	< 0.68 UJ	R	< 0.51 UJ	< 0.48 UJ	< 0.60 UJ	< 0.53 UJ	< 0.55 UJ	< 0.52 UJ	< 0.70 UJ	< 0.58 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.60 U	< 0.68 UJ	R	< 0.51 UJ	< 0.48 UJ	< 0.60 UJ	< 0.53 UJ	< 0.55 U	< 0.52 UJ	< 0.70 U	< 0.58 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.63 J**	R	R	< 1.0 UJ	R	R	R	< 1.1 UJ	< 1.0 UJ	< 1.4 UJ	< 1.2 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.14 J**	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	**0.19 J**	< 0.29 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.30 UJ	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.25 J**	< 0.34 U	< 0.24 U	**0.14 J**	**0.076 J**	**0.20 J**	**0.12 J**	< 0.27 U	< 0.26 U	**0.14 J**	< 0.29 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.27 J**	< 0.34 U	< 0.24 U	< 0.25 UJ	**0.075 J**	**0.11 J**	**0.10 J**	**0.057 J**	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.18 J**	< 0.34 U	< 0.24 U	**0.18 J**	**0.12 J**	**0.19 J**	**0.10 J**	**0.085 J**	**0.070 J**	**0.14 J**	< 0.29 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.47**	**0.11 J**	**0.092 J**	**0.32 J**	**0.28**	**0.52**	**0.32**	**0.18 J**	**0.17 J**	**0.39**	**0.32**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.49**	< 0.34 U	< 0.24 U	**0.14 J**	**0.14 J**	**0.26 J**	**0.23 J**	**0.12 J**	**0.15 J**	**0.22 J**	**0.14 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.30 U	< 0.34 U	< 0.24 U	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.23 J**	**0.17 J**	R	< 0.51 UJ	< 0.48 UJ	< 0.60 UJ	< 0.53 UJ	< 0.55 U	< 0.52 UJ	**0.16 J**	< 0.58 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.30 U	< 0.34 UJ	< 0.24 UJ	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.30 U	< 0.34 UJ	< 0.24 UJ	< 0.25 UJ	< 0.24 U	< 0.30 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.35 U	< 0.29 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.13 J**	< 0.34 U	< 0.24 U	**0.094 J**	< 0.24 U	**0.11 J**	< 0.26 U	< 0.27 U	< 0.26 U	**0.19 J**	**0.12 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	097A-SD	097A-SD	098-R	098-R	098-SD	098-SD	099F-R	099F-R	099F-SD	099F-SD	100A-R
				Sample ID	097A-SD-0-2	097A-SD-2-12	098-R-0-2	098-R-2-12	098-SD-0-2	098-SD-2-12	099F-R-0-2	099F-R-2-12	099F-SD-0-2	099F-SD-2-12	100A-R-0-2
				Sample Date	10/17/2023 10:25:00 AM	10/17/2023 10:30:00 AM	10/17/2023 11:40:00 AM	10/17/2023 11:45:00 AM	10/17/2023 11:30:00 AM	10/17/2023 11:35:00 AM	11/21/2023 10:15:00 AM	11/21/2023 10:20:00 AM	11/21/2023 9:55:00 AM	11/21/2023 10:00:00 AM	10/17/2023 2:30:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD74986-31	JD74986-32	JD74986-37	JD74986-38	JD74986-35	JD74986-36	JD77514-21	JD77514-22	JD77514-19	JD77514-20	JD74986-48
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**58.8**	**64.7**	**73.8**	**79.5**	**72.6**	**80.8**	**73.0**	**75.7**	**66.4**	**73.5**	**66.8**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 8.5 U	< 7.7 U	< 6.6 U	< 6.3 U	< 6.8 U	< 6.1 U	< 6.7 U	< 6.5 U	< 7.5 U	< 6.8 U	< 7.5 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 8.5 U	< 7.7 U	< 6.6 U	< 6.3 U	< 6.8 U	< 6.1 U	< 6.7 U	< 6.5 U	< 7.5 U	< 6.8 U	< 7.5 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.7 UJ	< 1.5 UJ	< 1.3 UJ	< 1.3 UJ	< 1.4 UJ	< 1.2 UJ	< 1.3 UJ	< 1.3 UJ	< 1.5 UJ	< 1.4 UJ	< 1.5 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.97 U	< 1.1 U	< 1.0 U	< 1.2 U	< 1.1 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.4 U	< 3.1 U	< 2.7 U	< 2.5 U	< 2.7 U	< 2.4 U	< 2.7 U	< 2.6 U	< 3.0 U	< 2.7 U	< 3.0 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.4 U	< 3.1 U	< 2.7 U	< 2.5 U	< 2.7 U	< 2.4 U	< 2.7 UJ	< 2.6 UJ	< 3.0 UJ	< 2.7 UJ	< 3.0 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.68 U	< 0.62 U	< 0.53 U	< 0.50 U	< 0.54 U	< 0.49 U	< 0.54 U	< 0.52 U	< 0.60 U	< 0.54 U	< 0.60 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.68 U	< 0.62 U	< 0.53 U	< 0.50 U	< 0.54 U	< 0.49 U	< 0.54 U	< 0.52 U	< 0.60 U	< 0.54 U	< 0.60 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.68 UJ	< 0.62 UJ	< 0.53 UJ	< 0.50 UJ	< 0.54 UJ	< 0.49 UJ	< 0.54 UJ	< 0.52 UJ	< 0.60 UJ	< 0.54 UJ	< 0.60 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.68 U	< 0.62 U	< 0.53 U	< 0.50 U	< 0.54 U	< 0.49 U	< 0.54 U	< 0.52 U	< 0.60 U	< 0.54 U	< 0.60 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	**0.094 J**	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.4 UJ	< 1.2 UJ	< 1.1 UJ	< 1.0 UJ	**0.27 J**	**0.15 J**	R	R	**0.91 J**	< 1.1 UJ	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.34 U	< 0.31 U	**0.30**	**0.22 J**	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	**0.13 J**	< 0.27 U	< 0.30 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.17 J**	**0.12 J**	**0.12 J**	**0.13 J**	**0.18 J**	**0.091 J**	**0.27**	**0.12 J**	**0.32**	**0.12 J**	< 0.30 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.20 J**	**0.16 J**	**0.13 J**	**0.16 J**	**0.17 J**	**0.095 J**	**0.22 J**	**0.14 J**	**0.23 J**	**0.13 J**	< 0.30 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 UJ	< 0.26 UJ	< 0.30 UJ	< 0.27 UJ	< 0.30 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.094 J**	**0.18 J**	**0.19 J**	**0.29**	**0.20 J**	**0.13 J**	**0.28**	**0.17 J**	**0.56**	**0.17 J**	**0.16 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 UJ	< 0.25 UJ	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 UJ
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.21 J**	**0.25 J**	**1.0**	**1.1**	**0.42**	**0.23 J**	**0.41**	**0.22 J**	**0.72**	**0.24 J**	**0.31**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.19 J**	**0.19 J**	**0.44**	**0.50**	**0.38**	**0.23 J**	**0.78**	**0.34**	**0.76**	**0.42**	< 0.30 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.13 J**	**0.22 J**	**0.13 J**	**0.19 J**	**0.18 J**	**0.16 J**	**0.17 J**	**0.092 J**	**0.25 J**	< 0.54 U	< 0.60 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 UJ
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.34 U	< 0.31 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.24 U	< 0.27 U	< 0.26 U	< 0.30 U	< 0.27 U	< 0.30 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.12 J**	< 0.31 U	**0.14 J**	**0.11 J**	**0.11 J**	< 0.24 U	**0.12 J**	< 0.26 U	**0.16 J**	< 0.27 U	< 0.30 UJ

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	100A-R	100A-SD	100A-SD	101-NS	101-NS	101-NS	101-R	101-R	101-SD	101-SD	102-R
				Sample ID	100A-R-2-12	100A-SD-0-2	100A-SD-2-12	101-NS-0-2	101-NS-2-12	FD-10232023	101-R-0-2	101-R-2-12	101-SD-0-2	101-SD-2-12	102-R-0-2
				Sample Date	10/17/2023 2:35:00 PM	10/17/2023 2:20:00 PM	10/17/2023 2:25:00 PM	10/23/2023 3:55:00 PM	10/23/2023 4:00:00 PM	10/23/2023 4:00:00 PM	10/23/2023 4:45:00 PM	10/23/2023 4:50:00 PM	10/23/2023 4:25:00 PM	10/23/2023 4:30:00 PM	11/27/2023 3:40:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD74986-49	JD74986-46	JD74986-47	JD75433-9	JD75433-10	JD75433-11	JD75433-14	JD75433-15	JD75433-12	JD75433-13	JD77742-8
				Sample Type	N	N	N	N	N	FD	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**69.6**	**70.1**	**74.8**	**76.6**	**83.5**	**84.7**	**77.4**	**64.0**	**64.5**	**64.7**	**43.7**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.96 U	< 0.94 U	< 1.0 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.8 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.96 U	< 0.94 U	< 1.0 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.8 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.1 UJ	< 1.0 U	< 0.96 U	< 0.94 U	< 1.0 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.8 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.96 U	< 0.94 U	< 1.0 U	< 1.3 U	< 1.2 U	< 1.2 UJ	< 1.8 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.0 U	< 7.1 U	< 6.7 U	< 6.4 U	< 6.0 U	< 5.9 U	< 6.3 U	< 7.8 U	< 7.8 U	< 7.6 U	< 11 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.0 U	< 7.1 U	< 6.7 U	< 6.4 U	< 6.0 U	< 5.9 U	< 6.3 U	< 7.8 U	< 7.8 U	< 7.6 U	< 11 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.4 UJ	< 1.4 UJ	R	< 1.3 UJ	< 1.2 U	< 1.2 UJ	< 1.3 U	< 1.6 U	< 1.6 UJ	< 1.5 U	< 2.3 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.96 U	< 0.94 U	< 1.0 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.8 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.1 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.96 U	< 0.94 U	< 1.0 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.8 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.1 U	< 1.1 U	< 1.1 UJ	< 1.0 U	< 0.96 U	< 0.94 U	< 1.0 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.8 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 UJ	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 UJ	< 0.46 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.8 U	< 2.9 U	< 2.7 U	< 2.6 U	< 2.4 UJ	< 2.4 U	< 2.5 U	< 3.1 U	< 3.1 U	< 3.0 UJ	< 4.6 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 UJ	< 0.46 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.8 U	< 2.9 U	< 2.7 U	< 2.6 U	< 2.4 U	< 2.4 U	< 2.5 U	< 3.1 U	< 3.1 U	< 3.0 U	< 4.6 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.56 U	< 0.57 U	< 0.53 U	< 0.51 U	< 0.48 U	< 0.47 U	< 0.51 U	< 0.63 U	< 0.62 U	< 0.61 U	< 0.92 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.56 U	< 0.57 U	< 0.53 U	< 0.51 U	< 0.48 U	< 0.47 U	< 0.51 U	< 0.63 U	< 0.62 U	< 0.61 U	< 0.92 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.56 UJ	< 0.57 UJ	R	< 0.51 UJ	< 0.48 U	< 0.47 UJ	< 0.51 U	< 0.63 U	< 0.62 UJ	< 0.61 U	< 0.92 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.56 UJ	< 0.57 UJ	R	< 0.51 UJ	< 0.48 U	< 0.47 UJ	< 0.51 U	< 0.63 U	< 0.62 UJ	< 0.61 U	< 0.92 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.28 U	< 0.29 U	**0.72**	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	**0.20 J**	< 0.31 U	< 0.30 U	**0.18 J**
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	R	R	R	< 0.96 UJ	< 0.94 UJ	< 1.0 UJ	< 1.3 UJ	< 1.2 UJ	< 1.2 U	< 1.8 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	**0.11 J**	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	**0.41 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 UJ	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	**0.37 J**
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	**0.15 J**	**0.19 J**	**0.16 J**	< 0.30 U	**0.52**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.056 J**	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	**0.11 J**	**0.094 J**	< 0.31 U	< 0.30 U	< 0.46 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.10 J**	**0.13 J**	**0.078 J**	**0.17 J**	**0.12 J**	**0.11 J**	**0.14 J**	**0.10 J**	**0.17 J**	< 0.30 U	**1.2**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.28 UJ	< 0.29 UJ	< 0.27 UJ	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.27 J**	**0.30**	**0.20 J**	**0.34**	**0.61**	**0.32**	**0.32**	**0.20 J**	**0.20 J**	**0.28 J**	**2.0**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.13 J**	**0.14 J**	**0.17 J**	< 0.26 U	**0.097 J**	**0.16 J**	**0.25**	**0.35**	**0.16 J**	**0.22 J**	**0.71**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.56 UJ	< 0.57 UJ	R	< 0.51 UJ	< 0.48 U	< 0.47 UJ	< 0.51 U	< 0.63 U	< 0.62 UJ	< 0.61 U	**0.22 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.46 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.28 U	< 0.29 U	< 0.27 U	< 0.26 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.31 U	< 0.30 U	**0.41 J**
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.28 UJ	< 0.29 UJ	< 0.27 UJ	**0.18 J**	**0.15 J**	**0.15 J**	**0.12 J**	< 0.31 U	**0.18 J**	< 0.30 U	**0.78**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	102-R	102-SD	102-SD	102-SD	103C-R	103C-R	103C-SD	103C-SD	104B-R	104B-R	104B-SD
				Sample ID	102-R-2-12	102-SD-0-2	102-SD-2-12	FD-11272023	103C-R-0-2	103C-R-2-12	103C-SD-0-2	103C-SD-2-12	104B-R-0-2	104B-R-2-12	104B-SD-0-2
				Sample Date	11/27/2023 3:45:00 PM	11/27/2023 3:25:00 PM	11/27/2023 3:30:00 PM	11/27/2023 3:30:00 PM	11/3/2023 10:40:00 AM	11/3/2023 10:45:00 AM	11/3/2023 10:15:00 AM	11/3/2023 10:20:00 AM	10/27/2023 8:35:00 AM	10/27/2023 8:40:00 AM	10/27/2023 8:15:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD77742-9	JD77742-5	JD77742-6	JD77742-7	JD76131-27	JD76131-28	JD76131-25	JD76131-26	JD75674-13	JD75674-14	JD75674-10
				Sample Type	N	N	N	FD	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**64.3**	**52.6**	**60.1**	**55.9**	**74.4**	**79.5**	**74.0**	**86.0**	**51.9**	**69.6**	**70.6**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.2 U	< 1.5 U	< 1.3 U	< 1.4 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.93 U	< 1.5 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.2 U	< 1.5 U	< 1.3 U	< 1.4 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.93 U	< 1.5 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.2 U	< 1.5 U	< 1.3 U	< 1.4 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.93 U	< 1.5 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.2 U	< 1.5 U	**0.18 J**	< 1.4 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.93 U	< 1.5 U	< 1.1 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.6 UJ	< 9.5 U	< 8.3 U	< 8.9 U	< 6.7 U	< 6.3 U	< 6.8 U	< 5.8 U	< 9.6 U	< 7.2 U	< 6.9 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.6 UJ	< 9.5 U	< 8.3 U	< 8.9 U	< 6.7 U	< 6.3 U	< 6.8 U	< 5.8 U	< 9.6 U	< 7.2 U	< 6.9 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.5 UJ	R	< 1.7 UJ	< 1.8 UJ	< 1.3 UJ	< 1.3 UJ	< 1.4 UJ	< 1.2 UJ	< 1.9 UJ	< 1.4 UJ	< 1.4 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.2 UJ	< 1.5 U	< 1.3 U	< 1.4 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.93 U	< 1.5 U	< 1.1 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.2 UJ	< 1.5 U	< 1.3 U	< 1.4 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.93 U	< 1.5 U	< 1.1 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.2 U	< 1.5 U	< 1.3 U	< 1.4 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.93 U	< 1.5 U	< 1.1 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 UJ	< 0.25 UJ	< 0.27 U	< 0.23 UJ	< 0.39 U	< 0.29 U	< 0.28 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.0 U	< 3.8 U	< 3.3 U	< 3.6 U	< 2.7 U	< 2.5 U	< 2.7 U	< 2.3 U	< 3.9 U	< 2.9 U	< 2.8 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.0 U	< 3.8 U	< 3.3 U	< 3.6 U	< 2.7 U	< 2.5 U	< 2.7 U	< 2.3 U	< 3.9 U	< 2.9 U	< 2.8 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.61 U	< 0.76 U	< 0.67 U	< 0.72 U	< 0.54 U	< 0.50 U	< 0.54 UJ	< 0.47 U	< 0.77 U	< 0.57 U	< 0.56 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.61 UJ	< 0.76 U	< 0.67 U	< 0.72 U	< 0.54 U	< 0.50 U	< 0.54 U	< 0.47 U	< 0.77 U	< 0.57 U	< 0.56 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.61 UJ	R	< 0.67 UJ	< 0.72 UJ	< 0.54 UJ	< 0.50 UJ	< 0.54 UJ	< 0.47 UJ	< 0.77 UJ	< 0.57 UJ	< 0.56 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.61 U	R	< 0.67 UJ	< 0.72 UJ	< 0.54 UJ	< 0.50 UJ	< 0.54 UJ	< 0.47 U	< 0.77 U	< 0.57 UJ	< 0.56 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			**0.21 J**	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.73 J**	R	R	R	R	R	< 1.1 UJ	< 0.93 UJ	< 1.5 UJ	< 1.1 UJ	< 1.1 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.19 J**	**0.19 J**	< 0.33 U	< 0.36 U	**0.11 J**	< 0.25 U	**0.10 J**	< 0.23 U	**0.18 J**	< 0.29 U	< 0.28 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.30 UJ	< 0.38 UJ	< 0.33 UJ	< 0.36 UJ	< 0.27 UJ	< 0.25 UJ	< 0.27 UJ	< 0.23 UJ	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.30 UJ	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 UJ	< 0.28 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.41**	**0.29 J**	**0.16 J**	**0.14 J**	**0.14 J**	**0.18 J**	**0.13 J**	< 0.23 U	**0.37 J**	**0.18 J**	< 0.28 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.27 J**	< 0.38 U	**0.12 J**	**0.12 J**	**0.046 J**	**0.15 J**	**0.065 J**	< 0.23 U	**0.34 J**	**0.20 J**	< 0.28 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.30 UJ	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.40**	**0.48**	**0.27 J**	**0.18 J**	**0.21 J**	**0.18 J**	**0.12 J**	< 0.23 U	**0.38 J**	**0.14 J**	< 0.28 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**1.3 J**	**1.1**	< 0.33 U	**0.19 J**	**0.55**	**0.46**	**0.43**	**0.078 J**	**0.54**	**0.30**	**0.077 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.67**	**0.52**	**0.17 J**	**0.21 J**	**0.39**	**1.2**	**0.25 J**	**0.10 J**	**0.73**	**0.45**	< 0.28 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.25 J**	R	**0.73 J**	< 0.72 UJ	< 0.54 UJ	< 0.50 UJ	< 0.54 UJ	< 0.47 U	**0.34 J**	**0.16 J**	**0.13 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.30 U	< 0.38 U	< 0.33 U	< 0.36 U	< 0.27 U	< 0.25 U	< 0.27 U	< 0.23 U	< 0.39 U	< 0.29 U	< 0.28 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.25 J**	**0.15 J**	< 0.33 U	< 0.36 U	**0.13 J**	< 0.25 U	**0.14 J**	< 0.23 U	**0.32 J**	**0.086 J**	< 0.28 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	104B-SD	104B-SD	105A-R	105A-R	105A-SD	105A-SD	106-R	106-R	106-SD	106-SD	107-R
				Sample ID	104B-SD-2-12	FD-10272023	105A-R-0-2	105A-R-2-12	105A-SD-0-2	105A-SD-2-12	106-R-0-2	106-R-2-12	106-SD-0-2	106-SD-2-12	107-R-0-2
				Sample Date	10/27/2023 8:20:00 AM	10/27/2023 8:20:00 AM	11/1/2023 3:05:00 PM	11/1/2023 3:10:00 PM	11/1/2023 2:50:00 PM	11/1/2023 2:55:00 PM	11/20/2023 11:25:00 AM	11/20/2023 11:30:00 AM	11/20/2023 11:05:00 AM	11/20/2023 11:10:00 AM	11/1/2023 9:25:00 AM
				Depth Interval	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD75674-11	JD75674-12	JD75951-23	JD75951-24	JD75951-21	JD75951-22	JD77514-7	JD77514-8	JD77514-5	JD77514-6	JD75951-3
				Sample Type	N	FD	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**88.9**	**89.5**	**73.0**	**77.3**	**73.9**	**78.7**	**73.4**	**89.3**	**82.8**	**86.0**	**67.0**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.90 U	< 0.88 U	R	< 1.0 U	R	R	< 1.1 U	< 0.88 U	< 0.97 U	< 0.91 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.90 U	< 0.88 U	R	< 1.0 U	R	R	< 1.1 U	< 0.88 U	< 0.97 U	< 0.91 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.90 U	< 0.88 U	R	< 1.0 U	R	R	< 1.1 U	< 0.88 U	< 0.97 U	< 0.91 U	< 1.2 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.90 U	< 0.88 U	R	< 1.0 U	R	R	< 1.1 U	< 0.88 U	< 0.97 U	< 0.91 U	< 1.2 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 5.6 U	< 5.5 U	R	< 6.3 U	R	R	< 6.8 U	< 5.5 U	< 6.0 U	< 5.7 U	< 7.5 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 5.6 U	< 5.5 U	R	< 6.3 U	R	R	< 6.8 U	< 5.5 U	< 6.0 U	< 5.7 U	< 7.5 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.1 UJ	< 1.1 UJ	R	< 1.3 UJ	R	R	< 1.4 UJ	< 1.1 UJ	< 1.2 UJ	< 1.1 UJ	< 1.5 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.90 U	< 0.88 U	R	< 1.0 U	R	R	< 1.1 U	< 0.88 U	< 0.97 U	< 0.91 U	< 1.2 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.90 U	< 0.88 U	R	< 1.0 U	R	R	< 1.1 U	< 0.88 U	< 0.97 U	< 0.91 U	< 1.2 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.90 U	< 0.88 U	R	< 1.0 U	R	R	< 1.1 U	< 0.88 U	< 0.97 U	< 0.91 U	< 1.2 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.2 U	< 2.2 U	< 2.7 UJ	< 2.5 U	R	R	< 2.7 U	< 2.2 U	< 2.4 U	< 2.3 U	< 3.0 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.2 U	< 2.2 U	R	< 2.5 U	R	R	< 2.7 U	< 2.2 U	< 2.4 U	< 2.3 U	< 3.0 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.45 U	< 0.44 U	R	< 0.51 U	R	R	< 0.54 U	< 0.44 U	< 0.48 U	< 0.46 U	< 0.60 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.45 U	< 0.44 U	R	< 0.51 U	R	R	< 0.54 U	< 0.44 U	< 0.48 U	< 0.46 U	< 0.60 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.45 UJ	< 0.44 UJ	R	< 0.51 UJ	R	R	< 0.54 UJ	< 0.44 UJ	< 0.48 UJ	< 0.46 UJ	< 0.60 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.45 UJ	< 0.44 U	R	< 0.51 UJ	R	R	< 0.54 UJ	< 0.44 UJ	< 0.48 U	< 0.46 U	< 0.60 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 0.90 UJ	< 0.88 UJ	R	R	R	R	R	R	< 0.97 UJ	< 0.91 UJ	**1.8 J**
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.22 U	< 0.22 U	R	**0.18 J**	R	R	**0.11 J**	**0.058 J**	**0.11 J**	**0.080 J**	**0.19 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.22 U	< 0.22 U	R	**0.085 J**	R	R	**0.088 J**	**0.054 J**	**0.069 J**	**0.067 J**	**0.14 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			< 0.22 U	< 0.22 U	R	**0.14 J**	R	R	**0.35**	**0.17 J**	**0.12 J**	**0.069 J**	**0.14 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		< 0.22 U	< 0.22 U	R	**0.22 J**	R	R	**0.74**	**0.28**	**0.25**	**0.28**	**0.39**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		< 0.22 U	< 0.22 U	R	**0.48**	R	R	**0.31**	**0.26**	**0.21 J**	**0.24**	**0.17 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	R	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.45 U	< 0.44 U	R	< 0.51 UJ	R	R	**0.18 J**	< 0.44 UJ	**0.14 J**	< 0.46 U	**0.15 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	< 0.25 UJ	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.22 U	< 0.22 U	R	< 0.25 U	R	< 0.25 UJ	< 0.27 U	< 0.22 U	< 0.24 U	< 0.23 U	< 0.30 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.22 U	< 0.22 U	R	**0.11 J**	R	R	**0.20 J**	< 0.22 U	< 0.24 U	< 0.23 U	**0.22 J**

Notes:
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Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	107-R	107-R	107-SD	107-SD	108-NS	108-NS	108-NS	108-R	108-R	108-SD	108-SD
				Sample ID	FD-11012023-1	107-R-2-12	107-SD-0-2	107-SD-2-12	108-NS-0-2	108-NS-2-12	FD-11012023-2	108-R-0-2	108-R-2-12	108-SD-0-2	108-SD-2-12
				Sample Date	11/1/2023 9:25:00 AM	11/1/2023 9:30:00 AM	11/1/2023 9:05:00 AM	11/1/2023 9:10:00 AM	11/1/2023 1:10:00 PM	11/1/2023 1:15:00 PM	11/1/2023 1:15:00 PM	11/1/2023 1:55:00 PM	11/1/2023 2:00:00 PM	11/1/2023 1:30:00 PM	11/1/2023 1:35:00 PM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD75951-4	JD75951-5	JD75951-1	JD75951-2	JD75951-14	JD75951-15	JD75951-16	JD75951-19	JD75951-20	JD75951-17	JD75951-18
				Sample Type	FD	N	N	N	N	N	FD	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**66.1**	**69.3**	**58.6**	**64.5**	**85.3**	**88.8**	**87.7**	**69.3**	**72.0**	**79.7**	**79.8**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.2 U	< 1.2 UJ	< 1.3 U	< 1.2 U	< 0.92 U	< 0.88 U	< 0.91 U	< 1.2 U	R	< 0.98 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.2 U	< 1.2 U	< 1.3 U	< 1.2 U	< 0.92 U	< 0.88 U	< 0.91 U	< 1.2 U	R	< 0.98 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.2 U	< 1.2 U	< 1.3 U	< 1.2 U	< 0.92 U	< 0.88 U	< 0.91 U	< 1.2 U	R	< 0.98 U	< 0.98 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.2 U	< 1.2 U	< 1.3 U	< 1.2 U	< 0.92 U	< 0.88 U	< 0.91 U	< 1.2 U	R	< 0.98 U	< 0.98 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.4 U	< 7.2 U	< 8.4 U	< 7.6 U	< 5.7 U	< 5.5 U	< 5.7 U	< 7.2 U	R	< 6.2 U	< 6.1 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.4 U	< 7.2 U	< 8.4 U	< 7.6 U	< 5.7 U	< 5.5 U	< 5.7 U	< 7.2 U	R	< 6.2 U	< 6.1 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.5 UJ	< 1.4 UJ	< 1.7 UJ	< 1.5 UJ	< 1.1 UJ	< 1.1 UJ	< 1.1 UJ	< 1.4 UJ	R	< 1.2 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.2 U	< 1.2 U	< 1.3 U	< 1.2 U	< 0.92 U	< 0.88 U	< 0.91 U	< 1.2 U	R	< 0.98 U	< 0.98 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.2 U	< 1.2 UJ	< 1.3 U	< 1.2 U	< 0.92 U	< 0.88 U	< 0.91 U	< 1.2 U	R	< 0.98 U	< 0.98 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.2 U	< 1.2 U	< 1.3 U	< 1.2 U	< 0.92 U	< 0.88 U	< 0.91 U	< 1.2 U	R	< 0.98 U	< 0.98 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.0 U	< 2.9 U	< 3.3 U	< 3.0 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.9 U	R	< 2.5 U	< 2.5 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.0 U	< 2.9 U	< 3.3 U	< 3.0 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.9 U	R	< 2.5 U	< 2.5 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.59 U	< 0.58 U	< 0.67 U	< 0.61 U	< 0.46 U	< 0.44 U	< 0.46 U	< 0.58 U	R	< 0.49 U	< 0.49 UJ
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.59 U	< 0.58 U	< 0.67 U	< 0.61 U	< 0.46 U	< 0.44 U	< 0.46 U	< 0.58 U	R	< 0.49 U	< 0.49 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.59 UJ	< 0.58 UJ	< 0.67 UJ	< 0.61 UJ	< 0.46 UJ	< 0.44 UJ	< 0.46 UJ	< 0.58 UJ	R	< 0.49 UJ	< 0.49 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.59 UJ	< 0.58 UJ	< 0.67 UJ	< 0.61 U	< 0.46 UJ	< 0.44 UJ	< 0.46 UJ	< 0.58 UJ	R	< 0.49 UJ	< 0.49 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**0.86 J**	< 1.2 UJ	< 1.3 UJ	< 1.2 UJ	< 0.92 UJ	< 0.88 UJ	< 0.91 UJ	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.14 J**	< 0.29 U	**0.14 J**	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	**0.22 J**	R	**0.12 J**	**0.091 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	**0.17 J**	R	< 0.25 U	< 0.25 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.23 J**	**0.20 J**	**0.28 J**	**0.25 J**	< 0.23 U	< 0.22 U	< 0.23 U	**0.16 J**	R	**0.19 J**	**0.18 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.15 J**	< 0.29 U	**0.15 J**	**0.19 J**	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	**0.064 J**	**0.10 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.13 J**	**0.12 J**	**0.19 J**	**0.15 J**	< 0.23 U	< 0.22 U	< 0.23 U	**0.34**	R	**0.17 J**	**0.20 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.42**	**0.20 J**	**0.32 J**	**0.36**	< 0.23 U	**0.056 J**	< 0.23 U	**1.1**	R	**0.75**	**0.55**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.18 J**	**0.37**	**0.24 J**	**0.50**	< 0.23 U	< 0.22 U	< 0.23 U	**0.16 J**	R	**0.28**	**0.67**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.22 J**	< 0.58 UJ	**0.27 J**	**0.23 J**	< 0.46 UJ	< 0.44 UJ	< 0.46 UJ	< 0.58 UJ	R	< 0.49 UJ	**0.11 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.29 U	R	< 0.25 U	< 0.25 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.23 U	< 0.22 U	< 0.23 U	**0.15 J**	R	< 0.25 U	< 0.25 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.19 J**	**0.094 J**	**0.25 J**	**0.15 J**	**0.092 J**	**0.092 J**	**0.11 J**	**0.35**	R	**0.21 J**	**0.10 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	109-R	109-R	109-SD	109-SD	110C-R	110C-R	110C-SD	110C-SD	111-R	111-R	111-SD
				Sample ID	109-R-0-2	109-R-2-12	109-SD-0-2	109-SD-2-12	110C-R-0-2	110C-R-2-12	110C-SD-0-2	110C-SD-2-12	111-R-0-2	111-R-2-12	111-SD-0-2
				Sample Date	11/27/2023 1:00:00 PM	11/27/2023 1:05:00 PM	11/27/2023 12:45:00 PM	11/27/2023 12:50:00 PM	12/5/2023 8:40:00 AM	12/5/2023 8:45:00 AM	12/5/2023 8:20:00 AM	12/5/2023 8:25:00 AM	11/1/2023 11:05:00 AM	11/1/2023 11:10:00 AM	11/1/2023 10:50:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD77742-3	JD77742-4	JD77742-1	JD77742-2	JD78193-14	JD78193-15	JD78193-12	JD78193-13	JD75951-8	JD75951-9	JD75951-6
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**23.6**	**71.2**	**81.1**	**94.0**	**44.8**	**78.3**	**72.1**	**73.2**	**72.2**	**72.2**	**70.3**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 3.3 U	< 1.1 U	< 0.97 U	< 0.83 U	< 1.8 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 3.3 U	< 1.1 U	< 0.97 U	< 0.83 U	< 1.8 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 3.3 U	< 1.1 U	< 0.97 U	< 0.83 U	< 1.8 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 3.3 U	< 1.1 U	< 0.97 U	**0.10 J**	< 1.8 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 21 U	< 6.9 U	< 6.0 U	< 5.2 U	< 11 U	< 6.4 U	< 6.9 U	< 6.7 U	< 6.8 UJ	< 6.8 U	< 7.1 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 21 U	< 6.9 U	< 6.0 U	< 5.2 U	< 11 U	< 6.4 U	< 6.9 U	< 6.7 U	< 6.8 U	< 6.8 U	< 7.1 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 4.2 UJ	< 1.4 UJ	< 1.2 UJ	< 1.0 UJ	< 2.2 UJ	< 1.3 UJ	< 1.4 UJ	< 1.3 UJ	< 1.4 UJ	< 1.4 UJ	< 1.4 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 3.3 U	< 1.1 U	< 0.97 U	< 0.83 U	< 1.8 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 3.3 U	< 1.1 U	< 0.97 U	< 0.83 U	< 1.8 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 3.3 U	< 1.1 U	< 0.97 U	< 0.83 U	< 1.8 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 8.3 U	< 2.8 U	< 2.4 U	< 2.1 U	< 4.5 U	< 2.6 U	< 2.8 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.8 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 8.3 U	< 2.8 U	< 2.4 U	< 2.1 U	< 4.5 U	< 2.6 U	< 2.8 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.8 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 1.7 U	< 0.55 U	< 0.48 U	< 0.42 U	< 0.89 U	< 0.51 U	< 0.55 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.57 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 1.7 U	< 0.55 U	< 0.48 U	< 0.42 U	< 0.89 U	< 0.51 U	< 0.55 U	< 0.54 U	< 0.54 U	< 0.54 U	< 0.57 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 1.7 UJ	< 0.55 U	< 0.48 UJ	< 0.42 UJ	< 0.89 UJ	< 0.51 UJ	< 0.55 UJ	< 0.54 UJ	< 0.54 UJ	< 0.54 UJ	< 0.57 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 1.7 UJ	< 0.55 U	< 0.48 U	< 0.42 UJ	< 0.89 U	< 0.51 U	< 0.55 U	< 0.54 UJ	< 0.54 U	< 0.54 U	< 0.57 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			**0.92**	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	< 1.1 UJ	< 0.97 U	R	< 1.8 UJ	< 1.0 UJ	< 1.1 UJ	< 1.1 UJ	R	< 1.1 UJ	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			**0.59 J**	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.83 UJ	**0.071 J**	< 0.24 UJ	< 0.21 UJ	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	**0.087 J**	**0.10 J**	**0.11 J**	**0.092 J**	**0.15 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	**0.12 J**	**0.044 J**	< 0.27 U	**0.075 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.75 J**	**0.14 J**	**0.16 J**	**0.18 J**	**0.13 J**	< 0.26 U	**0.10 J**	**0.13 J**	< 0.27 U	**0.12 J**	**0.17 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**2.3**	< 0.28 U	**0.17 J**	**0.13 J**	**0.28 J**	**0.074 J**	**0.25 J**	**0.37**	**0.33**	**0.18 J**	**0.35**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		< 0.83 U	**0.17 J**	< 0.24 U	**0.095 J**	< 0.45 U	< 0.26 U	< 0.28 U	**0.33**	**0.17 J**	**0.23 J**	**0.24 J**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**1.5 J**	< 0.55 U	< 0.48 U	< 0.42 UJ	< 0.89 U	< 0.51 U	< 0.55 U	**0.12 J**	< 0.54 UJ	< 0.54 U	< 0.57 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.83 U	< 0.28 U	< 0.24 U	< 0.21 U	< 0.45 U	< 0.26 U	< 0.28 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.28 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.89**	< 0.28 U	**0.14 J**	< 0.21 U	< 0.45 U	< 0.26 U	**0.10 J**	< 0.27 U	**0.081 J**	< 0.27 U	**0.16 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	111-SD	112-NS	112-NS	112-R	112-R	112-SD	112-SD	113B-R	113B-R	113B-SD	113B-SD
				Sample ID	111-SD-2-12	112-NS-0-2	112-NS-2-12	112-R-0-2	112-R-2-12	112-SD-0-2	112-SD-2-12	113B-R-0-2	113B-R-2-12	113B-SD-0-2	113B-SD-2-12
				Sample Date	11/1/2023 10:55:00 AM	11/6/2023 1:30:00 PM	11/6/2023 1:35:00 PM	11/6/2023 2:20:00 PM	11/6/2023 2:25:00 PM	11/6/2023 1:55:00 PM	11/6/2023 2:00:00 PM	10/27/2023 11:45:00 AM	10/27/2023 11:50:00 AM	10/27/2023 11:30:00 AM	10/27/2023 11:35:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD75951-7	JD76288-1	JD76288-2	JD76288-5	JD76288-6	JD76288-3	JD76288-4	JD75674-23	JD75674-24	JD75674-21	JD75674-22
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**78.7**	**74.1**	**82.5**	**35.7**	**66.9**	**32.9**	**64.3**	**70.4**	**76.2**	**75.6**	**82.8**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 2.2 U	< 1.2 U	< 2.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 2.2 U	< 1.2 U	< 2.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 2.2 U	< 1.2 U	< 2.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 2.2 U	< 1.2 U	< 2.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.2 U	< 6.7 U	< 6.1 U	< 14 U	< 7.3 U	< 15 U	< 7.8 U	< 7.1 U	< 6.4 U	< 6.5 U	< 6.0 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.2 U	< 6.7 U	< 6.1 U	< 14 U	< 7.3 U	< 15 U	< 7.8 U	< 7.1 U	< 6.4 U	< 6.5 U	< 6.0 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.2 UJ	< 1.3 UJ	< 1.2 UJ	< 2.8 UJ	< 1.5 UJ	< 3.0 UJ	< 1.6 UJ	< 1.4 UJ	< 1.3 UJ	< 1.3 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 2.2 U	< 1.2 U	< 2.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 2.2 U	< 1.2 U	< 2.4 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 2.2 U	< 1.2 U	< 2.4 UJ	< 1.2 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 UJ	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.27 UJ	< 0.24 UJ	< 0.56 UJ	< 0.29 UJ	< 0.60 UJ	< 0.31 UJ	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 2.7 U	< 2.4 U	< 5.6 UJ	< 2.9 U	< 6.0 UJ	< 3.1 U	< 2.8 U	< 2.6 U	< 2.6 U	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 U	< 2.7 U	< 2.4 U	< 5.6 UJ	< 2.9 U	< 6.0 UJ	< 3.1 U	< 2.8 U	< 2.6 U	< 2.6 U	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.50 U	< 0.54 U	< 0.48 U	< 1.1 U	< 0.59 U	< 1.2 U	< 0.62 U	< 0.57 U	< 0.51 U	< 0.52 U	< 0.48 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.50 U	< 0.54 U	< 0.48 U	< 1.1 U	< 0.59 U	< 1.2 U	< 0.62 U	< 0.57 U	< 0.51 U	< 0.52 U	< 0.48 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.50 UJ	< 0.54 UJ	< 0.48 UJ	< 1.1 UJ	< 0.59 UJ	< 1.2 UJ	< 0.62 UJ	< 0.57 UJ	< 0.51 UJ	< 0.52 UJ	< 0.48 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.50 UJ	< 0.54 U	< 0.48 UJ	< 1.1 U	< 0.59 U	< 1.2 U	< 0.62 UJ	< 0.57 U	< 0.51 U	< 0.52 U	< 0.48 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	**0.11 J**	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	R	< 0.97 UJ	R	R	R	< 1.2 UJ	< 1.1 UJ	< 1.0 UJ	< 1.0 UJ	< 0.97 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	**2.0**	**0.17 J**	**0.69**	**0.14 J**	**0.25 J**	**0.27**	**0.14 J**	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 U	< 0.27 UJ	< 0.24 UJ	**5.2 J**	< 0.29 UJ	< 0.60 UJ	< 0.31 UJ	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	**0.54 J**	< 0.29 U	**0.52 J**	< 0.31 U	**0.11 J**	< 0.26 U	**0.16 J**	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			< 0.25 U	< 0.27 U	**0.086 J**	**0.21 J**	**0.18 J**	**0.49 J**	**0.33**	**0.30**	**0.47**	**0.12 J**	**0.19 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.090 J**	< 0.27 U	< 0.24 U	< 0.56 U	**0.17 J**	< 0.60 U	**0.17 J**	**0.31**	**0.34**	**0.080 J**	**0.14 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	**0.38**	**0.81**	**0.48**	**0.30**	**0.18 J**	**0.14 J**	**0.10 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.24 J**	< 0.27 UJ	**0.083 J**	**1.2**	**0.63**	**1.5**	**0.53**	**0.72**	**0.48**	**0.17 J**	**0.20 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.20 J**	< 0.27 U	**0.18 J**	**0.40 J**	**0.50**	**0.35 J**	**0.56**	**1.5**	**4.7**	**0.14 J**	**0.30**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.56 U	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.50 UJ	< 0.54 U	< 0.48 UJ	**2.6**	**0.26 J**	**1.9**	**0.33 J**	**0.22 J**	**0.20 J**	**0.13 J**	**0.15 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	**0.47 J**	< 0.29 U	< 0.60 U	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	**0.64 J**	< 0.29 U	**0.37 J**	< 0.31 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.24 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.25 U	**0.14 J**	< 0.24 U	**1.1**	**0.13 J**	**1.1**	< 0.31 U	**0.43**	**0.20 J**	**0.16 J**	**0.10 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	114C-R	114C-R	114C-SD	114C-SD	116-NS	116-NS	116-R	116-R	116-SD	116-SD	117-R
				Sample ID	114C-R-0-2	114C-R-2-12	114C-SD-0-2	114C-SD-2-12	116-NS-0-2	116-NS-2-12	116-R-0-2	116-R-2-12	116-SD-0-2	116-SD-2-12	117-R-0-2
				Sample Date	11/1/2023 12:05:00 PM	11/1/2023 12:10:00 PM	11/1/2023 11:50:00 AM	11/1/2023 11:55:00 AM	11/2/2023 11:55:00 AM	11/2/2023 12:00:00 PM	11/2/2023 12:35:00 PM	11/2/2023 12:40:00 PM	11/2/2023 12:15:00 PM	11/2/2023 12:20:00 PM	11/2/2023 10:45:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD75951-12	JD75951-13	JD75951-10	JD75951-11	JD76131-9	JD76131-10	JD76131-13	JD76131-14	JD76131-11	JD76131-12	JD76131-7
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**67.7**	**70.6**	**62.2**	**68.7**	**92.7**	**93.3**	**66.1**	**71.5**	**76.3**	**72.6**	**57.7**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.2 U	< 1.1 U	< 1.3 U	< 1.1 U	< 0.85 U	< 0.84 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.4 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.2 U	< 1.1 U	< 1.3 U	< 1.1 U	< 0.85 U	< 0.84 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.4 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.2 U	< 1.1 U	< 1.3 U	< 1.1 U	< 0.85 U	< 0.84 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.4 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.2 U	< 1.1 U	< 1.3 U	< 1.1 U	< 0.85 U	< 0.84 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.4 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.2 U	< 7.1 U	< 8.0 U	< 7.1 U	< 5.3 U	< 5.3 U	< 7.6 U	< 6.9 U	< 6.4 U	< 6.8 U	< 8.5 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.2 U	< 7.1 U	< 8.0 U	< 7.1 U	< 5.3 U	< 5.3 U	< 7.6 U	< 6.9 U	< 6.4 U	< 6.8 U	< 8.5 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.4 UJ	< 1.4 UJ	< 1.6 UJ	< 1.4 UJ	< 1.1 UJ	< 1.1 UJ	< 1.5 UJ	< 1.4 UJ	< 1.3 UJ	< 1.4 UJ	< 1.7 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.2 U	< 1.1 U	< 1.3 U	< 1.1 U	< 0.85 U	< 0.84 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.4 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.2 U	< 1.1 U	< 1.3 U	< 1.1 U	< 0.85 U	< 0.84 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.4 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.2 U	< 1.1 U	< 1.3 U	< 1.1 U	< 0.85 U	< 0.84 U	< 1.2 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.4 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.9 U	< 2.8 U	< 3.2 U	< 2.9 U	< 2.1 U	< 2.1 U	< 3.0 U	< 2.7 U	< 2.6 U	< 2.7 U	< 3.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.9 U	< 2.8 U	< 3.2 U	< 2.9 U	< 2.1 U	< 2.1 U	< 3.0 U	< 2.7 U	< 2.6 U	< 2.7 U	< 3.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.58 U	< 0.57 U	< 0.64 U	< 0.57 U	< 0.42 UJ	< 0.42 UJ	< 0.61 UJ	< 0.55 UJ	< 0.51 UJ	< 0.54 UJ	< 0.68 UJ
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.58 U	< 0.57 U	< 0.64 U	< 0.57 U	< 0.42 U	< 0.42 U	< 0.61 U	< 0.55 U	< 0.51 U	< 0.54 U	< 0.68 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.58 UJ	< 0.57 UJ	< 0.64 UJ	< 0.57 UJ	< 0.42 UJ	< 0.42 UJ	< 0.61 UJ	< 0.55 UJ	< 0.51 UJ	< 0.54 UJ	< 0.68 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.58 UJ	< 0.57 UJ	< 0.64 U	< 0.57 U	< 0.42 U	< 0.42 U	< 0.61 UJ	< 0.55 UJ	< 0.51 UJ	< 0.54 U	< 0.68 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.2 UJ	< 1.1 UJ	**0.64 J**	< 1.1 UJ	< 0.85 UJ	< 0.84 UJ	R	< 1.1 UJ	R	< 1.1 U	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	**0.30**	**0.11 J**	< 0.26 U	< 0.27 U	**0.21 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 UJ	< 0.21 UJ	< 0.30 UJ	< 0.27 UJ	< 0.26 UJ	< 0.27 UJ	< 0.34 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.29**	**0.19 J**	< 0.32 U	**0.11 J**	< 0.21 U	< 0.21 U	**0.21 J**	**0.23 J**	< 0.26 U	**0.082 J**	**0.26 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.22 J**	**0.13 J**	**0.11 J**	**0.068 J**	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	**0.17 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.25 J**	**0.089 J**	**0.13 J**	**0.085 J**	< 0.21 U	< 0.21 U	**0.42**	**0.24 J**	< 0.26 U	< 0.27 U	**0.46**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.46**	**0.25 J**	**0.22 J**	**0.19 J**	< 0.21 U	< 0.21 U	**0.88**	**0.45**	**0.14 J**	**0.099 J**	**0.71**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.94**	**0.48**	**0.22 J**	**0.24 J**	< 0.21 U	< 0.21 U	**0.51**	**0.66**	< 0.26 U	< 0.27 U	**0.74**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.20 J**	< 0.57 UJ	< 0.64 U	< 0.57 U	< 0.42 U	< 0.42 U	< 0.61 UJ	< 0.55 UJ	**0.34 J**	< 0.54 U	**0.63 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.29 U	< 0.28 U	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	< 0.30 U	< 0.27 U	< 0.26 U	< 0.27 U	< 0.34 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.10 J**	**0.089 J**	< 0.32 U	< 0.29 U	< 0.21 U	< 0.21 U	**0.21 J**	**0.084 J**	< 0.26 U	**0.11 J**	**0.25 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	117-R	117-SD	117-SD	118-R	118-R	118-SD	118-SD	119-R	119-R	119-SD	119-SD
				Sample ID	117-R-2-12	117-SD-0-2	117-SD-2-12	118-R-0-2	118-R-2-12	118-SD-0-2	118-SD-2-12	119-R-0-2	119-R-2-12	119-SD-0-2	119-SD-2-12
				Sample Date	11/2/2023 10:50:00 AM	11/2/2023 10:20:00 AM	11/2/2023 10:25:00 AM	12/5/2023 10:10:00 AM	12/5/2023 10:15:00 AM	12/5/2023 9:55:00 AM	12/5/2023 10:00:00 AM	11/2/2023 2:55:00 PM	11/2/2023 3:00:00 PM	11/2/2023 2:30:00 PM	11/2/2023 2:35:00 PM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD76131-8	JD76131-5	JD76131-6	JD78193-18	JD78193-19	JD78193-16	JD78193-17	JD76131-18	JD76131-19	JD76131-15	JD76131-16
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**65.5**	**78.5**	**77.1**	**53.9**	**57.5**	**80.4**	**76.1**	**63.1**	**70.1**	**71.2**	**77.4**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.4 U	< 0.98 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.4 U	< 0.98 U	< 1.0 U	< 1.3 U	< 1.1 UJ	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.4 U	< 0.98 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.4 U	< 0.98 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 7.6 U	< 6.2 U	< 6.5 U	< 9.1 U	< 8.5 U	< 6.1 U	< 6.4 U	< 7.9 U	< 7.0 U	< 7.0 U	< 6.3 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 7.6 U	< 6.2 U	< 6.5 U	< 9.1 U	< 8.5 U	< 6.1 U	< 6.4 U	< 7.9 U	< 7.0 U	< 7.0 U	< 6.3 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.5 UJ	< 1.2 UJ	< 1.3 UJ	< 1.8 UJ	< 1.7 UJ	< 1.2 UJ	< 1.3 UJ	< 1.6 UJ	< 1.4 UJ	< 1.4 UJ	**2.7 J**
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.4 U	< 0.98 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.4 U	< 0.98 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.2 U	< 1.0 U	< 1.0 U	< 1.5 U	< 1.4 U	< 0.98 U	< 1.0 U	< 1.3 U	< 1.1 U	< 1.1 U	< 1.0 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.1 U	< 2.5 U	< 2.6 U	< 3.6 U	< 3.4 U	< 2.4 U	< 2.6 U	< 3.2 U	< 2.8 U	< 2.8 U	< 2.5 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.1 U	< 2.5 U	< 2.6 U	< 3.6 U	< 3.4 U	< 2.4 U	< 2.6 U	< 3.2 U	< 2.8 U	< 2.8 U	< 2.5 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.61 UJ	< 0.50 U	< 0.52 UJ	< 0.73 U	< 0.68 U	< 0.49 U	< 0.52 U	< 0.63 UJ	< 0.56 UJ	< 0.56 UJ	< 0.51 UJ
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.61 U	< 0.50 U	< 0.52 U	< 0.73 U	< 0.68 U	< 0.49 U	< 0.52 U	< 0.63 U	< 0.56 U	< 0.56 U	< 0.51 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.61 UJ	< 0.50 UJ	< 0.52 UJ	< 0.73 UJ	< 0.68 UJ	< 0.49 UJ	< 0.52 UJ	< 0.63 UJ	< 0.56 UJ	< 0.56 UJ	< 0.51 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.61 UJ	< 0.50 U	< 0.52 U	< 0.73 UJ	< 0.68 UJ	< 0.49 U	< 0.52 U	< 0.63 UJ	< 0.56 UJ	< 0.56 UJ	< 0.51 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			**3.2 J**	R	< 1.0 UJ	R	R	< 0.98 UJ	< 1.0 UJ	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	**0.35 J**	< 0.34 U	< 0.24 U	< 0.26 U	**0.15 J**	< 0.28 U	**0.13 J**	< 0.25 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.31 UJ	< 0.25 U	< 0.26 UJ	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 UJ	< 0.28 UJ	< 0.28 UJ	< 0.25 UJ
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.22 J**	< 0.25 U	**0.16 J**	**0.78**	**0.21 J**	< 0.24 U	< 0.26 U	**0.37**	**0.23 J**	**0.20 J**	**0.19 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.21 J**	< 0.25 U	**0.063 J**	**0.31 J**	**0.12 J**	< 0.24 U	< 0.26 U	**0.25 J**	**0.15 J**	**0.091 J**	**0.13 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.092 J**	**0.11 J**	< 0.26 U	**0.99**	**0.10 J**	**0.088 J**	< 0.26 U	**0.47**	**0.27 J**	**0.27 J**	**0.081 J**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.34**	**0.24 J**	< 0.26 U	**3.3**	**0.51**	**0.095 J**	**0.25 J**	**0.79**	**0.54**	**0.46**	**0.21 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.53**	< 0.25 U	**0.21 J**	**1.6**	**0.38**	< 0.24 U	**0.13 J**	**1.3**	**1.0**	**0.73**	**0.64**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.61 U	< 0.50 UJ	< 0.52 U	**1.0 J**	< 0.68 UJ	< 0.49 U	< 0.52 U	< 0.63 UJ	**0.20 J**	< 0.56 UJ	**0.095 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.31 U	< 0.25 U	< 0.26 U	< 0.36 U	< 0.34 U	< 0.24 U	< 0.26 U	< 0.32 U	< 0.28 U	< 0.28 U	< 0.25 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.11 J**	**0.082 J**	< 0.26 U	**0.33 J**	< 0.34 U	< 0.24 U	< 0.26 U	**0.25 J**	**0.18 J**	**0.18 J**	**0.080 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	119-SD	120-NS	120-NS	120-R	120-R	120-SD	120-SD	121-R	121-R	121-R	121-SD
				Sample ID	FD-11022023	120-NS-0-2	120-NS-2-12	120-R-0-2	120-R-2-12	120-SD-0-2	120-SD-2-12	121-R-0-2	121-R-2-12	FD-11202023	121-SD-0-2
				Sample Date	11/2/2023 2:35:00 PM	12/5/2023 12:05:00 PM	12/5/2023 12:10:00 PM	12/5/2023 12:35:00 PM	12/5/2023 12:40:00 PM	12/5/2023 12:20:00 PM	12/5/2023 12:25:00 PM	11/20/2023 9:50:00 AM	11/20/2023 9:55:00 AM	11/20/2023 9:55:00 AM	11/20/2023 9:30:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in
				Lab Sample ID	JD76131-17	JD78193-20	JD78193-21	JD78193-24	JD78193-25	JD78193-22	JD78193-23	JD77514-3	JD77514-4	JD77514-25	JD77514-1
				Sample Type	FD	N	N	N	N	N	N	N	N	FD	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**79.1**	**72.8**	**81.1**	**66.7**	**69.7**	**72.1**	**79.0**	**78.9**	**82.2**	**83.4**	**74.2**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.99 U	< 0.97 U	< 0.94 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.99 U	< 0.97 U	< 0.94 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.99 U	< 0.97 U	< 0.94 U	< 1.1 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.99 U	< 0.97 U	< 0.94 U	< 1.1 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.3 U	< 6.7 U	< 6.0 U	< 7.3 U	< 7.0 U	< 6.9 U	< 6.3 U	< 6.2 U	< 6.1 U	< 5.9 U	< 6.7 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.3 U	< 6.7 U	< 6.0 U	< 7.3 U	< 7.0 U	< 6.9 U	< 6.3 U	< 6.2 U	< 6.1 U	< 5.9 U	< 6.7 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.3 UJ	< 1.3 UJ	< 1.2 UJ	< 1.5 UJ	< 1.4 UJ	< 1.4 UJ	< 1.3 UJ	< 1.2 UJ	< 1.2 UJ	< 1.2 UJ	< 1.3 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.99 U	< 0.97 U	< 0.94 U	< 1.1 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.99 U	< 0.97 U	< 0.94 U	< 1.1 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.0 U	< 1.1 U	< 0.97 U	< 1.2 U	< 1.1 U	< 1.1 U	< 1.0 U	< 0.99 U	< 0.97 U	< 0.94 U	< 1.1 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.5 U	< 2.7 U	< 2.4 U	< 2.9 U	< 2.8 U	< 2.8 U	< 2.5 U	< 2.5 U	< 2.4 U	< 2.4 U	< 2.7 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.5 U	< 2.7 U	< 2.4 U	< 2.9 U	< 2.8 U	< 2.8 U	< 2.5 U	< 2.5 U	< 2.4 U	< 2.4 UJ	< 2.7 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.51 UJ	< 0.54 U	< 0.48 U	< 0.59 U	< 0.56 U	< 0.55 U	< 0.51 U	< 0.50 U	< 0.49 U	< 0.47 U	< 0.54 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.51 U	< 0.54 U	< 0.48 U	< 0.59 U	< 0.56 U	< 0.55 U	< 0.51 U	< 0.50 U	< 0.49 U	< 0.47 U	< 0.54 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.51 UJ	< 0.54 UJ	< 0.48 UJ	< 0.59 UJ	< 0.56 UJ	< 0.55 UJ	< 0.51 UJ	< 0.50 UJ	< 0.49 UJ	< 0.47 UJ	< 0.54 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.51 UJ	< 0.54 U	< 0.48 UJ	< 0.59 UJ	< 0.56 UJ	< 0.55 UJ	< 0.51 U	< 0.50 U	< 0.49 U	< 0.47 U	< 0.54 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			**0.097 J**	< 0.27 U	< 0.24 U	**0.11 J**	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	**0.12 J**
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			R	< 1.1 UJ	< 0.97 UJ	R	< 1.1 UJ	R	< 1.0 UJ	< 0.99 UJ	< 0.97 UJ	< 0.94 UJ	< 1.1 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	**0.090 J**	< 0.24 U	< 0.24 U	**0.21 J**
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.25 UJ	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.19 J**	< 0.27 U	< 0.24 U	**0.31**	**0.13 J**	< 0.28 U	**0.10 J**	< 0.25 U	**0.069 J**	**0.095 J**	**0.21 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.10 J**	< 0.27 U	< 0.24 U	**0.25 J**	**0.077 J**	< 0.28 U	< 0.25 U	< 0.25 U	**0.096 J**	**0.14 J**	**0.10 J**
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 UJ	< 0.27 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.12 J**	< 0.27 U	< 0.24 U	**0.37**	< 0.28 U	**0.13 J**	**0.096 J**	**0.28**	< 0.24 U	< 0.24 U	**0.38**
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.24 J**	**0.18 J**	**0.17 J**	**1.4**	**0.19 J**	**0.58**	**0.42**	**0.52**	**0.069 J**	**0.12 J**	**0.90**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.52**	< 0.27 U	< 0.24 U	**1.1**	**0.28**	< 0.28 U	**0.17 J**	**0.29**	**0.17 J**	**0.21 J**	**0.37**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.51 UJ	< 0.54 U	< 0.48 UJ	**0.25 J**	**0.11 J**	< 0.55 UJ	< 0.51 U	< 0.50 U	< 0.49 U	< 0.47 U	**0.15 J**
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.25 U	< 0.27 U	< 0.24 U	< 0.29 U	< 0.28 U	< 0.28 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.27 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.088 J**	< 0.27 U	**0.14 J**	**0.13 J**	< 0.28 U	**0.11 J**	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	**0.16 J**

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	121-SD	122A-R	122A-R	122A-SD	122A-SD	123A-NS	123A-NS	123A-R	123A-R	123A-SD	123A-SD
				Sample ID	121-SD-2-12	122A-R-0-2	122A-R-2-12	122A-SD-0-2	122A-SD-2-12	123A-NS-0-2	123A-NS-2-12	123A-R-0-2	123A-R-2-12	123A-SD-0-2	123A-SD-2-12
				Sample Date	11/20/2023 9:35:00 AM	11/3/2023 8:45:00 AM	11/3/2023 8:50:00 AM	11/3/2023 8:30:00 AM	11/3/2023 8:35:00 AM	10/27/2023 9:25:00 AM	10/27/2023 9:30:00 AM	10/27/2023 10:00:00 AM	10/27/2023 10:05:00 AM	10/27/2023 9:45:00 AM	10/27/2023 9:50:00 AM
				Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD77514-2	JD76131-23	JD76131-24	JD76131-21	JD76131-22	JD75674-15	JD75674-16	JD75674-19	JD75674-20	JD75674-17	JD75674-18
				Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**												
A2540G	SOLIDS, PERCENT	%			**82.2**	**85.5**	**87.6**	**75.9**	**84.0**	**71.8**	**91.2**	**71.1**	**80.2**	**67.0**	**81.9**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 0.97 U	< 0.92 U	< 0.90 U	< 1.0 U	< 0.93 U	< 1.1 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.96 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 0.97 U	< 0.92 U	< 0.90 U	< 1.0 U	< 0.93 U	< 1.1 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.96 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 0.97 U	< 0.92 U	< 0.90 U	< 1.0 U	< 0.93 U	< 1.1 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.96 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 0.97 U	< 0.92 U	< 0.90 U	< 1.0 U	< 0.93 U	< 1.1 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.96 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 6.1 U	< 5.7 U	< 5.6 U	< 6.5 U	< 5.8 U	< 6.8 U	< 5.4 U	< 7.0 U	< 6.2 U	< 7.5 U	< 6.0 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 6.1 U	< 5.7 U	< 5.6 U	< 6.5 U	< 5.8 U	< 6.8 U	< 5.4 U	< 7.0 U	< 6.2 U	< 7.5 U	< 6.0 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.2 UJ	< 1.1 UJ	< 1.1 UJ	< 1.3 UJ	< 1.2 UJ	< 1.4 UJ	< 1.1 UJ	< 1.4 UJ	< 1.2 UJ	< 1.5 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 0.97 U	< 0.92 U	< 0.90 U	< 1.0 U	< 0.93 U	< 1.1 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.96 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 0.97 U	< 0.92 U	< 0.90 U	< 1.0 U	< 0.93 U	< 1.1 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.96 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 0.97 U	< 0.92 U	< 0.90 U	< 1.0 U	< 0.93 U	< 1.1 U	< 0.86 U	< 1.1 U	< 1.0 U	< 1.2 U	< 0.96 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 2.4 U	< 2.3 U	< 2.2 U	< 2.6 U	< 2.3 U	< 2.7 U	< 2.1 U	< 2.8 U	< 2.5 U	< 3.0 U	< 2.4 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 2.4 UJ	< 2.3 U	< 2.2 U	< 2.6 U	< 2.3 U	< 2.7 U	< 2.1 U	< 2.8 U	< 2.5 U	< 3.0 U	< 2.4 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.49 U	< 0.46 UJ	< 0.45 UJ	< 0.52 UJ	< 0.47 UJ	< 0.55 U	< 0.43 U	< 0.56 U	< 0.50 U	< 0.60 U	< 0.48 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.49 U	< 0.46 U	< 0.45 U	< 0.52 U	< 0.47 U	< 0.55 U	< 0.43 U	< 0.56 U	< 0.50 U	< 0.60 U	< 0.48 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.49 UJ	< 0.46 UJ	< 0.45 UJ	< 0.52 UJ	< 0.47 UJ	< 0.55 UJ	< 0.43 UJ	< 0.56 UJ	< 0.50 UJ	< 0.60 UJ	< 0.48 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.49 U	< 0.46 UJ	< 0.45 U	< 0.52 UJ	< 0.47 U	< 0.55 U	< 0.43 U	< 0.56 U	< 0.50 U	< 0.60 U	< 0.48 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.24 U	**0.096 J**	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 0.97 UJ	R	< 0.90 UJ	**5.7 J**	< 0.93 UJ	< 1.1 UJ	< 0.86 UJ	< 1.1 UJ	< 1.0 UJ	< 1.2 UJ	< 0.96 UJ
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.24 U	**0.11 J**	< 0.22 U	**0.13 J**	< 0.23 U	**0.11 J**	< 0.21 U	**0.13 J**	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.24 U	< 0.23 UJ	< 0.22 UJ	< 0.26 UJ	< 0.23 UJ	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.13 J**	**0.22 J**	**0.12 J**	**0.24 J**	**0.10 J**	< 0.27 U	< 0.21 U	**0.15 J**	**0.13 J**	**0.13 J**	**0.075 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	R	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.087 J**	**0.18 J**	**0.062 J**	**0.15 J**	**0.064 J**	< 0.27 U	< 0.21 U	**0.13 J**	**0.085 J**	< 0.30 U	< 0.24 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.098 J**	**0.28**	< 0.22 U	**0.20 J**	**0.059 J**	< 0.27 U	< 0.21 U	**0.13 J**	**0.10 J**	**0.13 J**	< 0.24 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.14 J**	**0.79**	**0.075 J**	**0.71**	**0.44**	< 0.27 U	< 0.21 U	**0.33**	**0.26**	**0.26 J**	**0.17 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.53**	**1.3**	**0.26**	**0.86**	**0.27**	< 0.27 U	< 0.21 U	**0.17 J**	**0.22 J**	**0.13 J**	< 0.24 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	R	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			< 0.49 U	< 0.46 UJ	< 0.45 U	**0.20 J**	< 0.47 U	< 0.55 U	< 0.43 U	< 0.56 U	< 0.50 U	< 0.60 U	< 0.48 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.24 U	< 0.23 U	< 0.22 U	< 0.26 U	< 0.23 U	< 0.27 U	< 0.21 U	< 0.28 U	< 0.25 U	< 0.30 U	< 0.24 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			< 0.24 U	**0.13 J**	< 0.22 U	**0.12 J**	< 0.23 U	**0.15 J**	< 0.21 U	**0.21 J**	**0.13 J**	**0.12 J**	< 0.24 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 1
PFAS Analytical Results
2023 PFAS Background Study
New York State

				Location	124C-R	124C-R	124C-SD	124C-SD	124C-SD	125-R	125-R	125-SD	125-SD
				Sample ID	124C-R-0-2	124C-R-2-12	124C-SD-0-2	124C-SD-2-12	FD-11302023	125-R-0-2	125-R-2-12	125-SD-0-2	125-SD-2-12
				Sample Date	11/30/2023 1:15:00 PM	11/30/2023 1:20:00 PM	11/30/2023 12:55:00 PM	11/30/2023 1:00:00 PM	11/30/2023 1:00:00 PM	11/2/2023 9:15:00 AM	11/2/2023 9:20:00 AM	11/2/2023 8:55:00 AM	11/2/2023 9:00:00 AM
				Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
				Lab Sample ID	JD77883-38	JD77883-39	JD77883-35	JD77883-36	JD77883-37	JD76131-3	JD76131-4	JD76131-1	JD76131-2
				Sample Type	N	N	N	N	FD	N	N	N	N
Method	**Analyte**	**Unit**	**(1)**										
A2540G	SOLIDS, PERCENT	%			**58.6**	**63.9**	**65.2**	**68.9**	**70.7**	**77.8**	**82.7**	**85.1**	**86.1**
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-	ug/kg			< 1.4 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.1 U	< 1.0 U	< 0.97 U	< 0.92 U	< 0.93 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg			< 1.4 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.1 U	< 1.0 U	< 0.97 U	< 0.92 U	< 0.93 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg			< 1.4 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.1 U	< 1.0 U	< 0.97 U	< 0.92 U	< 0.93 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg			< 1.4 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.1 U	< 1.0 U	< 0.97 U	< 0.92 U	< 0.93 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg			< 8.5 U	< 7.8 U	< 7.5 U	< 7.3 U	< 7.1 U	< 6.4 U	< 6.0 U	< 5.8 U	< 5.8 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg			< 8.5 U	< 7.8 U	< 7.5 U	< 7.3 U	< 7.1 U	< 6.4 U	< 6.0 U	< 5.8 U	< 5.8 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			< 1.7 UJ	< 1.6 UJ	< 1.5 UJ	< 1.5 UJ	< 1.4 UJ	< 1.3 UJ	< 1.2 UJ	< 1.2 UJ	< 1.2 UJ
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg			< 1.4 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.1 U	< 1.0 U	< 0.97 U	< 0.92 U	< 0.93 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-P	ug/kg			< 1.4 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.1 U	< 1.0 U	< 0.97 U	< 0.92 U	< 0.93 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg			< 1.4 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.1 U	< 1.0 U	< 0.97 U	< 0.92 U	< 0.93 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg			< 3.4 U	< 3.1 U	< 3.0 U	< 2.9 U	< 2.8 U	< 2.6 U	< 2.4 U	< 2.3 U	< 2.3 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg			< 0.34 U	< 0.31 UJ	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSA	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg			< 3.4 U	< 3.1 U	< 3.0 U	< 2.9 U	< 2.8 U	< 2.6 U	< 2.4 U	< 2.3 U	< 2.3 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg			< 0.68 U	< 0.63 U	< 0.60 U	< 0.58 U	< 0.57 U	< 0.51 U	< 0.48 U	< 0.46 U	< 0.46 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg			< 0.68 U	< 0.63 U	< 0.60 U	< 0.58 U	< 0.57 U	< 0.51 U	< 0.48 U	< 0.46 U	< 0.46 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			< 0.68 UJ	< 0.63 UJ	< 0.60 UJ	< 0.58 UJ	< 0.57 UJ	< 0.51 UJ	< 0.48 UJ	< 0.46 UJ	< 0.46 UJ
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			< 0.68 U	< 0.63 U	< 0.60 U	< 0.58 U	< 0.57 U	< 0.51 UJ	< 0.48 UJ	< 0.46 UJ	< 0.46 UJ
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluorobutanoic acid (PFBA)	ug/kg			< 1.4 UJ	< 1.3 UJ	< 1.2 UJ	< 1.2 UJ	< 1.1 UJ	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluorodecanoic acid (PFDA)	ug/kg			< 0.34 U	< 0.31 U	**0.12 J**	< 0.29 U	< 0.28 U	**0.10 J**	< 0.24 U	**0.11 J**	< 0.23 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg			**0.26 J**	**0.18 J**	**0.24 J**	**0.18 J**	**0.10 J**	**0.15 J**	**0.12 J**	**0.074 J**	**0.088 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg			**0.16 J**	**0.15 J**	**0.095 J**	**0.15 J**	**0.11 J**	**0.085 J**	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluorononanoic acid (PFNA)	ug/kg			**0.33 J**	**0.28 J**	**0.29 J**	**0.23 J**	**0.11 J**	**0.35**	**0.066 J**	**0.12 J**	< 0.23 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88		**0.86**	**0.71**	**0.60**	**0.58**	**0.31**	**0.40**	< 0.24 U	**0.30**	**0.11 J**
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	0.66		**0.56**	**0.59**	**0.49**	**0.50**	**0.23 J**	**0.57**	**0.29**	< 0.23 U	**0.28**
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			**0.16 J**	< 0.63 U	**0.13 J**	< 0.58 U	< 0.57 U	< 0.51 UJ	< 0.48 UJ	**0.39 J**	< 0.46 UJ
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg			< 0.34 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.28 U	< 0.26 U	< 0.24 U	< 0.23 U	< 0.23 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg			**0.16 J**	< 0.31 U	**0.12 J**	< 0.29 U	< 0.28 U	**0.12 J**	< 0.24 U	**0.16 J**	< 0.23 U

Notes:
Bold = Parameter was detected
Highlight = Concentration exceeds guidance value
(1) = NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (NYSDEC PFAS Guidance), dated April 2023 (NYSDEC, 2023), Guidance Values for Unrestricted Use
N = Normal sample
FD = Field duplicate sample
J = The reported results was an estimate value
U = The analyte was not detected
UJ = The analyte was not detected and detection limit was estimated
R = The result was affected by serious deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

			Location	001-R	001-R	001-SD	006-SD	006-SD	007-R	007-SD	007-SD	008A-R	008A-R	009D-R
			Sample ID	001-R-0-2	001-R-2-12	001-SD-0-2	006-SD-0-2	006-SD-2-12	007-R-0-2	007-SD-0-2	FD-11072023	008A-R-0-2	008A-R-2-12	009D-R-0-2
			Sample Date	11/7/2023 11:00:00 AM	11/7/2023 11:05:00 AM	11/7/2023 10:45:00 AM	11/9/2023 1:05:00 PM	11/9/2023 1:10:00 PM	11/7/2023 9:15:00 AM	11/7/2023 8:55:00 AM	11/7/2023 9:00:00 AM	11/30/2023 9:00:00 AM	11/30/2023 9:05:00 AM	12/4/2023 2:05:00 PM
			Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
			Lab Sample ID	JD76288-19	JD76288-20	JD76288-17	JD76818-10	JD76818-11	JD76288-15	JD76288-12	JD76288-14	JD77883-25	JD77883-26	JD78193-9
			Sample Type	N	N	N	N	N	N	N	FD	N	N	N
Method	Analyte	Unit												
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg					R							
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg												
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg												
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg												
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg												
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg												
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg					R							
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg						R						
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg					R							
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg												
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg												
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg												
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg												
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg												
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg												
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R			R	R	R	R	R	R	
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg												
E1633	Perfluorodecanoic acid (PFDA)	ug/kg												
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg												
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg					R							
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg												
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg												
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg												
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg												
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg												
E1633	Perfluorononanoic acid (PFNA)	ug/kg												
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg												
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg												
E1633	Perfluorooctanoic acid (PFOA)	ug/kg												
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg												
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg												
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg					R	R						
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg					R	R						
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg												

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

	Location	009D-SD	010C-R	010C-R	010C-SD	011-R	011-R	012-SD	012-SD	017C-SD	019B-R	019B-R
	Sample ID	009D-SD-0-2	010C-R-0-2	010C-R-2-12	010C-SD-2-12	011-R-0-2	011-R-2-12	012-SD-0-2	012-SD-2-12	017C-SD-0-2	019B-R-0-2	019B-R-2-12
	Sample Date	12/4/2023 1:50:00 PM	11/29/2023 11:05:00 AM	11/29/2023 11:10:00 AM	11/29/2023 10:50:00 AM	11/8/2023 12:45:00 PM	11/8/2023 12:50:00 PM	11/8/2023 10:45:00 AM	11/8/2023 10:50:00 AM	11/29/2023 12:15:00 PM	11/29/2023 9:30:00 AM	11/29/2023 9:35:00 AM
	Depth Interval	0 - 2 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	2 - 12 in
	Lab Sample ID	JD78193-7	JD77883-9	JD77883-10	JD77883-8	JD76441-12	JD76441-13	JD76441-6	JD76441-7	JD77883-11	JD77883-5	JD77883-6
	Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	Analyte	Unit										
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg										
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg										
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg										
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg										
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg										
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg										
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg										
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg										
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg										
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg										
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg										
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg										
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg										
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg										
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg										
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg										
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg										
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg										
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg										
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg										
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg										
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg										
E1633	Perfluorodecanoic acid (PFDA)	ug/kg										
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg										
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg										
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg										
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg										
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg										
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg										
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg										
E1633	Perfluorononanoic acid (PFNA)	ug/kg										
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg										
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg										
E1633	Perfluorooctanoic acid (PFOA)	ug/kg										
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg										
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg										
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg										
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg										
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg										

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

	Location		**020B-R**	**021-R**	**021-R**	**023-R**	**024-NS**	**024–R**	**024–R**	**024-SD**	**024-SD**	**025-NS**	**025-NS**
	Sample ID		**020B-R-0-2**	**021-R-0-2**	**021-R-2-12**	**023-R-0-2**	**024-NS-0-2**	**024–R-0-2**	**024–R-2-12**	**024-SD-0-2**	**024-SD-2-12**	**025-NS-0-2**	**025-NS-2-12**
	Sample Date		**11/28/2023 1:40:00 PM**	**11/6/2023 4:00:00 PM**	**11/6/2023 4:05:00 PM**	**11/30/2023 10:00:00 AM**	**11/28/2023 9:05:00 AM**	**11/28/2023 9:35:00 AM**	**11/28/2023 9:40:00 AM**	**11/28/2023 9:20:00 AM**	**11/28/2023 9:25:00 AM**	**11/7/2023 12:45:00 PM**	**11/7/2023 12:50:00 PM**
	Depth Interval		**0 - 2 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**
	Lab Sample ID		**JD77742-24**	**JD76288-9**	**JD76288-10**	**JD77883-29**	**JD77742-11**	**JD77742-15**	**JD77742-16**	**JD77742-13**	**JD77742-14**	**JD76288-21**	**JD76288-22**
	Sample Type		**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**
Method	Analyte	Unit											
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg											
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg											
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg											
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg							R				
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg											
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg											
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg											
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg											
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg											
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg							R				
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg							R				
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg											
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg											
E1633	Perfluorodecanoic acid (PFDA)	ug/kg											
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg											
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg											
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg											
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg											
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg											
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg											
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg											
E1633	Perfluorononanoic acid (PFNA)	ug/kg											
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg											
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg											
E1633	Perfluorooctanoic acid (PFOA)	ug/kg											
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg											
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg							R				
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg											
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg											
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg											

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
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	Location		**025-R**	**025-R**	**025-SD**	**025-SD**	**027c-R**	**027c-R**	**027c-SD**	**030-NS**	**030-R**	**030-SD**	**030-SD**
	Sample ID		**025-R-0-2**	**025-R-2-12**	**025-SD-0-2**	**025-SD-2-12**	**027c-R-0-2**	**027c-R-2-12**	**027c-SD-0-2**	**030-NS-2-12**	**030-R-0-2**	**030-SD-0-2**	**030-SD-2-12**
	Sample Date		**11/7/2023 1:20:00 PM**	**11/7/2023 1:25:00 PM**	**11/7/2023 1:00:00 PM**	**11/7/2023 1:05:00 PM**	**10/11/2023 3:20:00 PM**	**10/11/2023 3:25:00 PM**	**10/11/2023 3:10:00 PM**	**10/10/2023 2:00:00 PM**	**10/10/2023 2:15:00 PM**	**10/10/2023 2:05:00 PM**	**10/10/2023 2:10:00 PM**
	Depth Interval		**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**0 - 2 in**	**2 - 12 in**
	Lab Sample ID		**JD76288-25**	**JD76288-26**	**JD76288-23**	**JD76288-24**	**JD74737-46**	**JD74737-47**	**JD74737-44**	**JD74737-14**	**JD74737-17**	**JD74737-15**	**JD74737-16**
	Sample Type		**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**
Method	Analyte	Unit											
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg											
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg											
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg											
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg	R		R		R	R					
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg											
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg											
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg											
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg											
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg											
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg	R		R		R	R					
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg	R		R		R	R					
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg											
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg											
E1633	Perfluorodecanoic acid (PFDA)	ug/kg											
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg											
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg											
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg											
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg											
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg											
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg											
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg											
E1633	Perfluorononanoic acid (PFNA)	ug/kg											
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg											
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg											
E1633	Perfluorooctanoic acid (PFOA)	ug/kg											
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg											
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg	R		R		R	R					
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg											
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg											
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg											

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

			Location	031A-R	031A-R	031A-SD	031A-SD	034-R	034-SD	035B-NS	035B-NS	035B-R	035B-SD	035B-SD
			Sample ID	031A-R-0-2	031A-R-2-12	031A-SD-0-2	031A-SD-2-12	034-R-2-12	034-SD-2-12	035B-NS-0-2	035B-NS-2-12	035B-R-2-12	035B-SD-0-2	035B-SD-2-12
			Sample Date	10/12/2023 12:55:00 PM	10/12/2023 1:00:00 PM	10/12/2023 12:45:00 PM	10/12/2023 12:50:00 PM	10/10/2023 3:45:00 PM	10/10/2023 3:30:00 PM	10/12/2023 9:50:00 AM	10/12/2023 9:49:00 AM	10/12/2023 10:15:00 AM	10/12/2023 10:00:00 AM	10/12/2023 10:05:00 AM
			Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in
			Lab Sample ID	JD74737-65	JD74737-67	JD74737-63	JD74737-64	JD74737-23	JD74737-20	JD74737-53	JD74737-54	JD74737-58	JD74737-55	JD74737-56
			Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	Analyte	Unit												
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg												
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg												
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg												
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg	R	R	R	R			R		R	R	R	
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg												
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg								R				
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg												
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg												
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg												
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg	R	R	R	R			R	R	R	R	R	
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg	R	R	R	R			R	R	R	R	R	
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg												
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R	
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg												
E1633	Perfluorodecanoic acid (PFDA)	ug/kg												
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg												
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg												
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg												
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg												
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg												
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg												
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg												
E1633	Perfluorononanoic acid (PFNA)	ug/kg												
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg												
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg												
E1633	Perfluorooctanoic acid (PFOA)	ug/kg												
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg												
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg	R	R	R	R			R	R	R	R	R	
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg												
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg												
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg												

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
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	Location		**038-R**	**039-R**	**039-R**	**041-R**	**042C-R**	**042C-R**	**042C-SD**	**043-NS**	**043-NS**	**043-R**	**043-SD**
	Sample ID		**038-R-0-2**	**039-R-0-2**	**039-R-2-12**	**041-R-0-2**	**042C-R-0-2**	**042C-R-2-12**	**042C-SD-2-12**	**043-NS-0-2**	**043-NS-2-12**	**043-R-0-2**	**043-SD-0-2**
	Sample Date		**10/11/2023 10:40:00 AM**	**10/11/2023 1:50:00 PM**	**10/11/2023 1:55:00 PM**	**10/11/2023 9:40:00 AM**	**10/12/2023 11:50:00 AM**	**10/12/2023 11:55:00 AM**	**10/12/2023 11:45:00 AM**	**10/11/2023 11:30:00 AM**	**10/11/2023 11:35:00 AM**	**10/11/2023 12:05:00 PM**	**10/11/2023 11:50:00 AM**
	Depth Interval		**0 - 2 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**0 - 2 in**	**2 - 12 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**0 - 2 in**
	Lab Sample ID		**JD74737-31**	**JD74737-41**	**JD74737-42**	**JD74737-27**	**JD74737-61**	**JD74737-62**	**JD74737-60**	**JD74737-33**	**JD74737-34**	**JD74737-37**	**JD74737-35**
	Sample Type		**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**
Method	Analyte	Unit											
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg											
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg											
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg											
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg					R						
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg											
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg											
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg											
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg											
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg											
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg					R						
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg					R						
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg											
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg											
E1633	Perfluorodecanoic acid (PFDA)	ug/kg											
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg											
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg											
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg											
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg											
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg											
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg											
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg											
E1633	Perfluorononanoic acid (PFNA)	ug/kg											
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg											
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg											
E1633	Perfluorooctanoic acid (PFOA)	ug/kg											
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg											
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg					R						
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg											
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg											
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg											

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Table 2
PFAS Rejected Results
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	Location		**043-SD**	**046-R**	**048B-R**	**048B-SD**	**048B-SD**	**050-NS**	**053B-NS**	**053B-NS**	**053B-R**	**053B-SD**	**053B-SD**
	Sample ID		**043-SD-2-12**	**FD-10132023**	**048B-R-2-12**	**048B-SD-0-2**	**048B-SD-2-12**	**050-NS-0-2**	**053B-NS-0-2**	**053B-NS-2-12**	**053B-R-2-12**	**053B-SD-0-2**	**053B-SD-2-12**
	Sample Date		**10/11/2023**	**10/13/2023**	**10/12/2023**	**10/12/2023**	**10/12/2023**	**10/13/2023**	**10/25/2023**	**10/25/2023**	**10/25/2023**	**10/25/2023**	**10/25/2023**
	Depth Interval		**11:55:00 AM**	**1:05:00 PM**	**8:50:00 AM**	**8:35:00 AM**	**8:40:00 AM**	**9:15:00 AM**	**1:35:00 PM**	**1:40:00 PM**	**2:10:00 PM**	**1:50:00 PM**	**1:55:00 PM**
	Lab Sample ID		**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**0 - 2 in**	**2 - 12 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**
	Sample Type		**JD74737-36**	**JD74836-14**	**JD74737-52**	**JD74737-49**	**JD74737-50**	**JD74836-1**	**JD75523-14**	**JD75523-15**	**JD75523-19**	**JD75523-16**	**JD75523-17**
			N	**FD**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**
Method	Analyte	Unit											
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg											
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg											
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg											
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg			R	R							
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg											
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg											
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg											
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg											
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg											
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg			R	R							
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg			R	R							
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg											
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg											
E1633	Perfluorodecanoic acid (PFDA)	ug/kg											
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg											
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg											
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg											
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg											
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg											
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg											
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg											
E1633	Perfluorononanoic acid (PFNA)	ug/kg											
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg											
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg											
E1633	Perfluorooctanoic acid (PFOA)	ug/kg											
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg											
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg			R	R							
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg											
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg											
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg											

Note:
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Table 2
PFAS Rejected Results
2023 PFAS Background Study
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			Location	054A-R	055-SD	057-R	058-SD	059C-R	063-R	064-R	064-SD	064-SD	066-SD	067-R
			Sample ID	054A-R-2-12	055-SD-0-2	057-R-0-2	058-SD-0-2	059C-R-2-12	063-R-0-2	FD-10252023	064-SD-0-2	064-SD-2-12	066-SD-0-2	067-R-0-2
			Sample Date	10/25/2023 9:05:00 AM	10/24/2023 9:25:00 AM	10/19/2023 4:50:00 PM	10/31/2023 2:50:00 PM	10/31/2023 9:20:00 AM	10/24/2023 11:30:00 AM	10/25/2023 12:10:00 PM	10/25/2023 11:50:00 AM	10/25/2023 11:55:00 AM	10/26/2023 11:30:00 AM	10/25/2023 10:20:00 AM
			Depth Interval	2 - 12 in	0 - 2 in	0 - 2 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in
			Lab Sample ID	JD75523-4	JD75433-17	JD75251-18	JD75822-31	JD75822-16	JD75433-23	JD75523-12	JD75523-9	JD75523-10	JD75674-5	JD75523-7
			Sample Type	N	N	N	N	N	N	FD	N	N	N	N
Method	Analyte	Unit												
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg												
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg												
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg												
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg	R											R
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg												
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg												
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg												
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg												
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg												
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg	R											R
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg	R											R
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg												
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg												
E1633	Perfluorodecanoic acid (PFDA)	ug/kg												
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg												
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg												
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg												
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg												
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg												
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg												
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg												
E1633	Perfluorononanoic acid (PFNA)	ug/kg												
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg												
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg												
E1633	Perfluorooctanoic acid (PFOA)	ug/kg												
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg												
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg	R											R
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg												
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg												
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg												

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
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	Location		**067-R**	**067-SD**	**067-SD**	**069-R**	**069-SD**	**077B-R**	**077B-R**	**078-NS**	**079-NS**	**079-SD**	**079-SD**
	Sample ID		**067-R-2-12**	**067-SD-0-2**	**067-SD-2-12**	**069-R-0-2**	**069-SD-0-2**	**077B-R-0-2**	**FD-10202023**	**078-NS-0-2**	**079-NS-0-2**	**079-SD-0-2**	**079-SD-2-12**
	Sample Date		**10/25/2023 10:25:00 AM**	**10/25/2023 10:05:00 AM**	**10/25/2023 10:10:00 AM**	**10/20/2023 11:35:00 AM**	**10/20/2023 11:15:00 AM**	**10/20/2023 9:45:00 AM**	**10/20/2023 9:45:00 AM**	**10/19/2023 1:15:00 PM**	**10/16/2023 4:15:00 PM**	**10/16/2023 4:30:00 PM**	**10/16/2023 4:35:00 PM**
	Depth Interval		**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**2 - 12 in**
	Lab Sample ID		**JD75523-8**	**JD75523-5**	**JD75523-6**	**JD75251-34**	**JD75251-32**	**JD75251-25**	**JD75251-26**	**JD75251-5**	**JD74986-20**	**JD74986-22**	**JD74986-23**
	Sample Type		**N**	**N**	**N**	**N**	**N**	**N**	**FD**	**N**	**N**	**N**	**N**
Method	Analyte	Unit											
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg											
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg											
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg											
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg		R									
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg											
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg											
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg											
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg											
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg											
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg		R									
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg		R									
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg											
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg											
E1633	Perfluorodecanoic acid (PFDA)	ug/kg											
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg											
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg											
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg											
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg											
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg											
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg											
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg											
E1633	Perfluorononanoic acid (PFNA)	ug/kg											
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg											
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg											
E1633	Perfluorooctanoic acid (PFOA)	ug/kg											
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg											
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg		R									
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg											
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg											
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg											

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

			Location	080-NS	081C-SD	085A-SD	086-R	086-SD	087E-R	087E-R	087E-SD	090-R	092A-R	092A-R
			Sample ID	080-NS-0-2	081C-SD-2-12	085A-SD-0-2	086-R-0-2	086-SD-0-2	087E-R-0-2	087E-R-2-12	087E-SD-0-2	090-R-2-12	092A-R-0-2	092A-R-2-12
			Sample Date	10/18/2023 12:45:00 PM	10/18/2023 11:50:00 AM	11/20/2023 3:15:00 PM	10/20/2023 8:40:00 AM	10/20/2023 8:25:00 AM	10/17/2023 1:05:00 PM	10/17/2023 1:10:00 PM	10/17/2023 12:45:00 PM	10/16/2023 3:00:00 PM	10/23/2023 12:40:00 PM	10/23/2023 12:45:00 PM
			Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	0 - 2 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
			Lab Sample ID	JD75085-9	JD75085-6	JD77514-15	JD75251-23	JD75251-21	JD74986-44	JD74986-45	JD74986-42	JD74986-19	JD75433-3	JD75433-4
			Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	Analyte	Unit												
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg												
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg												
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg												
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg										R		
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg												
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg												
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg												
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg												
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg												
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg										R		
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg										R		
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg												
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg												
E1633	Perfluorodecanoic acid (PFDA)	ug/kg												
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg												
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg												
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg												
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg												
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg												
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg												
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg												
E1633	Perfluorononanoic acid (PFNA)	ug/kg												
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg												
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg												
E1633	Perfluorooctanoic acid (PFOA)	ug/kg												
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg												
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg										R		
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg												
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg												
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg												

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Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

			Location	092A-SD	093-SD	095-SD	095-SD	096C-NS	096C-R	096C-R	099F-R	099F-R	100A-R	100A-R
			Sample ID	092A-SD-0-2	093-SD-0-2	095-SD-0-2	095-SD-2-12	096C-NS-2-12	096C-R-0-2	096C-R-2-12	099F-R-0-2	099F-R-2-12	100A-R-0-2	100A-R-2-12
			Sample Date	10/23/2023 12:20:00 PM	11/20/2023 1:05:00 PM	10/17/2023 8:30:00 AM	10/17/2023 8:35:00 AM	12/4/2023 9:25:00 AM	12/4/2023 10:05:00 AM	12/4/2023 10:10:00 AM	11/21/2023 10:15:00 AM	11/21/2023 10:20:00 AM	10/17/2023 2:30:00 PM	10/17/2023 2:35:00 PM
			Depth Interval	0 - 2 in	0 - 2 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in
			Lab Sample ID	JD75433-1	JD77514-9	JD74986-27	JD74986-28	JD78193-2	JD78193-5	JD78193-6	JD77514-21	JD77514-22	JD74986-48	JD74986-49
			Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	Analyte	Unit												
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg												
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg												
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg												
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg												
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg					R							
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg												
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg												
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg												
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg												
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg												
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg												
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg												
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg					R							
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg					R							
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg												
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg												
E1633	Perfluorodecanoic acid (PFDA)	ug/kg												
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg												
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg												
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg												
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg												
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg												
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg												
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg												
E1633	Perfluorononanoic acid (PFNA)	ug/kg												
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg												
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg												
E1633	Perfluorooctanoic acid (PFOA)	ug/kg												
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg												
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg					R							
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg												
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg												
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg												

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Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

			Location	100A-SD	100A-SD	101-NS	102-SD	102-SD	102-SD	103C-R	103C-R	105A-R	105A-R	105A-SD
			Sample ID	100A-SD-0-2	100A-SD-2-12	101-NS-0-2	102-SD-0-2	102-SD-2-12	FD-11272023	103C-R-0-2	103C-R-2-12	105A-R-0-2	105A-R-2-12	105A-SD-0-2
			Sample Date	10/17/2023 2:20:00 PM	10/17/2023 2:25:00 PM	10/23/2023 3:55:00 PM	11/27/2023 3:25:00 PM	11/27/2023 3:30:00 PM	11/27/2023 3:30:00 PM	11/3/2023 10:40:00 AM	11/3/2023 10:45:00 AM	11/1/2023 3:05:00 PM	11/1/2023 3:10:00 PM	11/1/2023 2:50:00 PM
			Depth Interval	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in	2 - 12 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in
			Lab Sample ID	JD74986-46	JD74986-47	JD75433-9	JD77742-5	JD77742-6	JD77742-7	JD76131-27	JD76131-28	JD75951-23	JD75951-24	JD75951-21
			Sample Type	N	N	N	N	N	FD	N	N	N	N	N
Method	Analyte	Unit												
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg										R		R
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg										R		R
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg										R		R
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg										R		R
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg										R		R
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg										R		R
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg		R		R						R		R
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg										R		R
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg										R		R
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg										R		R
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg										R		R
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg										R		R
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg												R
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg										R		R
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg										R		R
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg										R		R
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg										R		R
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg										R		R
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg		R		R						R		R
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg		R		R						R		R
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg										R		R
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg										R		R
E1633	Perfluorodecanoic acid (PFDA)	ug/kg										R		R
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg										R		R
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg										R		R
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg										R		R
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg										R		R
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg										R		R
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg										R		R
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg										R		R
E1633	Perfluorononanoic acid (PFNA)	ug/kg										R		R
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg										R		R
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg										R		R
E1633	Perfluorooctanoic acid (PFOA)	ug/kg										R		R
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg										R		R
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg		R		R						R		R
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg										R		R
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg										R		R
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg										R		R

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Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

			Location	105A-SD	106-R	106-R	108-R	108-R	108-SD	108-SD	109-R	109-SD	111-R	111-SD
			Sample ID	105A-SD-2-12	106-R-0-2	106-R-2-12	108-R-0-2	108-R-2-12	108-SD-0-2	108-SD-2-12	109-R-0-2	109-SD-2-12	111-R-0-2	111-SD-0-2
			Sample Date	11/1/2023	11/20/2023	11/20/2023	11/1/2023	11/1/2023	11/1/2023	11/1/2023	11/27/2023	11/27/2023	11/1/2023	11/1/2023
				2:55:00 PM	11:25:00 AM	11:30:00 AM	1:55:00 PM	2:00:00 PM	1:30:00 PM	1:35:00 PM	1:00:00 PM	12:50:00 PM	11:05:00 AM	10:50:00 AM
			Depth Interval	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	2 - 12 in	0 - 2 in	0 - 2 in
			Lab Sample ID	JD75951-22	JD77514-7	JD77514-8	JD75951-19	JD75951-20	JD75951-17	JD75951-18	JD77742-3	JD77742-2	JD75951-8	JD75951-6
			Sample Type	N	N	N	N	N	N	N	N	N	N	N
Method	Analyte	Unit												
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg	R				R							
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg	R				R							
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg	R				R							
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg	R				R							
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg	R				R							
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg	R				R							
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg	R				R							
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg	R				R							
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg	R				R							
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg	R				R							
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg	R				R							
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg	R				R							
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg	R				R							
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg	R				R							
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	R				R							
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg	R				R							
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg	R				R							
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg	R				R							
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg	R				R							
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg	R				R							
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg	R				R							
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg	R				R							
E1633	Perfluorodecanoic acid (PFDA)	ug/kg	R				R							
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg	R				R							
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg	R				R							
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	R				R							
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg	R				R							
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg	R				R							
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg	R				R							
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg	R				R							
E1633	Perfluorononanoic acid (PFNA)	ug/kg	R				R							
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg	R				R							
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg	R				R							
E1633	Perfluorooctanoic acid (PFOA)	ug/kg	R				R							
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg	R				R							
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg	R				R							
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg					R							
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg					R							
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg	R				R							

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

	Location		**111-SD**	**112-NS**	**112-R**	**112-R**	**112-SD**	**116-R**	**116-SD**	**117-R**	**117-SD**	**118-R**	**118-R**
	Sample ID		**111-SD-2-12**	**112-NS-0-2**	**112-R-0-2**	**112-R-2-12**	**112-SD-0-2**	**116-R-0-2**	**116-SD-0-2**	**117-R-0-2**	**117-SD-0-2**	**118-R-0-2**	**118-R-2-12**
	Sample Date		**11/1/2023 10:55:00 AM**	**11/6/2023 1:30:00 PM**	**11/6/2023 2:20:00 PM**	**11/6/2023 2:25:00 PM**	**11/6/2023 1:55:00 PM**	**11/2/2023 12:35:00 PM**	**11/2/2023 12:15:00 PM**	**11/2/2023 10:45:00 AM**	**11/2/2023 10:20:00 AM**	**12/5/2023 10:10:00 AM**	**12/5/2023 10:15:00 AM**
	Depth Interval		**2 - 12 in**	**0 - 2 in**	**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**2 - 12 in**
	Lab Sample ID		**JD75951-7**	**JD76288-1**	**JD76288-5**	**JD76288-6**	**JD76288-3**	**JD76131-13**	**JD76131-11**	**JD76131-7**	**JD76131-5**	**JD78193-18**	**JD78193-19**
	Sample Type		**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**
Method	Analyte	Unit											
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg											
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg											
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg											
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg											
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg											
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg											
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg											
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg											
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg											
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg											
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg											
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg											
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R	R	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg											
E1633	Perfluorodecanoic acid (PFDA)	ug/kg											
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg											
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg											
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg											
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg											
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg											
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg											
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg											
E1633	Perfluorononanoic acid (PFNA)	ug/kg											
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg											
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg											
E1633	Perfluorooctanoic acid (PFOA)	ug/kg											
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg											
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg											
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg											
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg											
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg											

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

	Location		**119-R**	**119-R**	**119-SD**	**119-SD**	**119-SD**	**120-R**	**120-SD**	**122A-R**	**122A-SD**	**125-R**	**125-R**
	Sample ID		**119-R-0-2**	**119-R-2-12**	**119-SD-0-2**	**119-SD-2-12**	**FD-11022023**	**120-R-0-2**	**120-SD-0-2**	**122A-R-0-2**	**122A-SD-0-2**	**125-R-0-2**	**125-R-2-12**
	Sample Date		**11/2/2023 2:55:00 PM**	**11/2/2023 3:00:00 PM**	**11/2/2023 2:30:00 PM**	**11/2/2023 2:35:00 PM**	**11/2/2023 2:35:00 PM**	**12/5/2023 12:35:00 PM**	**12/5/2023 12:20:00 PM**	**11/3/2023 8:45:00 AM**	**11/3/2023 8:30:00 AM**	**11/2/2023 9:15:00 AM**	**11/2/2023 9:20:00 AM**
	Depth Interval		**0 - 2 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**	**2 - 12 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**2 - 12 in**
	Lab Sample ID		**JD76131-18**	**JD76131-19**	**JD76131-15**	**JD76131-16**	**JD76131-17**	**JD78193-24**	**JD78193-22**	**JD76131-23**	**JD76131-21**	**JD76131-3**	**JD76131-4**
	Sample Type		**N**	**N**	**N**	**N**	**FD**	**N**	**N**	**N**	**N**	**N**	**N**
Method	Analyte	Unit											
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg											
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg											
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg											
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg											
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg											
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg											
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg											
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg											
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg											
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg											
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg											
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg											
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg											
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg											
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg											
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R	R	R	R	R	R	R		R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg											
E1633	Perfluorodecanoic acid (PFDA)	ug/kg											
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg											
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg											
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg											
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg											
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg									R		
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg											
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg											
E1633	Perfluorononanoic acid (PFNA)	ug/kg											
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg											
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg											
E1633	Perfluorooctanoic acid (PFOA)	ug/kg											
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg									R		
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg											
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg											
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg											
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg											

Note:
R = The result was affected by deficiencies and data was rejected

Table 2
PFAS Rejected Results
2023 PFAS Background Study
New York State

	Location		**125-SD**	**125-SD**
	Sample ID		**125-SD-0-2**	**125-SD-2-12**
	Sample Date		**11/2/2023 8:55:00 AM**	**11/2/2023 9:00:00 AM**
	Depth Interval		**0 - 2 in**	**2 - 12 in**
	Lab Sample ID		**JD76131-1**	**JD76131-2**
	Sample Type		**N**	**N**
Method	Analyte	Unit		
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/kg		
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/kg		
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/kg		
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/kg		
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/kg		
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/kg		
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/kg		
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg		
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/kg		
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/kg		
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/kg		
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg		
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/kg		
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/kg		
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg		
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/kg		
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/kg		
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/kg		
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/kg		
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/kg		
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/kg		
E1633	Perfluorobutanoic acid (PFBA)	ug/kg	R	R
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/kg		
E1633	Perfluorodecanoic acid (PFDA)	ug/kg		
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/kg		
E1633	Perfluorododecanoic acid (PFDoA)	ug/kg		
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/kg		
E1633	Perfluoroheptanoic acid (PFHpA)	ug/kg		
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/kg		
E1633	Perfluorohexanoic acid (PFHxA)	ug/kg		
E1633	Perfluorononanesulfonic acid (PFNS)	ug/kg		
E1633	Perfluorononanoic acid (PFNA)	ug/kg		
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/kg		
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/kg		
E1633	Perfluorooctanoic acid (PFOA)	ug/kg		
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/kg		
E1633	Perfluoropentanoic acid (PFPeA)	ug/kg		
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/kg		
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg		
E1633	Perfluoroundecanoic acid (PFUnA)	ug/kg		

Note:
R = The result was affected by deficiencies and data was rejected

Table 3
PFAS Rinse Blank Results
2023 PFAS Background Study
New York State

		Sample ID	RB-10102023	RB-10112023	RB-10122023	RB-10132023	RB-10162023	RB-10172023
		Sample Date	10/10/2023	10/11/2023	10/12/2023	10/13/2023	10/16/2023	10/17/2023
		Sample Type	RB	RB	RB	RB	RB	RB
Method	**Analyte**	**Unit**						
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0077 U	< 0.0073 U	< 0.0078 U	< 0.0086 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0077 U	< 0.0073 U	< 0.0078 U	< 0.0086 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0077 U	< 0.0073 U	< 0.0078 U	< 0.0086 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0077 U	< 0.0073 U	< 0.0078 U	< 0.0086 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/l	< 0.047 U	< 0.048 U	< 0.048 U	< 0.046 U	< 0.049 U	< 0.054 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/l	< 0.047 U	< 0.048 U	< 0.048 U	< 0.046 U	< 0.049 U	< 0.054 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/l	< 0.0093 U	< 0.0097 U	< 0.0097 U	< 0.0092 U	< 0.0098 U	< 0.011 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0077 U	< 0.0073 U	< 0.0078 U	< 0.0086 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0077 U	< 0.0073 U	< 0.0078 U	< 0.0086 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0077 U	< 0.0073 U	< 0.0078 U	< 0.0086 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/l	< 0.019 U	< 0.019 U	< 0.019 U	< 0.018 U	< 0.020 U	< 0.022 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/l	< 0.0019 U	< 0.0019 UJ	< 0.0019 UJ	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/l	< 0.019 U	< 0.019 U	< 0.019 U	< 0.018 U	< 0.020 U	< 0.022 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/l	< 0.0037 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0043 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/l	< 0.0037 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0043 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/l	< 0.0037 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0043 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/l	< 0.0037 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0043 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorobutanoic acid (PFBA)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0077 U	< 0.0073 U	< 0.0078 U	< 0.0086 U
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorodecanoic acid (PFDA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/l	< 0.0019 U	< 0.0019 UJ	< 0.0019 UJ	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorononanoic acid (PFNA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorooctanoic acid (PFOA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/l	< 0.0037 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0043 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0018 U	< 0.0020 U	< 0.0022 U

Notes:
RB = Rinse blank sample
J = The reported results was an estimate value
U = Analyte was not detected
UJ = Analyte was not detected and detection limit was estimated

Table 3
PFAS Rinse Blank Results
2023 PFAS Background Study
New York State

	Sample ID		RB-10182023	RB-10192023	RB-10202023	RB-10232023	RB-10242023	RB-10252023
	Sample Date		10/18/2023	10/19/2023	10/20/2023	10/23/2023	10/24/2023	10/25/2023
	Sample Type		RB	RB	RB	RB	RB	RB
Method	**Analyte**	**Unit**						
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/l	< 0.0081 U	< 0.0076 U	< 0.0077 U	< 0.0074 U	< 0.0080 U	< 0.0074 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/l	< 0.0081 U	< 0.0076 U	< 0.0077 U	< 0.0074 U	< 0.0080 U	< 0.0074 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/l	< 0.0081 U	< 0.0076 U	< 0.0077 U	< 0.0074 U	< 0.0080 U	< 0.0074 UJ
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/l	< 0.0081 U	< 0.0076 U	< 0.0077 U	< 0.0074 U	< 0.0080 U	< 0.0074 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/l	< 0.051 U	< 0.047 U	< 0.048 U	< 0.047 U	< 0.050 U	< 0.046 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/l	< 0.051 U	< 0.047 U	< 0.048 U	< 0.047 U	< 0.050 U	< 0.046 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/l	< 0.010 U	< 0.0095 UJ	< 0.0096 U	< 0.0093 U	< 0.0099 U	< 0.0092 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/l	< 0.0081 U	< 0.0076 U	< 0.0077 U	< 0.0074 U	< 0.0080 U	< 0.0074 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/l	< 0.0081 U	< 0.0076 U	< 0.0077 U	< 0.0074 U	< 0.0080 U	< 0.0074 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/l	< 0.0081 U	< 0.0076 U	< 0.0077 U	< 0.0074 U	< 0.0080 U	< 0.0074 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/l	< 0.0020 UJ	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/l	< 0.020 UJ	< 0.019 U	< 0.019 U	< 0.019 U	< 0.020 U	< 0.018 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/l	< 0.020 U	< 0.019 U	< 0.019 U	< 0.019 U	< 0.020 U	< 0.018 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/l	< 0.0041 U	< 0.0038 U	< 0.0038 U	< 0.0037 U	< 0.0040 U	< 0.0037 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/l	< 0.0041 U	< 0.0038 U	< 0.0038 U	< 0.0037 U	< 0.0040 U	< 0.0037 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/l	< 0.0041 U	< 0.0038 UJ	< 0.0038 U	< 0.0037 U	< 0.0040 U	< 0.0037 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/l	< 0.0041 U	< 0.0038 U	< 0.0038 U	< 0.0037 U	< 0.0040 U	< 0.0037 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorobutanoic acid (PFBA)	ug/l	< 0.0081 U	< 0.0076 U	< 0.0077 U	< 0.0074 U	< 0.0080 U	< 0.0074 U
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorodecanoic acid (PFDA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/l	< 0.0020 U	< 0.0019 UJ	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/l	< 0.0020 UJ	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorononanoic acid (PFNA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorooctanoic acid (PFOA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/l	< 0.0041 U	< 0.0038 U	< 0.0038 U	< 0.0037 U	< 0.0040 U	< 0.0037 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/l	< 0.0020 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0018 U

Notes:
RB = Rinse blank sample
J = The reported results was an estimate value
U = Analyte was not detected
UJ = Analyte was not detected and detection limit was estimated

Table 3
PFAS Rinse Blank Results
2023 PFAS Background Study
New York State

	Sample ID		RB-10262023	RB-10272023	RB-10302023	RB-10312023	RB-11012023	RB-11022023
	Sample Date		10/26/2023	10/27/2023	10/30/2023	10/31/2023	11/1/2023	11/2/2023
	Sample Type		RB	RB	RB	RB	RB	RB
Method	**Analyte**	**Unit**						
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/l	< 0.0084 U	< 0.0075 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0080 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/l	< 0.0084 U	< 0.0075 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0080 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/l	< 0.0084 U	< 0.0075 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0080 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/l	< 0.0084 U	< 0.0075 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0080 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/l	< 0.052 U	< 0.047 U	< 0.048 U	< 0.047 U	< 0.050 U	< 0.050 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/l	< 0.052 U	< 0.047 U	< 0.048 U	< 0.047 U	< 0.050 U	< 0.050 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/l	< 0.010 U	< 0.0094 U	< 0.0096 U	< 0.0094 U	< 0.010 U	< 0.010 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/l	< 0.0084 U	< 0.0075 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0080 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/l	< 0.0084 U	< 0.0075 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0080 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/l	< 0.0084 U	< 0.0075 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0080 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/l	< 0.021 U	< 0.019 U	< 0.019 U	< 0.019 U	< 0.020 U	< 0.020 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/l	< 0.021 U	< 0.019 U	< 0.019 U	< 0.019 U	< 0.020 U	< 0.020 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/l	< 0.0042 U	< 0.0038 U	< 0.0038 U	< 0.0038 U	< 0.0040 U	< 0.0040 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/l	< 0.0042 U	< 0.0038 U	< 0.0038 U	< 0.0038 U	< 0.0040 U	< 0.0040 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/l	< 0.0042 U	< 0.0038 U	< 0.0038 U	< 0.0038 U	< 0.0040 U	< 0.0040 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/l	< 0.0042 U	< 0.0038 U	< 0.0038 U	< 0.0038 U	< 0.0040 U	< 0.0040 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorobutanoic acid (PFBA)	ug/l	< 0.0084 U	< 0.0075 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0080 U
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 UJ	< 0.0019 UJ	< 0.0020 U	< 0.0020 U
E1633	Perfluorodecanoic acid (PFDA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 UJ	< 0.0019 UJ	< 0.0020 U	< 0.0020 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorononanoic acid (PFNA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorooctanoic acid (PFOA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/l	< 0.0042 U	< 0.0038 U	< 0.0038 U	< 0.0038 U	< 0.0040 U	< 0.0040 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/l	< 0.0021 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0020 U	< 0.0020 U

Notes:
RB = Rinse blank sample
J = The reported results was an estimate value
U = Analyte was not detected
UJ = Analyte was not detected and detection limit was estimated

Table 3
PFAS Rinse Blank Results
2023 PFAS Background Study
New York State

	Sample ID		RB-11032023	RB-11062023	RB-11072023	RB-11082023	RB-11092023	RB-11102023
	Sample Date		11/3/2023	11/6/2023	11/7/2023	11/8/2023	11/9/2023	11/10/2023
	Sample Type		RB	RB	RB	RB	RB	RB
Method	**Analyte**	**Unit**						
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/l	< 0.0080 U	< 0.0084 U	< 0.0075 U	< 0.0080 U	< 0.0080 U	< 0.0077 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/l	< 0.0080 U	< 0.0084 U	< 0.0075 U	< 0.0080 UJ	< 0.0080 U	< 0.0077 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/l	< 0.0080 U	< 0.0084 U	< 0.0075 U	< 0.0080 U	< 0.0080 U	< 0.0077 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/l	< 0.0080 U	< 0.0084 U	< 0.0075 U	< 0.0080 U	< 0.0080 U	< 0.0077 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/l	< 0.050 U	< 0.053 U	< 0.047 U	< 0.050 U	< 0.050 U	< 0.048 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/l	< 0.050 U	< 0.053 U	< 0.047 U	< 0.050 U	< 0.050 U	< 0.048 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/l	< 0.010 U	< 0.011 UJ	< 0.0093 UJ	< 0.010 U	< 0.010 U	< 0.0096 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/l	< 0.0080 U	< 0.0084 U	< 0.0075 U	< 0.0080 U	< 0.0080 U	< 0.0077 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/l	< 0.0080 U	< 0.0084 U	< 0.0075 U	< 0.0080 U	< 0.0080 U	< 0.0077 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/l	< 0.0080 U	< 0.0084 UJ	< 0.0075 UJ	< 0.0080 U	< 0.0080 U	< 0.0077 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/l	< 0.020 U	< 0.021 U	< 0.019 U	< 0.020 U	< 0.020 U	< 0.019 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/l	< 0.020 U	< 0.021 U	< 0.019 U	< 0.020 U	< 0.020 U	< 0.019 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/l	< 0.0040 U	< 0.0042 U	< 0.0037 U	< 0.0040 U	< 0.0040 U	< 0.0039 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/l	< 0.0040 U	< 0.0042 U	< 0.0037 U	< 0.0040 U	< 0.0040 U	< 0.0039 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/l	< 0.0040 U	< 0.0042 UJ	< 0.0037 UJ	< 0.0040 U	< 0.0040 U	< 0.0039 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/l	< 0.0040 U	< 0.0042 U	< 0.0037 U	< 0.0040 U	< 0.0040 U	< 0.0039 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorobutanoic acid (PFBA)	ug/l	< 0.0080 U	< 0.0084 U	< 0.0075 U	< 0.0080 U	< 0.0080 U	< 0.0077 U
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorodecanoic acid (PFDA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/l	< 0.0020 U	< 0.0021 UJ	< 0.0019 UJ	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorononanoic acid (PFNA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 UJ	< 0.0020 U	< 0.0019 U
E1633	Perfluorooctanoic acid (PFOA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/l	< 0.0040 U	< 0.0042 U	< 0.0037 U	< 0.0040 U	< 0.0040 U	< 0.0039 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/l	< 0.0020 U	< 0.0021 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0019 U

Notes:
RB = Rinse blank sample
J = The reported results was an estimate value
U = Analyte was not detected
UJ = Analyte was not detected and detection limit was estimated

Table 3
PFAS Rinse Blank Results
2023 PFAS Background Study
New York State

	Sample ID	RB-11202023	RB-11212023	RB-11272023	RB-11282023	RB-11292023	RB-11302023
	Sample Date	11/20/2023	11/21/2023	11/27/2023	11/28/2023	11/29/2023	11/30/2023
	Sample Type	RB	RB	RB	RB	RB	RB
Method	**Analyte**	**Unit**					
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/l	< 0.0083 U	< 0.0079 U	< 0.0073 U	< 0.0075 U	< 0.0085 U	< 0.0074 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/l	< 0.0083 U	< 0.0079 U	< 0.0073 U	< 0.0075 U	< 0.0085 U	< 0.0074 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/l	< 0.0083 U	< 0.0079 U	< 0.0073 U	< 0.0075 U	< 0.0085 U	< 0.0074 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/l	< 0.0083 U	< 0.0079 U	< 0.0073 U	< 0.0075 U	**0.0010 J**	< 0.0074 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/l	< 0.052 U	< 0.050 U	< 0.046 U	< 0.047 U	< 0.053 U	< 0.046 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/l	< 0.052 U	< 0.050 U	< 0.046 U	< 0.047 U	< 0.053 U	< 0.046 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/l	< 0.010 U	< 0.0099 U	< 0.0091 U	< 0.0094 U	< 0.011 U	< 0.0092 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/l	< 0.0083 U	< 0.0079 U	< 0.0073 U	< 0.0075 U	< 0.0085 U	< 0.0074 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/l	< 0.0083 U	< 0.0079 U	< 0.0073 U	< 0.0075 U	< 0.0085 U	< 0.0074 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/l	< 0.0083 U	< 0.0079 U	< 0.0073 U	< 0.0075 U	< 0.0085 U	< 0.0074 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/l	< 0.021 U	< 0.020 U	< 0.018 U	< 0.019 U	< 0.021 U	< 0.018 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/l	< 0.021 U	< 0.020 U	< 0.018 U	< 0.019 U	< 0.021 U	< 0.018 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/l	< 0.0041 U	< 0.0040 U	< 0.0036 U	< 0.0038 U	< 0.0042 U	< 0.0037 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/l	< 0.0041 U	< 0.0040 U	< 0.0036 U	< 0.0038 U	< 0.0042 U	< 0.0037 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/l	< 0.0041 U	< 0.0040 U	< 0.0036 U	< 0.0038 U	< 0.0042 U	< 0.0037 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/l	< 0.0041 U	< 0.0040 U	< 0.0036 U	< 0.0038 U	< 0.0042 U	< 0.0037 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorobutanoic acid (PFBA)	ug/l	< 0.0083 U	< 0.0079 U	< 0.0073 U	< 0.0075 U	< 0.0085 U	< 0.0074 U
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorodecanoic acid (PFDA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorohexanoic acid (PFHxA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorononanoic acid (PFNA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	**0.00072 J**	< 0.0021 U	< 0.0018 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorooctanoic acid (PFOA)	ug/l	< 0.0021 U	**0.00087 J**	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/l	< 0.0041 U	< 0.0040 U	< 0.0036 U	< 0.0038 U	< 0.0042 U	< 0.0037 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/l	< 0.0021 U	< 0.0020 U	< 0.0018 U	< 0.0019 U	< 0.0021 U	< 0.0018 U

Notes:
RB = Rinse blank sample
J = The reported results was an estimate value
U = Analyte was not detected
UJ = Analyte was not detected and detection limit was estimated

Table 3
PFAS Rinse Blank Results
2023 PFAS Background Study
New York State

	Sample ID		RB-12042023	RB-12052023	RB-12062023
	Sample Date		12/4/2023	12/5/2023	12/6/2023
	Sample Type		RB	RB	RB
Method	**Analyte**	**Unit**			
E1633	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0083 U
E1633	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0083 U
E1633	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0083 U
E1633	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0083 U
E1633	2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	ug/l	< 0.046 U	< 0.048 U	< 0.052 U
E1633	3-Perfluoroheptyl propanoic acid (7:3FTCA)	ug/l	< 0.046 U	< 0.048 U	< 0.052 U
E1633	3-Perfluoropropyl propanoic acid (3:3FTCA)	ug/l	< 0.0093 U	< 0.0096 U	< 0.010 U
E1633	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0083 U
E1633	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0083 U
E1633	Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0083 U
E1633	N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	ug/l	< 0.019 U	< 0.019 U	< 0.021 U
E1633	N-methyl perfluorooctanesulfonamide (NMeFOSA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	ug/l	< 0.019 U	< 0.019 U	< 0.021 U
E1633	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ug/l	< 0.0037 U	< 0.0038 U	< 0.0041 U
E1633	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ug/l	< 0.0037 U	< 0.0038 U	< 0.0041 U
E1633	Perfluoro-3-methoxypropanoic acid (PFMPA)	ug/l	< 0.0037 U	< 0.0038 U	< 0.0041 U
E1633	Perfluoro-4-methoxybutanoic acid (PFMBA)	ug/l	< 0.0037 U	< 0.0038 U	< 0.0041 U
E1633	Perfluorobutanesulfonic acid (PFBS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorobutanoic acid (PFBA)	ug/l	< 0.0074 U	< 0.0077 U	< 0.0083 U
E1633	Perfluorodecanesulfonic acid (PFDS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorodecanoic acid (PFDA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorododecanesulfonic acid (PFDoS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorododecanoic acid (PFDoA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluoroheptanesulfonic acid (PFHpS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluoroheptanoic acid (PFHpA)	ug/l	< 0.0019 U	< 0.0019 U	**0.00061 J**
E1633	Perfluorohexanesulfonic acid (PFHxS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 UJ
E1633	Perfluorohexanoic acid (PFHxA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorononanesulfonic acid (PFNS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorononanoic acid (PFNA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorooctane sulfonamide (PFOSA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorooctanesulfonic acid (PFOS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorooctanoic acid (PFOA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluoropentanesulfonic acid (PFPeS)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluoropentanoic acid (PFPeA)	ug/l	< 0.0037 U	< 0.0038 U	< 0.0041 U
E1633	Perfluorotetradecanoic acid (PFTeDA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U
E1633	Perfluoroundecanoic acid (PFUnA)	ug/l	< 0.0019 U	< 0.0019 U	< 0.0021 U

Notes:
RB = Rinse blank sample
J = The reported results was an estimate value
U = Analyte was not detected
UJ = Analyte was not detected and detection limit was estimated

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Attachment A Photo Logs

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#001	60679961

Photo No. 1 001-R	Date: 11/7/2023 11:03:00 AM	Location: 001-R

Description:

Facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#001	60679961

Photo No. 1 001-SD	Date: 11/7/2023 10:44:00 AM	Location: 001-SD
Description: Facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#002	60679961

Photo No. 1 002-R	Date: 11/9/2023 12:06:00 PM	Location: 002-R

Description:

Wooded area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#002	60679961

Photo No. 1 002-SD	Date: 11/9/2023 11:45:00 AM	Location: 002-SD

Description:

Facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#003	60679961

Photo No. 1 003-R	Date: 11/28/2023 12:24:00 PM	Location: 003-R
Description: Wooded area, facing south.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#003	60679961

Photo No. 1 003-SD	Date: 11/28/2023 12:14:00 PM	Location: 003-SD
Description: On trail, facing southeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#004A	60679961

Photo No. 1 004A-R	Date: 11/29/2023 2:01:00 PM	Location: 004A-R

Description:

Facing south.



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PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#004A	60679961

Photo No. 1 004A-SD	Date: 11/29/2023 1:28:00 PM	Location: 004A-SD

Description:

Facing northeast.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#005	60679961

Photo No. 1 005-NS	Date: 11/9/2023 3:12:00 PM	Location: 005-NS

Description:

Facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#005	60679961

Photo No. 1 005-R	Date: 11/9/2023 3:51:00 PM	Location: 005-R
Description: Facing west, long grass area.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#005	60679961

Photo No. 1 005-SD	Date: 11/9/2023 3:34:00 PM	Location: 005-SD

Description:

Facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#006	60679961

Photo No. 1 006-R	Date: 11/9/2023 1:26:00 PM	Location: 006-R

Description:

Wooded area, facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#006	60679961

Photo No. 1 006-SD	Date: 11/9/2023 1:05:00 PM	Location: 006-SD

Description:

Facing southwest, near transmission lines, in grassy area.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#007	60679961

Photo No. 1 007-R	Date: 11/7/2023 9:18:00 AM	Location: 007-R

Description:

Wooded area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#007	60679961

Photo No. 1 007-SD	Date: 11/7/2023 8:56:00 AM	Location: 007-SD
Description: High grass area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#008A	60679961

Photo No. 1 008A-NS	Date: 11/30/2023 8:31:00 AM	Location: 008A-NS
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#008A	60679961

Photo No. 1 008A-R	Date: 11/30/2023 8:57:00 AM	Location: 008A-R
Description: Facing west.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#008A	60679961

Photo No. 1 008A-SD	Date: 11/30/2023 8:42:00 AM	Location: 008A-SD

Description:

Grassy area near transmission line, facing east.



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PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#009D	60679961

Photo No. 1 009D-R	Date: 12/4/2023 2:04:00 PM	Location: 009D-R
Description: Wooded area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#009D	60679961

Photo No. 1 009D-SD	Date: 12/4/2023 1:50:00 PM	Location: 009D-SD

Description:

Wooded area, facing west.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#010C	60679961

Photo No. 1 010C-R	Date: 11/29/2023 11:05:00 AM	Location: 010C-R
Description: Wooded area, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#010C	60679961

Photo No. 1 010C-SD	Date: 11/29/2023 10:49:00 AM	Location: 010C-SD

Description:

Grassy area, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#011	60679961

Photo No. 1 011-R	Date: 11/8/2023 12:42:00 PM	Location: 011-R
Description: Wooded area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#011	60679961

Photo No. 1 011-SD	Date: 11/8/2023 12:25:00 PM	Location: 011-SD
Description: On foot trail, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#012	60679961

Photo No. 1 012-R	Date: 11/8/2023 11:00:00 AM	Location: 012-R
Description: Wooded area, facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#012	60679961

Photo No. 1 012-SD	Date: 11/8/2023 10:43:00 AM	Location: 012-SD
Description: Grassy area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#013	60679961

Photo No. 1 013-R	Date: 11/28/2023 2:39:00 PM	Location: 013-R

Description:

Edge of farm field, facing northwest.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#013	60679961

Photo No. 1 013-SD	Date: 11/28/2023 2:58:00 PM	Location: 013-SD
Description: Farm field, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#014	60679961

Photo No. 1 014-NS	Date: 11/8/2023 2:29:00 PM	Location: 014-NS
Description: Facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#014	60679961

Photo No. 1 014-R	Date: 11/8/2023 2:01:00 PM	Location: 014-R
Description: Wooded area, facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#014	60679961

Photo No. 1 014-SD	Date: 11/8/2023 1:42:00 PM	Location: 014-SD

Description:

On foot path trail, facing southeast.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#015B	60679961

Photo No. 1 015B-R	Date: 11/8/2023 8:33:00 AM	Location: 015B-R
Description: Wooded area, facing southwest.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#015B	60679961

Photo No. 1 015B-SD	Date: 11/8/2023 8:12:00 AM	Location: 015B-SD

Description:

Field, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#016E	60679961

Photo No. 1 016E-R	Date: 11/9/2023 10:17:00 AM	Location: 016E-R

Description:

Wooded area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#016E	60679961

Photo No. 1 016E-SD	Date: 11/9/2023 9:54:00 AM	Location: 016E-SD

Description:

Wooded area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#017C	60679961

Photo No. 1 017C-R	Date: 11/29/2023 12:22:00 PM	Location: 017C-R
Description: Wooded area, facing west.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#017	60679961

Photo No. 1 017C-SD	Date: 11/29/2023 12:12:00 PM	Location: 017C-SD
Description: Facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#018	60679961

Photo No. 1 018-R	Date: 11/30/2023 11:02:00 AM	Location: 018-R

Description:

Wooded area, facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#018	60679961

Photo No. 1 018-SD	Date: 11/30/2023 10:50:00 AM	Location: 018-SD
Description: On trail, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#019B	60679961

Photo No. 1 019B-NS	Date: 11/29/2023 8:58:00 AM	Location: 019B-NS

Description:

Grass near driveway, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#019B	60679961

Photo No. 1 019B-R	Date: 11/29/2023 9:34:00 AM	Location: 019B-R

Description:

Wooded area, facing northwest.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#019B	60679961

Photo No. 1 019B-SD	Date: 11/29/2023 9:15:00 AM	Location: 019B-SD

Description:

Backyard, facing northeast.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	020B	60679961

Photo No. 1 020B-R	Date: 11/28/2023 1:31:00 PM	Location: 020B-R

Description:

Wooded area, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#020B	60679961

Photo No. 1 020B-SD	Date: 11/28/2023 1:22:00 PM	Location: 020B-SD

Description:

Backyard, facing south.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#021	60679961

Photo No. 1 021-R	Date: 11/6/2023 4:01:00 PM	Location: 021-R

Description:

Wooded area, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#021	60679961

Photo No. 1 021-SD	Date: 11/6/2023 3:44:00 PM	Location: 021-SD
Description: Near footpath, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#022A	60679961

Photo No. 1 022A-R	Date: 11/10/2023 9:36:00 AM	Location: 022A-R
Description: Wooded area, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#022A	60679961

Photo No. 1 022A-SD	Date: 11/10/2023 9:09:00 AM	Location: 022A-SD
Description: Wooded area, facing southeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#023	60679961

Photo No. 1 023-R	Date: 11/30/2023 9:55:00 AM	Location: 023-R

Description:

Wooded area, facing south.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#023	60679961

Photo No. 1 023-SD	Date: 11/30/2023 9:45:00 AM	Location: 023-SD
Description: Backyard, facing east.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#024	60679961

Photo No. 1 024-NS	Date: 11/28/2023 9:05:00 AM	Location: 024-NS
Description: Near road, facing south.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#024	60679961

Photo No. 1 024-R	Date: 11/28/2023 9:32:00 AM	Location: 024–R
Description: Wooded area, facing west.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#024	60679961

Photo No. 1 024-SD	Date: 11/28/2023 9:18:00 AM	Location: 024-SD
Description: On trail, facing west.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#025	60679961

Photo No. 1 025-NS	Date: 11/7/2023 12:43:00 PM	Location: 025-NS

Description:

Facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#025	60679961

Photo No. 1 025-R	Date: 11/7/2023 1:22:00 PM	Location: 025-R
Description: Wooded area, facing southeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#025	60679961

Photo No. 1 025-SD	Date: 11/7/2023 1:01:00 PM	Location: 025-SD

Description:

Wooded area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#026	60679961

Photo No. 1 026-R	Date: 10/12/2023 1:51:00 PM	Location: 026-R

Description:

Forest area further north of housing and agricultural fields.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#026	60679961

Photo No. 1 026-SD	Date: 10/12/2023	Location: 026-SD

Description:

Agricultural field north of housing.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#027C	60679961

Photo No. 1 027C-R	Date: 10/11/2023 2:53:00 PM	Location: 027C-R

Description:

Further in the woodland area to the left of the property.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#027C	60679961

Photo No. 1 027C-SD	Date: 10/11/2023 2:51:00 PM	Location: 027C-SD
Description: Slightly inward of the wooded area to the left of housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#028A	60679961

Photo No. 1 028A-NS	Date: 10/17/2023	Location: 028A-NS
Description: Front lawn area six feet from the roadway.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#028A	60679961

Photo No. 1 028A-R	Date: 10/17/2023	Location: 028A-R
Description: Forest area southwest of housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site	Project No.
PFAS Rural Background Study	#028A	60679961

Photo No. 1 028A-SD	Date: 10/17/2023	Location: 028A-SD
Description: Back corner of front lawn right before forest area.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#029C	60679961

Photo No. 1 029C-R	Date: 10/10/2023	Location: 029C-R
Description: Wooded area southwest of housing and far south of the road.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#029C	60679961

Photo No. 1 029C-SD	Date: 10/10/2023	Location: 029C-SD
Description: Short grass lawn west of housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#030	60679961

Photo No. 1 030-NS	Date: 10/10/2023	Location: 030-NS
Description: Six feet north of the road across from field.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#030	60679961

Photo No. 1 030-R	Date: 10/10/2023 1:37:00 PM	Location: 030-R

Description:

Wooded area east of open field and west of housing.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#030	60679961

Photo No. 1 030-SD	Date: 10/10/2023 1:36:00 PM	Location: 030-SD
Description: Grass lawn west of housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#031A	60679961

Photo No. 1 031A-R	Date: 10/12/2023 12:29:00 PM	Location: 031A-R
Description: Forest area behind housing and lawn.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#031A	60679961

Photo No. 1 031A-SD	Date: 10/12/2023 12:28:00 PM	Location: 031A-SD
Description: Grass lawn behind housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#033C	60679961

Photo No. 1 033C-R	Date: 10/10/2023	Location: 033C-R
Description:		

Photo No. 2 033C-R	Date: 10/10/2023	Location: 033C-R
Description:		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#033C	60679961

Photo No. 1 033C-SD	Date: 10/10/2023	Location: 033C-SD
Description:		

Photo No. 2 033C-SD	Date: 10/10/2023	Location: 033C-SD
Description:		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#034	60679961

Photo No. 1 034-R	Date: 10/10/2023	Location: 034-R
Description: Shrub area northeast of housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#034	60679961

Photo No. 1 034-SD	Date: 10/10/2023	Location: 034-SD
Description: Front lawn east of housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#035B	60679961

Photo No. 1 035B-NS	Date: 10/12/2023 9:35:00 AM	Location: 035B-NS

Description:

Six feet from the roadway north of the housing.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#035B	60679961

Photo No. 1 035B-R	Date: 10/12/2023 9:35:00 AM	Location: 035B-R
Description: Shrub forest behind housing and grass yard.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#035B	60679961

Photo No. 1 035B-SD	Date: 10/12/2023 9:34:00 AM	Location: 035B-SD

Description:

Grassy lawn area north of the tree line.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#036	60679961

Photo No. 1 036-R	Date: 10/13/2023 10:32:00 AM	Location: 036-R

Description:

Forest area west of housing and backyard.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#036	60679961

Photo No. 1 036-SD	Date: 10/13/2023 10:31:00 AM	Location: 036-SD

Description:

Backyard lawn area west of housing.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#037	60679961

Photo No. 1 037-R	Date: 10/10/2023	Location: 037-R
Description: Grassy field leading into a wooded shrub area.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#037	60679961

Photo No. 1 037-SD	Date: 10/10/2023	Location: 037-SD
Description: Grass field south of housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#038	60679961

Photo No. 1 038-R	Date: 10/11/2023	Location: 038-R
Description: Forest area south of the grass patch and gravel driveway.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#038	60679961

Photo No. 1 038-SD	Date: 10/11/2023	Location: 038-SD

Description:

Grassy patch in between forest and gravel driveway.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#039	60679961

Photo No. 1 039-R	Date: 10/11/2023 1:20:00 PM	Location: 039-R

Description:

Wooded area to the left of the property.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#039	60679961

Photo No. 1 039-SD	Date: 10/11/2023 1:20:00 PM	Location: 039-SD

Description:

Grass lawn portion of the property.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#040G	60679961

Photo No. 1 040G-NS	Date: 12/6/2023 7:54:00 AM	Location: 040G-NS
Description: Facing southwest.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#040G	60679961

Photo No. 1 040G-R	Date: 12/6/2023 8:35:00 AM	Location: 040G-R
Description: Wooded area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#040G	60679961

Photo No. 1 040G-SD	Date: 12/6/2023 8:10:00 AM	Location: 040G-SD
Description: On footpath trail, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#041	60679961

Photo No. 1 041-R	Date: 10/11/2023 9:02:00 AM	Location: 041-R

Description:

Wooded area further east of grassy field.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#041	60679961

Photo No. 1 041-SD	Date: 10/11/2023 9:22:00 AM	Location: 041-SD
Description: Grassy field east of housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#042C	60679961

Photo No. 1 042C-R	Date: 10/12/2023	Location: 042C-R

Description:

Hedge row in between agricultural fields southwest of housing.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#042C	60679961

Photo No. 1 042C-SD	Date: 10/12/2023	Location: 042C-SD

Description:

Agricultural field south of housing.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#043	60679961

Photo No. 1 043-NS	Date: 10/11/2023	Location: 043-NS

Description:

Near source six feet south of the road.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#043	60679961

Photo No. 1 043-R	Date: 10/11/2023 12:02:00 PM	Location: 043-R

Description:

Forest south of grass field.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#043	60679961

Photo No. 1 043-SD	Date: 10/11/2023 11:13:00 AM	Location: 043-SD
Description: Grass field far south of roadway.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#044	60679961

Photo No. 1 044-R	Date: 10/17/2023	Location: 044-R
Description: Dense forest area far north of housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#044	60679961

Photo No. 1 044-SD	Date: 10/17/2023	Location: 044-SD

Description:

Grassy trail north of housing.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#045F	60679961

Photo No. 1 045F-NS	Date: 12/6/2023 10:20:00 AM	Location: 045F-NS
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#045F	60679961

Photo No. 1 045F-R	Date: 12/6/2023 10:57:00 AM	Location: 045F-R
Description: Wooded area, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#045F	60679961

Photo No. 1 045F-SD	Date: 12/6/2023 10:32:00 AM	Location: 045F-SD
Description: Lawn, facing southwest.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#046	60679961

Photo No. 1 046-R	Date: 10/13/2023 12:37:00 PM	Location: 046-R

Description:

Forest area southwest from housing.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#046	60679961

Photo No. 1 046-SD	Date: 10/13/2023 12:36:00 PM	Location: 046-SD
Description: Grass lawn south of housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#047	60679961

Photo No. 1 047-SD	Date: 10/13/2023 2:24:00 PM	Location: 047-SD
Description: Backyard area west of housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#048B	60679961

Photo No. 1 048-R	Date: 10/12/2023 8:42:00 AM	Location: 048B-R

Description:

Forest further east of agricultural fields.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#048B	60679961

Photo No. 1 048B-SD	Date: 10/12/2023	Location: 048B-SD
Description: Agricultural field far east of the roadway.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#049E	60679961

Photo No. 1 049E-R	Date: 12/6/2023 1:00:00 PM	Location: 049E-R
Description: Facing west.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#049E	60679961

Photo No. 1 049E-SD	Date: 12/6/2023 12:45:00 PM	Location: 049E-SD
Description: Grassy area, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#050	60679961

Photo No. 1 050-R	Date: 10/13/2023	Location: 050-R
Description: Forest area far north of road.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#050	60679961

Photo No. 1 050-SD	Date: 10/13/2023	Location: 050-SD

Description:

Tall grass patch south of the forest area and north of the road.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#052A	60679961

Photo No. 1 052A-R	Date: 10/26/2023 9:42:00 AM	Location: 052A-R
Description: Edge of slope, facing west.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#052A	60679961

Photo No. 1 052A-SD	Date: 10/26/2023 9:14:00 AM	Location: 052A-SD

Description:

Front lawn, facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#053B	60679961

Photo No. 1 053B-NS	Date: 10/25/2023 1:35:00 PM	Location: 053B-NS

Description:

Front yard, facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#053B	60679961

Photo No. 1 053B-R	Date: 10/25/2023 2:06:00 PM	Location: 053B-R
Description: Wooded area, facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#053B	60679961

Photo No. 1 053B-SD	Date: 10/25/2023 1:51:00 PM	Location: 053B-SD
Description: Backyard, facing southeast.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#054A	60679961

Photo No. 1 054A-R	Date: 10/25/2023	Location: 054A-R
Description: Wooded, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#054A	60679961

Photo No. 1 054A-SD	Date: 10/25/2023	Location: 054A-SD
Description: Backyard, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#055	60679961

Photo No. 1 055-R	Date: 10/24/2023	Location: 055-R
Description: Wooded area, facing southeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#055	60679961

Photo No. 1 055-SD	Date: 10/24/2023	Location: 055-SD
Description: On foot hiking path, facing east.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#057	60679961

Photo No. 1 057-R	Date: 10/19/2023	Location: 057-R
Description: Facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#057	60679961

Photo No. 1 057-SD	Date: 10/19/2023	Location: 057-SD
Description: Facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#058	60679961

Photo No. 1 058-NS	Date: 10/31/2023 2:36:00 PM	Location: 058-NS
Description: Facing west.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#058	60679961

Photo No. 1 058-R	Date: 10/31/2023 3:01:00 PM	Location: 058-R
Description: Wooded area, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#058	60679961

Photo No. 1 058-SD	Date: 10/31/2023 2:47:00 PM	Location: 058-SD

Description:

Lawn area, facing east.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#059C	60679961

Photo No. 1 059C-NS	Date: 10/31/2023 8:33:00 AM	Location: 059C-NS
Description: Near driveway, facing east.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#059R	60679961

Photo No. 1 059C-R	Date: 10/31/2023 9:14:00 AM	Location: 059C-R
Description: Property line hedge row, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#061	60679961

Photo No. 1 061-R	Date: 10/30/2023 2:46:00 PM	Location: 061-R
Description: Front yard, facing northwest.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#061	60679961

Photo No. 1 061-SD	Date: 10/30/2023 2:26:00 PM	Location: 061-SD
Description: Front lawn, facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#062C	60679961

Photo No. 1 062C-R	Date: 10/31/2023 10:28:00 AM	Location: 062C-R
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#062C	60679961

Photo No. 1 062C-SD	Date: 10/31/2023 10:10:00 AM	Location: 062C-SD
Description: Mowed area, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#063	60679961

Photo No. 1 063-R	Date: 10/24/2023	Location: 063-R
Description: Facing east.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#063	60679961

Photo No. 1 063-SD	Date: 10/24/2023	Location: 063-SD
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#064	60679961

Photo No. 1 064-R	Date: 10/25/2023 12:11:00 PM	Location: 064-R

Description:

Wooded area, facing southeast.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#064	60679961

Photo No. 1 064-SD	Date: 10/25/2023 11:49:00 AM	Location: 064-SD

Description:

Grass lawn, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#066	60679961

Photo No. 1 066-R	Date: 10/26/2023 11:46:00 AM	Location: 066-R

Description:

On steep slope, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#066	60679961

Photo No. 1 066-SD	Date: 10/26/2023 11:28:00 AM	Location: 066-SD
Description: On trail, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#067	60679961

Photo No. 1 067-R	Date: 10/25/2023	Location: 067-R
Description: Wooded area, lake in background, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#067	60679961

Photo No. 1 067-SD	Date: 10/25/2023	Location: 067-SD

Description:

Side yard, facing south.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#068	60679961

Photo No. 1 068-R	Date: 10/31/2023 1:31:00 PM	Location: 068-R
Description: Wooded area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#068	60679961

Photo No. 1 068-SD	Date: 10/31/2023 1:15:00 PM	Location: 068-SD
Description: On hiking trail, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#069	60679961

Photo No. 1 069-R	Date: 10/20/2023	Location: 069-R
Description: Facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#069	60679961

Photo No. 1 069-SD	Date: 10/20/2023	Location: 069-SD

Description:

Facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#071	60679961

Photo No. 1 071-R	Date: 10/30/2023 12:50:00 PM	Location: 071-R
Description: Woods, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#071	60679961

Photo No. 1 071-SD	Date: 10/30/2023 12:27:00 PM	Location: 071-SD

Description:

Lawn near tree line, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#072	60679961

Photo No. 1 072-R	Date: 10/23/2023	Location: 072-R
Description: Wooded area, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#072	60679961

Photo No. 1 072-SD	Date: 10/23/2023	Location: 072-SD

Description:

Back side yard, facing south.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#073	60679961

Photo No. 1 073-R	Date: 10/24/2023	Location: 073-R
Description: Facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#073	60679961

Photo No. 1 073-SD	Date: 10/24/2023	Location: 073-SD
Description: Facing north in backyard.		

Photo No. 2 073-SD	Date: 10/24/2023	Location: 073-SD
Description: Backyard, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#074D	60679961

Photo No. 1 074D-R	Date: 10/31/2023 11:37:00 AM	Location: 074D-R

Description:

Backyard wooded area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#074D	60679961

Photo No. 1 074D-SD	Date: 10/31/2023 11:19:00 AM	Location: 074D-SD
Description: Side yard, facing northwest.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#076	60679961

Photo No. 1 076-R	Date: 10/19/2023 11:12:00 AM	Location: 076-R
Description: Viewing west.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#076	60679961

Photo No. 1 076-SD	Date: 10/19/2023 11:46:00 AM	Location: 076-SD

Description:

Viewing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#077B	60679961

Photo No. 1 077B-NS	Date: 10/20/2023	Location: 077B-NS
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#077B	60679961

Photo No. 1 077B-R	Date: 10/20/2023	Location: 077B-R
Description: Viewing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#077	60679961

Photo No. 1 077B-SD	Date: 10/20/2023	Location: 077B-SD
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#078	60679961

Photo No. 1 078-NS	Date: 10/19/2023	Location: 078-NS
Description: Facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#078	60679961

Photo No. 1 078-R	Date: 10/19/2023	Location: 078-R

Description:

Facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#079	60679961

Photo No. 1 079-NS	Date: 10/16/2023 4:06:00 PM	Location: 079-NS
Description: Six feet from the roadway closest to housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#079	60679961

Photo No. 1 079-R	Date: 10/16/2023 4:06:00 PM	Location: 079-R

Description:

Shrub and long grass field.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#079	60679961

Photo No. 1 079-SD	Date: 10/16/2023 4:06:00 PM	Location: 079-SD
Description: Edge of front lawn before tall grass.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#080	60679961

Photo No. 1 080-NS	Date: 10/18/2023	Location: 080-NS
Description: Six feet east from roadway.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#080	60679961

Photo No. 1 080-R	Date: 10/18/2023	Location: 080-R

Description:

Spruce forest east of road and backyard.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#080	60679961

Photo No. 1 080-SD	Date: 10/18/2023	Location: 080-SD

Description:

Backyard area west of forested area.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#081C	60679961

Photo No. 1 081C-R	Date: 10/18/2023 11:33:00 AM	Location: 081C-R

Description:

Across creek area from the Finger Lakes Trail where the SD location was taken.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#081C	60679961

Photo No. 1 081C-SD	Date: 10/18/2023 11:33:00 AM	Location: 081C-SD
Description: Along the Finger Lakes Trail.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#083B	60679961

Photo No. 1 083B-R	**Date:** 10/18/2023 1:51:00 PM	**Location:** 083B-R
Description: Shrubby area southwest of housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#083B	60679961

Photo No. 1 083B-SD	Date: 10/18/2023 1:50:00 PM	Location: 083B-SD
Description: Lawn area south of housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#084	60679961

Photo No. 1 084-R	Date: 10/19/2023	Location: 084-R

Description:

Facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#084	60679961

Photo No. 1 084-SD	Date: 10/19/2023	Location: 084-SD

Description:

Facing west.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#085A	60679961

Photo No. 1 085A-R	**Date:** 11/20/2023 2:43:00 PM	**Location:** 085A-R
Description: North lightly wooded.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#085A	60679961

Photo No. 1 085A-SD	Date: 11/20/2023 2:26:00 PM	Location: 085A-SD
Description: North edge of yard.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#086	60679961

Photo No. 1 086-R	Date: 10/20/2023	Location: 086-R

Description:

Facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#086	60679961

Photo No. 1 086-SD	Date: 10/20/2023	Location: 086-SD

Description:

Facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#087E	60679961

Photo No. 1 087E-NS	Date: 10/17/2023	Location: 087E-NS

Description:

Six feet from roadway south of housing.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#087E	60679961

Photo No. 1 087E-R	Date: 10/17/2023 12:22:00 PM	Location: 087E-R
Description: Forest area in the back of the property far west of road and housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#087E	60679961

Photo No. 1 087E-SD	Date: 10/17/2023 12:21:00 PM	Location: 087E-SD

Description:

Further back in the front yard west of the roadway and south of the housing.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#088B	60679961

Photo No. 1 088B-R	Date: 10/17/2023	Location: 088B-R
Description: Forest north of the grass path and west of the road.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#088B	60679961

Photo No. 1 088B-SD	Date: 10/17/2023	Location: 088B-SD

Description:

Open grass area before forest west of the roadway.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#089C	60679961

Photo No. 1 089C-R	Date: 10/18/2023 3:17:00 PM	Location: 089C-R
Description: Forest area of the property beyond the pond.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#089C	60679961

Photo No. 1 089C-SD	Date: 10/18/2023 3:16:00 PM	Location: 089C-SD
Description: Lawn area southwest of housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#090	60679961

Photo No. 1 090-R	Date: 10/16/2023 2:28:00 PM	Location: 090-R
Description: Shrub area before pond located to the right side of the backyard.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#090	60679961

Photo No. 1 090-SD	Date: 10/16/2023 2:28:00 PM	Location: 090-SD
Description: Grass lawn in backyard area.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#091B	60679961

Photo No. 1 091B-R	Date: 12/5/2023 2:13:00 PM	Location: 091B-R
Description: Facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#091B	60679961

Photo No. 1 091B-SD	Date: 12/5/2023 1:59:00 PM	Location: 091B-SD
Description: On footpath trail facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#092A	60679961

Photo No. 1 092A-R	Date: 10/23/2023	Location: 092A-R
Description: Woods, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#092A	60679961

Photo No. 1 092A-SD	Date: 10/23/2023	Location: 092A-SD

Description:

Backyard, facing north.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#093	60679961

Photo No. 1 093-NS	Date: 11/20/2023 1:17:00 PM	Location: 093-NS
Description: Northwest access road to field.		

AECOM

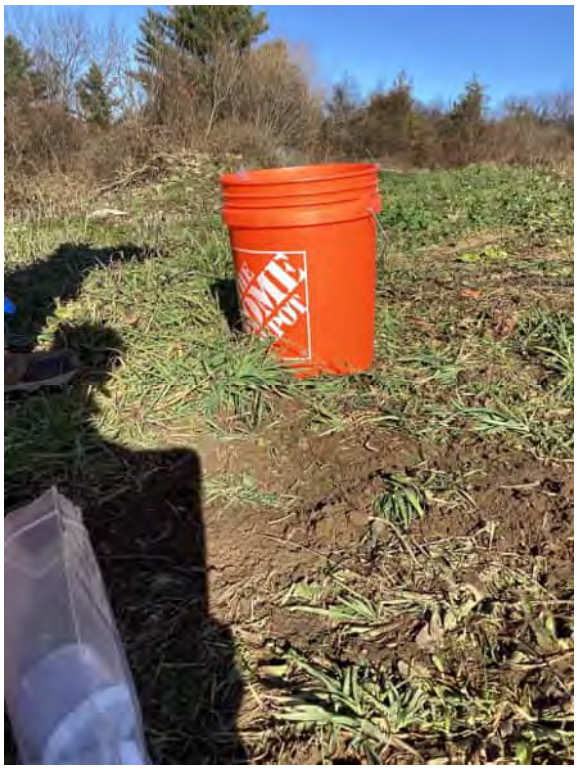
PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#093	60679961

Photo No. 1 093-R	Date: 11/20/2023 12:41:00 PM	Location: 093-R
Description: Northwest wooded.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#093	60679961

Photo No. 1 093-SD	Date: 11/20/2023 12:18:00 PM	Location: 093-SD
Description: Northwest untilled field.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#094	60679961

Photo No. 1 094-R	Date: 10/18/2023	Location: 094-R
Description: Forest area to the west of the Finger Lakes Trail.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#094	60679961

Photo No. 1 094-SD	Date: 10/18/2023 10:03:00 AM	Location: 094-SD
Description: Taken along the Finger Lakes Trail more open area.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#095	60679961

Photo No. 1 095-R	Date: 10/17/2023 8:05:00 AM	Location: 095-R

Description:

Forest area northwest of the roadway.



PHOTOGRAPHIC LOG

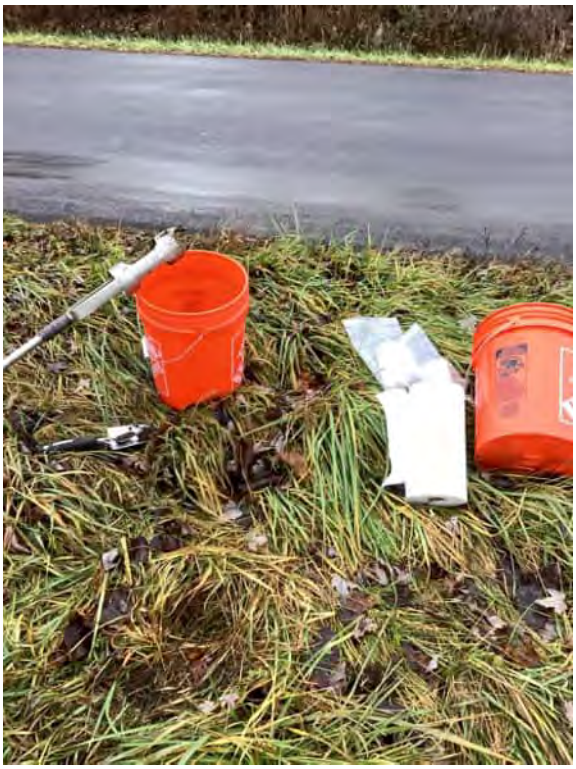
Facility Name:	Site:	Project No.
PFAS Rural Background Study	#095	60679961

Photo No. 1 095-SD	Date: 10/17/2023 8:05:00 AM	Location: 095-SD
Description: Grassy field south of woodlands.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#096C	60679961

Photo No. 1 096C-NS	Date: 12/4/2023 9:21:00 AM	Location: 096C-NS
Description: Facing west.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#096C	60679961

Photo No. 1 096C-R	Date: 12/4/2023 10:02:00 AM	Location: 096C-R
Description: Wooded area, facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#096C	60679961

Photo No. 1 096C-SD	Date: 12/4/2023 9:44:00 AM	Location: 096C-SD

Description:

Edge of farm field, facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#097A	60679961

Photo No. 1 097A-R	Date: 10/17/2023 10:15:00 AM	Location: 097A-R
Description: Forested area further southeast of trail and pond.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#097A	60679961

Photo No. 1 097A-SD	Date: 10/17/2023 10:14:00 AM	Location: 097A-SD
Description: Grassy trail southeast of pond and housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#098	60679961

Photo No. 1 098-R	Date: 10/17/2023	Location: 098-R

Description:

Backside of housing near long grassy field.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#098	60679961

Photo No. 1 098-SD	Date: 10/17/2023	Location: 098-SD

Description:

Front lawn west of roadway.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#099F	60679961

Photo No. 1 099F-R	Date: 11/21/2023 9:16:00 AM	Location: 099F-R
Description: South wooded remote.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#099F	60679961

Photo No. 1 099F-SD	**Date:** 11/21/2023 8:59:00 AM	**Location:** 099F-SD
Description: South wooded SD sample.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#100A	60679961

Photo No. 1 100A-R	Date: 10/17/2023 2:04:00 PM	Location: 100A-R
Description: Outside forested area west of housing.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#100A	60679961

Photo No. 1 100A-SD	Date: 10/17/2023	Location: 100A-SD
Description: Grassy area south of housing.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#101	60679961

Photo No. 1 101-NS	Date: 10/23/2023	Location: 101-NS

Description:

Facing south.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#101	60679961

Photo No. 1 101-R	Date: 10/23/2023	Location: 101-R
Description: Wooded, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#101	60679961

Photo No. 1 101-SD	Date: 10/23/2023	Location: 101-SD
Description: Facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#102	60679961

Photo No. 1 102-R	Date: 11/27/2023 3:37:00 PM	Location: 102-R

Description:

Wooded area, facing northwest.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#102	60679961

Photo No. 1 102-SD	Date: 11/27/2023 3:23:00 PM	Location: 102-SD
Description: Wooded area, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#103C	60679961

Photo No. 1 103C-R	Date: 11/3/2023 10:36:00 AM	Location: 103C-R
Description: Wooded area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#103C	60679961

Photo No. 1 103C-SD	Date: 11/3/2023 10:14:00 AM	Location: 103C-SD
Description: Side yard, grassy, facing northeast.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#104B	60679961

Photo No. 1 104B-R	Date: 10/27/2023 8:36:00 AM	Location: 104B-R
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#104B	60679961

Photo No. 1 104B-SD	Date: 10/27/2023 8:14:00 AM	Location: 104B-SD

Description:

Facing south.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#105A	60679961

Photo No. 1 105A-R	Date: 11/1/2023 3:02:00 PM	Location: 105A-R
Description: Wooded area, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#105A	60679961

Photo No. 1 105A-SD	Date: 11/1/2023 2:49:00 PM	Location: 105A-SD

Description:

Backyard, facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#106	60679961

Photo No. 1 106-R	Date: 11/20/2023 10:39:00 AM	Location: 106-R
Description: South sparsely wooded remote sample.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#106	60679961

Photo No. 1 106-SD	**Date:** 11/20/2023 10:17:00 AM	**Location:** 106-SD
Description: West SD edge of field.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#107	60679961

Photo No. 1 107-R	Date: 11/1/2023 9:26:00 AM	Location: 107-R
Description: Facing northwest.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#107	60679961

Photo No. 1 107-SD	Date: 11/1/2023 9:06:00 AM	Location: 107-SD
Description: Facing northwest.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#108	60679961

Photo No. 1 108-NS	Date: 11/1/2023 1:07:00 PM	Location: 108-NS
Description: Facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#108	60679961

Photo No. 1 108-R	Date: 11/1/2023 1:58:00 PM	Location: 108-R
Description: Facing southwest.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#108	60679961

Photo No. 1 108-SD	Date: 11/1/2023 1:31:00 PM	Location: 108-SD

Description:

Facing northeast in grassy area, rear cottage building.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#109	60679961

Photo No. 1 109-R	Date: 11/27/2023 1:01:00 PM	Location: 109-R

Description:

Facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#109	60679961

Photo No. 1 109-SD	Date: 11/27/2023 12:46:00 PM	Location: 109-SD

Description:

Facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#110C	60679961

Photo No. 1 110C-R	Date: 12/5/2023 8:39:00 AM	Location: 110C-R
Description: Wooded area, facing northeast.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#110C	60679961

Photo No. 1 110C-SD	Date: 12/5/2023 8:19:00 AM	Location: 110C-SD
Description: Backyard, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#111	60679961

Photo No. 1 111-R	Date: 11/1/2023 11:06:00 AM	Location: 111-R

Description:

Wooded area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#111	60679961

Photo No. 1 111-SD	Date: 11/1/2023 10:46:00 AM	Location: 111-SD

Description:

Front lawn, facing west.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#112	60679961

Photo No. 1 112-NS	Date: 11/6/2023 1:30:00 PM	Location: 112-NS
Description: Six feet off road, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#112	60679961

Photo No. 1 112-R	Date: 11/6/2023 2:17:00 PM	Location: 112-R
Description: Wooded area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#112	60679961

Photo No. 1 112-SD	Date: 11/6/2023 1:52:00 PM	Location: 112-SD

Description:

Wooded area, facing south.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#113B	60679961

Photo No. 1 113B-R	Date: 10/27/2023 11:44:00 AM	Location: 113B-R
Description: Wooded area, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#113B	60679961

Photo No. 1 113B-SD	Date: 10/27/2023 11:27:00 AM	Location: 113B-SD

Description:

Lawn area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#114C	60679961

Photo No. 1 114C-R	Date: 11/1/2023 12:06:00 PM	Location: 114C-R
Description: Wooded area, facing west.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#114C	60679961

Photo No. 1 114C-SD	Date: 11/1/2023 11:48:00 AM	Location: 114C-SD

Description:

Backyard lawn, facing south.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#116	60679961

Photo No. 1 116-NS	Date: 11/2/2023 11:52:00 AM	Location: 116-NS
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#116	60679961

Photo No. 1 116-R	Date: 11/2/2023 12:33:00 PM	Location: 116-R
Description: Wooded area, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#116	60679961

Photo No. 1 116-SD	Date: 11/2/2023 12:12:00 PM	Location: 116-SD

Description:

On footpath, facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#117	60679961

Photo No. 2 117-R	Date: 11/2/2023 10:41:00 AM	Location: 117-R
Description: Wooded area, facing NE		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#117	60679961

Photo No. 1 117-SD	Date: 11/2/2023 10:19:00 AM	Location: 117-SD
Description: Side lawn, facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#118	60679961

Photo No. 1 118-R	Date: 12/5/2023 10:06:00 AM	Location: 118-R

Description:

Wooded area, facing north.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#118	60679961

Photo No. 1 118-SD	Date: 12/5/2023 9:53:00 AM	Location: 118-SD
Description: Side of trail, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#119	60679961

Photo No. 1 119-R	Date: 11/2/2023 2:56:00 PM	Location: 119-R
Description: Wooded area, facing southwest.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#119	60679961

Photo No. 1 119-SD	Date: 11/2/2023 2:26:00 PM	Location: 119-SD
Description: Wooded area, facing east, about 35-40 feet from road.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#120	60679961

Photo No. 1 120-NS	Date: 12/5/2023 12:02:00 PM	Location: 120-NS
Description: Facing south.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#120	60679961

Photo No. 1 120-R	Date: 12/5/2023 12:29:00 PM	Location: 120-R
Description: Wooded area, facing north.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#120	60679961

Photo No. 1 120-SD	Date: 12/5/2023 12:15:00 PM	Location: 120-SD

Description:

Grassy area, facing east.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#121	60679961

Photo No. 1 121-R	Date: 11/20/2023 8:57:00 AM	Location: 121-R
Description: Remote looking east.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#121	60679961

Photo No. 1 121-SD	Date: 11/20/2023 8:39:00 AM	Location: 121-SD
Description: East facing walking path.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#122A	60679961

Photo No. 1 122A-R	Date: 11/3/2023 8:45:00 AM	Location: 122A-R
Description: Wooded area, facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#122A	60679961

Photo No. 1 122A-SD	Date: 11/3/2023 8:27:00 AM	Location: 122A-SD
Description: Backyard, facing west.		

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#123A	60679961

Photo No. 1 123A-NS	Date: 10/27/2023 9:23:00 AM	Location: 123A-NS
Description: Facing east.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#123A	60679961

Photo No. 1 123A-R	Date: 10/27/2023 10:00:00 AM	Location: 123A-R
Description: Wooded area, facing west.		

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#123A	60679961

Photo No. 1 123A-SD	Date: 10/27/2023 9:43:00 AM	Location: 123A-SD

Description:

Backyard lawn, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#124C	60679961

Photo No. 1 124C-R	Date: 11/30/2023 1:13:00 PM	Location: 124C-R

Description:

Facing northwest.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#124C	60679961

Photo No. 1 124C-SD	Date: 11/30/2023 12:53:00 PM	Location: 124C-SD

Description:

Facing northwest.



PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#125	60679961

Photo No. 1 125-R	Date: 11/2/2023 9:10:00 AM	Location: 125-R

Description:

Wooded area, facing west.



AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site:	Project No.
PFAS Rural Background Study	#125	60679961

Photo No. 1 125-SD	Date: 11/2/2023 8:55:00 AM	Location: 125-SD
Description: Side yard, facing north.		

AECOM

Attachment B Soil Boring Logs

AECOM

001-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #001
Date Started 11/07/23 **Completed** 11/07/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine to medium sand [NATIVE] - brown to black, moist, loose - no odor, no staining	001-R-0-2
2		Silt with sand (ML), 5-15% fine to medium sand <10% fine gravel [NATIVE] - brown to black, moist, soft - no odor, no staining	
4			
6			001-R-2-12
8			
10		Silt (ML), 5-15% clay, <10% fine to medium sand Red color [NATIVE] - brown, moist, soft - no odor, no staining	
12			

AECOM

001-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #001
Date Started 11/07/23 **Completed** 11/07/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 35-45% fine to medium sand [NATIVE] - brown, dry, loose - no odor, no staining	001-SD-0-2
2		Well-graded sand (SW), fine to medium, subangular, <10% silt, <10% fine gravel [NATIVE] - brown, dry, loose - no odor, no staining	001-SD-2-12
4			
6			
8			
10			
12			

AECOM

002-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #002
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), 10-20% fine to coarse sand <10% fine gravel [NATIVE] - brown to black, moist, loose - no odor, no staining	002-R-0-2
2		Silty sand (SM), fine to medium, subrounded, 10-20% silt, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	002-R-2-12
4			
6			
8			
10			
12			

AECOM

002-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #002
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	002-SD-0-2
2		Silt (ML), 5-15% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	
4			
6			
			002-SD-2-12 FD-11092023
		Silty sand (SM), fine to coarse, subrounded, 15-25% silt, 5-15% fine gravel [NATIVE] - brown, moist, firm - no odor, no staining	
8			
10			
12			

AECOM

003-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #003
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine to coarse sand 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	003-R-0-2
2		Silt (ML), 5-15% fine to coarse sand 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	003-R-2-12
4			
6			
8			
10			
12			

AECOM

003-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #003
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 35-45% fine to coarse sand 5-15% fine gravel [NATIVE] - Dark brown, moist, very loose - no odor, no staining	003-SD-0-2
2		Sandy silt (ML), 35-45% fine to coarse sand 5-15% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	003-SD-2-12
4			
6			
8			
10			
12			

AECOM

004A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #004A
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine, subangular, 35-45% silt [NATIVE] - Dark brown, moist, loose - no odor, no staining	004A-R-0-2
2		Silty sand (SM), fine, subangular, 35-45% silt [NATIVE] - brown, moist, loose - no odor, no staining	004A-R-2-12
4			
6			
8			
10			
12			

AECOM

004A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #004A
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 25-35% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	004A-SD-0-2
2		Silt (ML), 25-35% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	004A-SD-2-12 FD-11292023
4			
6			
8			
10			
12			

AECOM

005-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #005
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 35-45% fine to coarse sand [NATIVE] - gray to brown, moist, soft - no odor, no staining	005-NS-0-2
2		Sandy silt (ML), 35-45% fine to coarse sand [NATIVE] - gray to brown, moist, soft - no odor, no staining	
4		Silt (ML), 5-15% clay, <10% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	
6			005-NS-2-12
8			
10			
12			

AECOM

005-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #005
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - Dark brown, moist, loose - no odor, no staining	005-R-0-2
2		Silt with gravel (ML), 10-20% fine gravel, 5-15% clay [NATIVE] - brown, moist, loose - no odor, no staining	005-R-2-12
4			
6			
8			
10			
12			

AECOM

005-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #005
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, <10% fine sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	005-SD-0-2
2		Silt with gravel (ML), <10% clay, <10% fine to coarse sand 5-15% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	005-SD-2-12
4			
6			
8			
10			
12			

AECOM

006-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #006
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	006-R-0-2
2		Silt (ML), <10% fine sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	006-R-2-12
8		Silt (ML), 5-15% fine to medium sand [NATIVE] - brown, moist, soft - no odor, no staining	
10			
12			

AECOM

006-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #006
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine to medium sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	006-SD-0-2
2		Silt (ML), <10% fine to medium sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	
4			
6		Silty sand (SM), fine, subrounded, 25-35% silt, <10% medium sand [NATIVE] - brown, moist, soft - no odor, no staining	006-SD-2-12
8			
10			
12			

AECOM

007-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #007
Date Started 11/07/23 **Completed** 11/07/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, 5-15% fine sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	007-R-0-2
2		Silt with sand (ML), <10% clay, 5-15% fine to medium sand <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	007-R-2-12
4			
6			
8			
10			
12			

AECOM

007-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #007
Date Started 11/07/23 **Completed** 11/07/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, <10% fine sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	007-SD-0-2
2		Silt with gravel (ML), 5-15% fine sand <10% clay, 5-15% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	007-SD-2-12 FD-11072023
4			
6			
8			
10			
12			

AECOM

008A-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #008A
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with gravel (SW), fine to medium, subangular, 15-25% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	008A-NS-0-2
2		Well-graded sand with gravel (SW), fine to medium, subangular, 25-35% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	
4			
6			008A-NS-2-12
8			
10			
12			

AECOM

008A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #008A
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subangular, 35-45% silt [NATIVE] - Dark brown, moist, loose - no odor, no staining	008A-R-0-2
2		Silty sand (SM), fine to medium, subangular, 35-45% silt [NATIVE] - brown, moist, loose - no odor, no staining	008A-R-2-12
4			
6			
8			
10			
12			

AECOM

008A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #008A
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with gravel (SW), fine to medium, subangular, 15-25% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	008A-SD-0-2
2		Well-graded sand with gravel (SW), fine to medium, subangular, 15-25% fine gravel, <10% silt [NATIVE] - brown, moist, loose - no odor, no staining	008A-SD-2-12
4			
6			
8			
10			
12			

AECOM

009D-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #009D
Date Started 12/04/23 **Completed** 12/04/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	009D-R-0-2
2		Silt (ML), 5-15% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6		Sandy lean clay (CL), 25-35% fine sand [NATIVE] - gray to brown, moist, soft - no odor, no staining	009D-R-2-12
8			
10			
12			

AECOM

009D-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #009D
Date Started 12/04/23 **Completed** 12/04/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	009D-SD-0-2
2		Silt with sand (ML), 10-20% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	009D-SD-2-12
4			
6			
8			
10			
12			

AECOM

010C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #010C
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Poorly graded sand (SP), fine, subangular, <10% silt [NATIVE] - brown, moist, loose - no odor, no staining	010C-R-0-2
2		Silty sand (SM), fine, subangular, 15-25% silt [NATIVE] - brown, moist, loose - no odor, no staining	010C-R-2-12
4			
6			
8			
10			
12			

AECOM

010C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #010C
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine, subangular, 35-45% silt, 5-15% clay [NATIVE] - brown, moist, loose - no odor, no staining	010C-SD-0-2
2		Sandy silt (ML), fine, 5-15% clay, 5-15% fine gravel, 25-35% fine sand [NATIVE] - brown, moist, loose - no odor, no staining	010C-SD-2-12
4			
6			
8			
10			
12			

AECOM

011-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #011
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, <10% fine to medium sand [NATIVE] - Dark brown, dry, loose - no odor, no staining	011-R-0-2
2		Silt (ML), <10% fine to medium sand <10% clay, <10% fine gravel [NATIVE] - Dark brown, dry, loose - no odor, no staining	011-R-2-12
4			
6			
8			
10			
12			

AECOM

011-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #011
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 20-30% fine to medium sand 5-15% fine gravel, <10% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	011-SD-0-2
2		Gravelly silt with sand (ML), 10-20% fine to medium sand 5-15% clay, 10-20% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	011-SD-2-12
4			
6			
8			
10			
12			

AECOM

012-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #012
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), <10% clay, 5-15% fine gravel, <10% fine sand [NATIVE] - Dark brown, dry, loose - no odor, no staining	012-R-0-2
2		Silt with sand (ML), <10% clay, 10-20% fine sand <10% fine gravel [NATIVE] - Dark brown, dry, loose - no odor, no staining	012-R-2-12
4			
6			
8			
10			
12			

AECOM

012-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #012
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine sand [NATIVE] - Dark brown, dry, loose - no odor, no staining	012-SD-0-2
2		Silty sand (SM), fine, rounded, 20-30% silt, <10% fine gravel [NATIVE] - Dark brown, dry, very loose - no odor, no staining	012-SD-2-12
4			
6			
8			
10			
12			

AECOM

013-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #013
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 10-20% clay [NATIVE] - brown, moist, soft - no odor, no staining	013-R-0-2
2		Silt (ML), 10-20% clay [NATIVE] - brown, moist, soft - no odor, no staining	013-R-2-12
4			
6			
8			
10			
12			

AECOM

013-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #013
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	013-SD-0-2
2		Silt (ML), 5-15% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	013-SD-2-12
4			
6			
8			
10			
12			

AECOM

014-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #014
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand (SW), fine to coarse, subrounded [NATIVE] - brown, dry, loose - no odor, no staining	014-NS-0-2
2		Well-graded sand (SW), fine to coarse, subrounded, <10% fine gravel [NATIVE] - brown, dry, loose - no odor, no staining	014-NS-2-12
4			
6			
8			
10			
12			

AECOM

014-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #014
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subrounded, 20-30% silt, 5-15% fine gravel [NATIVE] - gray to brown, dry, loose - no odor, no staining	014-R-0-2
2		Silty sand (SM), fine to medium, subrounded, 20-30% silt, 5-15% fine gravel [NATIVE] - gray to brown, dry, loose - no odor, no staining	
4		Silty sand with gravel (SM), fine to coarse, subrounded, 20-30% silt, 10-20% fine gravel [NATIVE] - brown, dry, loose - no odor, no staining	
6			014-R-2-12
8			
10			
12			

AECOM

014-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #014
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subrounded, 25-35% silt, <10% fine gravel [NATIVE] - Dark brown, dry, loose - no odor, no staining	014-SD-0-2
2		Silty sand with gravel (SM), fine to coarse, subrounded, 10-20% fine gravel, 15-25% silt [NATIVE] - brown, dry, loose - no odor, no staining	014-SD-2-12
4			
6			
8			
10			
12			

AECOM

015B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #015B
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - Dark brown, wet, firm - no odor, no staining	015B-R-0-2
2		Silt with gravel (ML), 5-15% clay, 5-15% fine gravel, <10% fine sand [NATIVE] - Dark brown, wet, firm - no odor, no staining	015B-R-2-12
4			
6			
8			
10			
12			

AECOM

015B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #015B
Date Started 11/08/23 **Completed** 11/08/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, <10% fine sand [NATIVE] - Dark brown, wet, firm - no odor, no staining	015B-SD-0-2
2		Silt with gravel (ML), <10% clay, <10% fine sand 5-15% fine gravel [NATIVE] - Dark brown, wet, firm - no odor, no staining	015B-SD-2-12 FD-11082023
4			
6			
8			
10			
12			

AECOM

016E-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #016E
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - Dark brown, dry, loose - no odor, no staining	016E-R-0-2
2		Silt (ML), <10% clay, <10% fine gravel [NATIVE] - brown, dry, loose - no odor, no staining	016E-R-2-12
4			
6			
8			
10			
12			

AECOM

016E-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #016E
Date Started 11/09/23 **Completed** 11/09/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - Dark brown, dry, loose - no odor, no staining	016E-SD-0-2
2		Silt (ML), <10% clay, <10% fine gravel [NATIVE] - brown, dry, very loose - no odor, no staining	016E-SD-2-12
4			
6			
8			
10			
12			

AECOM

017C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #017C
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Poorly graded sand with silt (SW-SM), fine, subangular, 5-15% silt, <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	017C-R-0-2
2		Poorly graded sand with silt (SW-SM), fine, subangular, 5-15% silt, <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	017C-R-2-12
4			
6			
8			
10			
12			

AECOM

017C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #017C
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Poorly graded sand with silt (SW-SM), fine, subangular, 5-15% silt [NATIVE] - brown, moist, loose - no odor, no staining	017C-SD-0-2
2		Poorly graded sand with silt (SW-SM), fine, subangular, 5-15% silt, 5-15% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	017C-SD-2-12
4			
6			
8			
10			
12			

AECOM

018-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #018
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subangular, 25-35% silt [NATIVE] - Dark brown, moist, loose - no odor, no staining	018-R-0-2
2		Silty sand (SM), fine to medium, subangular, 25-35% silt, 5-15% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	018-R-2-12
4			
6			
8			
10			
12			

AECOM

018-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #018
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subangular, 25-35% silt [NATIVE] - Dark brown, moist, loose - no odor, no staining	018-SD-0-2
2		Silty sand (SM), fine to medium, subangular, 25-35% silt [NATIVE] - brown, moist, loose - no odor, no staining	
4			
6			018-SD-2-12
8			
10			
12			

AECOM

019B-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #019B
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	019B-NS-0-2
2		Silt (ML), 5-15% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	019B-NS-2-12
4			
6			
8			
10			
12			

AECOM

019B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #019B
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine sand 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	019B-R-0-2
2		Silt (ML), 5-15% fine sand 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	019B-R-2-12
8		Fat clay (CH), 25-35% silt [NATIVE] - Dark brown, moist, firm - no odor, no staining	
10			
12			

AECOM

019B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #019B
Date Started 11/29/23 **Completed** 11/29/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay [NATIVE] - brown, moist, soft - no odor, no staining	019B-SD-0-2
2		Silt (ML), 15-25% clay [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			019B-SD-2-12
8			
10			
12		Fat clay (CH), 25-35% silt [NATIVE] - gray to brown, moist, firm - no odor, no staining	

AECOM

020B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #020B
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	020B-R-0-2
2		Silt (ML), 25-35% clay [NATIVE] - brown, moist, soft - no odor, no staining	020B-R-2-12
4			
6			
8			
10			
12			

AECOM

020B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #020B
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay [NATIVE] - brown, moist, soft - no odor, no staining	020B-SD-0-2
2		Silt (ML), 15-25% clay [NATIVE] - brown, moist, soft - no odor, no staining	020B-SD-2-12 FD-11282023
4			
6			
8			
10			
12			

AECOM

021-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #021
Date Started 11/06/23 **Completed** 11/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - Dark brown, moist, very loose - no odor, no staining	021-R-0-2
2		Silt (ML) [NATIVE] - brown, moist, very loose - no odor, no staining	
4			
6			021-R-2-12
8			
10			
12			

AECOM

021-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #021
Date Started 11/06/23 **Completed** 11/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 15-25% fine to coarse sand 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	021-SD-0-2
2		Silty sand with gravel (SM), fine to coarse, subrounded, 20-30% silt, 10-20% fine to coarse gravel [NATIVE] - brown, moist, very loose - no odor, no staining	021-SD-2-12
4			
6			
8			
10			
12			

AECOM

022A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #022A
Date Started 11/10/23 **Completed** 11/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, <10% fine to coarse sand <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	022A-R-0-2
2		Silt (ML), <10% clay, <10% fine to coarse sand <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	
4			
6		Poorly graded sand with silt and gravel (SW-SM), fine to coarse, subangular, 5-15% silt, 10-20% fine gravel [NATIVE] - brown, moist, very loose - no odor, no staining	022A-R-2-12
8			
10			
12			

AECOM

022A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #022A
Date Started 11/10/23 **Completed** 11/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, 5-15% fine to medium sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	022A-SD-0-2
2		Silt (ML), 5-15% clay, <10% fine to medium sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	
4			
6			022A-SD-2-12
8			
10		Silty sand with gravel (SM), fine to coarse, subangular, 15-25% silt, 10-20% fine gravel [NATIVE] - brown, moist, very loose - no odor, no staining	
12			

AECOM

023-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #023
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand (SW), fine to medium, subangular [NATIVE] - Dark brown, moist, loose - no odor, no staining	023-R-0-2
2		Well-graded sand with gravel (SW), fine to medium, subangular, 15-25% fine to coarse gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	023-R-2-12
4			
6			
8			
10			
12			

AECOM

023-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #023
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand (SW), fine to medium, subangular, <10% silt, <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	023-SD-0-2
2		Well-graded sand (SW), fine to medium, subangular, <10% silt, <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	023-SD-2-12
4			
6			
8			
10			
12			

AECOM

024-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #024
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with silt (SW-SM), fine to coarse, subangular, 5-15% silt [NATIVE] - Dark brown, moist, loose - no odor, no staining	024-NS-0-2
2		Well-graded sand with silt (SW-SM), fine to coarse, subangular, 5-15% silt [NATIVE] - Dark brown, moist, loose - no odor, no staining	
4			
6			024-NS-2-12
8			
10			
12			

AECOM

024–R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #024
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	024–R-0-2
2		Silt (ML), 15-25% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4		Well-graded sand with silt (SW-SM), fine to coarse, subangular, 5-15% silt [NATIVE] - gray to brown, moist, very loose - no odor, no staining	
6			024–R-2-12
8			
10			
12			

AECOM

024-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #024
Date Started 11/28/23 **Completed** 11/28/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with silt (SW-SM), fine to medium, subangular, 5-15% silt, 5-15% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	024-SD-0-2
2		Well-graded sand with silt (SW-SM), fine to medium, subangular, 5-15% silt, 5-15% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	
6		Well-graded sand with silt (SW-SM), fine to medium, subangular, 5-15% silt, 5-15% fine gravel [NATIVE] - black, moist, loose - no odor, no staining	024-SD-2-12
10			
12			

AECOM

025-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #025
Date Started 11/07/23 **Completed** 11/07/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 35-45% fine to coarse sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	025-NS-0-2
2		Silty sand (SM), fine to coarse, subrounded, 30-40% silt, <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	025-NS-2-12
10		Well-graded sand (SW), medium to coarse, subrounded, <10% fine gravel, <10% fine sand [NATIVE] - brown, moist, loose - no odor, no staining	
12			

AECOM

025-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #025
Date Started 11/07/23 **Completed** 11/07/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - brown to black, moist, loose - no odor, no staining	025-R-0-2
2		Silt (ML), <10% clay [NATIVE] - brown to black, moist, loose - no odor, no staining	
		Silty sand (SM), fine to coarse, subrounded, 35-45% silt [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			025-R-2-12
8		Silt with sand (ML), 5-15% fine to coarse sand <10% fine gravel, <10% clay [NATIVE] - brown, moist, soft - no odor, no staining	
10			
12			

AECOM

025-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #025
Date Started 11/07/23 **Completed** 11/07/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - brown to black, moist, loose - no odor, no staining	025-SD-0-2
2		Silt (ML), <10% clay [NATIVE] - brown to black, moist, loose - no odor, no staining	
4		Silty sand (SM), medium to coarse, subrounded, 25-35% silt, <10% fine gravel, Red clay lens [NATIVE] - brown to black, moist, loose - no odor, no staining	025-SD-2-12
6			
8			
10			
12			

AECOM

026-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #026
Date Started 10/12/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) - gray to brown, moist, soft - no odor, no staining	026-R-0-2
2		Organic soil (OL), <10% cobbles [NATIVE] - brown, dry, loose - no odor, no staining	026-R-2-12
4			
6			
8			
10			
12			

AECOM

026-SD

Total Depth 12 **in**

Client NYSDEC **Project Name** PFAS Rural Background Study

Project Number 60679961 **Site Name** #026

Date Started 10/12/23 **Completed** **Survey By** NA **Survey Date** NA

Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]

Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in

Drilling Method HAND AUGER

Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, soft - no odor	026-SD-0-2
2		Organic soil (OL), <10% cobbles [NATIVE] - brown, dry, soft - no odor, no staining	026-SD-2-12
4			
6			
8			
10			
12			

AECOM

027c-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #027C
Date Started 10/11/23 **Completed** 10/11/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML) [NATIVE] - gray to brown, dry, loose - no odor, no staining	027c-R-0-2
2		Silt (ML), 5-15% cobbles [NATIVE] - gray to brown, dry, loose - no odor, no staining	027c-R-2-12
4			
6			
8			
10			
12			

AECOM

027c-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #027C
Date Started 10/11/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML) [NATIVE] - brown, dry, loose - no odor, no staining	027c-SD-0-2
2		Silt (ML), 5-15% cobbles [NATIVE] - brown, dry, loose - no odor, no staining	027c-SD-2-12
4			
6			
8			
10			
12			

AECOM

028A-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #028A
Date Started 10/16/23 **Completed** 10/16/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, dense - no odor, no staining	028A-NS-0-2
2		Organic soil (OL), 35-45% clay, 11-12” gray mottling clay [NATIVE] - Dark brown, moist, dense - no odor, no staining	
4			
6			028A-NS-2-12
8			
10			
12			

AECOM

028A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #028A
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - gray to brown, moist, dense - no odor, no staining	028A-R-0-2
2		Organic soil (OL), 15-25% clay, 5-15% cobbles [NATIVE] - gray, moist, very dense - no odor, no staining	028A-R-2-12
4			
6			
8			
10			
12			

AECOM

028A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #028A
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Fat clay (CH), 15-25% silt [NATIVE] - Dark brown, moist, dense - no odor, no staining	028A-SD-0-2
2		Fat clay (CH), 15-25% silt, <10% gravel [NATIVE] - Dark brown, moist, very dense - no odor, no staining	028A-SD-2-12
4			
6			
8			
10			
12			

AECOM

029c-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #029C
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay [NATIVE] - moist, soft - no odor, no staining	029c-R-0-2
2		Silt (ML), 15-25% clay, Mottling at 9-12", begins to become light brown in color. [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			029c-R-2-12
8			
10			
12			

AECOM

029c-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #029C
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 5-15% silt [NATIVE] - brown, moist, soft - no odor, no staining	029c-SD-0-2
2		Fat clay (CH), 5-15% silt [NATIVE] - brown, moist, soft - no odor, no staining	029c-SD-2-12
4			
6			
8			
10			
12			

AECOM

030-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #030
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, 5-15% fine sand [NATIVE] - brown, dry, soft - no odor, no staining	030-NS-0-2
2		Silt with gravel (ML), <10% clay, 5-15% fine sand 5-15% fine gravel [NATIVE] - brown, dry, loose - no odor, no staining	030-NS-2-12
4			
6			
8			
10			
12			

AECOM

030-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #030
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), 15-25% sand [NATIVE] - brown, dry, loose - no odor, no staining	030-R-0-2
2		Sandy silt (ML), 15-25% fine sand 5-15% fine gravel [NATIVE] - dry, loose - no odor, no staining	030-R-2-12
4			
6			
8			
10			
12			

AECOM

030-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #030
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine sand <10% clay [NATIVE] - brown, dry, soft - no odor, no staining	030-SD-0-2
2		Sandy silt (ML), 15-25% fine sand <10% clay, 5-15% gravel [NATIVE] - brown, dry, soft - no odor, no staining	030-SD-2-12
4			
6			
8			
10			
12			

AECOM

031A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #031A
Date Started 10/12/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, dry, soft - no odor, no staining	031A-R-0-2 FD-10122023
2		Organic soil (OL) [NATIVE] - Dark brown, dry, loose - no odor, no staining	
4			
6			
			031A-R-2-12
8			
10			
12			

AECOM

031A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #031A
Date Started 10/12/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	031A-SD-0-2
2		Silt (ML), 15-25% clay, <10% cobbles, 5-15% sand Lighter brown at 10” [NATIVE] - brown, dry, loose - no odor, no staining	031A-SD-2-12
4			
6			
8			
10			
12			

AECOM

033C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #033C
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine sand 5-15% clay [NATIVE] - brown to black, dry, soft - no odor, no staining	033c-R-0-2
2		Silt (ML), 5-15% silt, 5-15% clay [NATIVE] - brown, dry, soft - no odor, no staining	
4			
6			033c-R-2-12
8			
10			
12			

AECOM

033c-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #033C
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), 20-30% fine sand 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	033c-SD-0-2
2		Silt with sand (ML), 15-25% fine sand 5-15% silt, 5-15% clay [NATIVE] - brown, dry, soft - no odor, no staining	033c-SD-2-12
4			
6			
8			
10			
12			

AECOM

034-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #034
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay - brown, dry, soft - no odor, no staining	034-R-0-2
2		Silt (ML), <10% cobbles [NATIVE] - brown, dry, soft - no odor, no staining	034-R-2-12
4			
6			
8			
10			
12			

AECOM

034-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #034
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - moist, soft - no odor, no staining	034-SD-0-2
2		Silt (ML), <10% clay [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			FD-10102023 034-SD-2-12
8			
10			
12			

AECOM

035B-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #035B
Date Started 10/12/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, loose - no odor, no staining	035B-NS-0-2
2		Organic soil (OL), <10% cobbles and fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	035B-NS-2-12
4			
6			
8			
10			
12			

AECOM

035B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #035B
Date Started 10/12/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 5-15% clay [NATIVE] - Dark brown, moist, loose - no odor, no staining	035B-R-0-2
2		Organic soil (OL), 15-25% clay, <10% cobbles [NATIVE] - Dark brown, moist, firm - no odor, no staining	035B-R-2-12
4			
6			
8			
10			
12			

AECOM

035B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #035B
Date Started 10/12/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), <10% fine sand [NATIVE] - brown, moist, loose - no odor, no staining	035B-SD-0-2
2		Organic soil (OL), <10% fine sand <10% cobbles [NATIVE] - brown, moist, soft - no odor, no staining	035B-SD-2-12
4			
6			
8			
10			
12			

AECOM

036-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #036
Date Started 10/13/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 5-15% fine gravel [NATIVE] - dry, loose - no odor, no staining	036-R-0-2
2		Silt (ML), <10% clay [NATIVE] - gray, dry, loose - no odor, no staining	036-R-2-12
4			
6			
8			
10			
12			

AECOM

036-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #036
Date Started 10/13/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - brown, dry, soft - no odor, no staining	036-SD-0-2
2		Silt (ML), 5-15% clay, 5-15% fine gravel [NATIVE] - Dark brown, dry, loose - no odor, no staining	036-SD-2-12
4			
6			
8			
10			
12			

AECOM

037-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #037
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic matter, 5-15% silt, 5-15% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	037-R-0-2
2		Silt (ML), 5-15% silt, 5-15% clay [NATIVE] - moist, soft - no odor, no staining	037-R-2-12
4			
6			
8			
10			
12			

AECOM

037-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #037
Date Started 10/10/23 **Completed** 10/10/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic matter, 5-15% silt, 5-15% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	037-SD-0-2
2		Silt (ML), 5-15% silt, 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	037-SD-2-12
4			
6			
8			
10			
12			

AECOM

038-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #038
Date Started 10/11/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay - gray to brown, moist, soft - no odor, no staining	038-R-0-2
2		Organic soil (OL), 5-15% clay, 8-12 turns to a light brown in color [NATIVE] - moist, soft - no odor, no staining	038-R-2-12
4			
6			
8			
10			
12			

AECOM

038-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #038
Date Started 10/11/23 **Completed** 10/11/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine sand [NATIVE] - brown, dry, soft - no odor, no staining	038-SD-0-2
2		Silt with sand (ML), 15-25% fine sand [NATIVE] - dry, very loose - no odor, no staining	038-SD-2-12
4			
6			
8			
10			
12			

AECOM

039-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #039
Date Started 10/11/23 **Completed** 10/11/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 5-15% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	039-R-0-2
2		Elastic silt (MH), 5-15% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	039-R-2-12 FD-10112023
4			
6			
8			
10			
12			

AECOM

039-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #039
Date Started 10/11/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 5-15% fine gravel, <10% cobbles [NATIVE] - brown, moist - no odor, no staining	039-SD-0-2
2		Organic soil (OL), 5-15% cobbles [NATIVE] - brown, moist, soft - no odor, no staining	039-SD-2-12
4			
6			
8			
10			
12			

AECOM

040G-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #040G
Date Started 12/06/23 **Completed** 12/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 5-15% clay, 10-20% fine gravel [NATIVE] - gray, moist, soft - no odor, no staining	040G-NS-0-2
2		Lean clay with sand (CL), 15-25% fine to medium sand [NATIVE] - brown, moist, soft - no odor, no staining	040G-NS-2-12 FD-12062023
4			
6			
8			
10			
12			

AECOM

040G-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #040G
Date Started 12/06/23 **Completed** 12/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with clay (SW-SC), fine to medium, subangular, 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	040G-R-0-2
2		Clayey sand (SC), fine to medium, subangular, 5-15% fine gravel, 10-20% clay [NATIVE] - brown, moist, soft - no odor, no staining	040G-R-2-12
4			
6			
8			
10			
12			

AECOM

040G-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #040G
Date Started 12/06/23 **Completed** 12/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with clay (SW-SC), fine to medium, subangular, 5-15% clay [NATIVE] - Dark brown, moist, loose - no odor, no staining	040G-SD-0-2
2		Well-graded sand with clay (SW-SC), fine to medium, subangular, 5-15% clay, <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	040G-SD-2-12
4			
6			
8			
10			
12			

AECOM

041-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #041
Date Started 10/11/23 **Completed** 10/11/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Fat clay (CH), 5-15% silt [NATIVE] - brown to black, moist, firm - no odor, no staining	041-R-0-2
2		Fat clay (CH), <10% silt, 35-45% clay, Mottling 9-12” [NATIVE] - brown to black, moist, firm - no odor, no staining	041-R-2-12
4			
6			
8			
10			
12			

AECOM

041-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #041
Date Started 10/11/23 **Completed** 10/11/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic matter, 5-15% silt, 5-15% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	041-SD-0-2
2		Organic matter, 5-15% clay [NATIVE] - brown to black, moist, firm - no odor, no staining	041-SD-2-12
4			
6			
8			
10			
12			

AECOM

042C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #042C
Date Started 10/12/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - brown, dry, very loose - no odor, no staining	042C-R-0-2
2		Lean clay (CL), <10% cobbles [NATIVE] - brown, dry, loose - no odor, no staining	042C-R-2-12
4			
6			
8			
10			
12			

AECOM

042C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #042C
Date Started 10/12/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), <10% fine sand - brown, moist, loose - no odor, no staining	042C-SD-0-2
2		Organic soil (OL), <10% fine gravel [NATIVE] - brown, dry - no odor, no staining	042C-SD-2-12
4			
6			
8			
10			
12			

AECOM

043-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #043
Date Started 10/11/23 **Completed** 10/11/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 5-15% fine sand [NATIVE] - moist, soft - no odor, no staining	043-NS-0-2
2		Organic soil with gravel (OL), 5-15% fine gravel, 5-15% fine sand [NATIVE] - brown to black, moist, soft - no odor, no staining	043-NS-2-12
4			
6			
8			
10			
12			

AECOM

043-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #043
Date Started 10/11/23 **Completed** 10/11/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - brown to black, moist, firm - no odor, no staining	043-R-0-2
2		Organic soil (OL), 20-30% clay, 10-12” turns light brown [NATIVE] - moist, firm - no odor, no staining	043-R-2-12
4			
6			
8			
10			
12			

AECOM

043-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #043
Date Started 10/11/23 **Completed** 10/11/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - brown to black, moist, soft - no odor, no staining	043-SD-0-2
2		Fat clay (CH), 15-25% silt [NATIVE] - moist, firm - no odor, no staining	043-SD-2-12
4			
6			
8			
10			
12			

AECOM

044-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #044
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - brown, moist, soft - no odor, no staining	044-R-0-2
2		Organic soil (OL), 5-15% cobbles [NATIVE] - brown, moist, loose - no odor, no staining	
4			
6			044-R-2-12
8			
10			
12			

AECOM

044-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #044
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil with gravel (OL), 20-30% cobbles, 20-30% fine gravel [NATIVE] - Dark brown, moist, medium dense - no odor, no staining	044-SD-0-2
2		Silty gravel (GM), fine to coarse, subangular, 30-40% clay and silt, 5-15% cobbles [NATIVE] - gray to brown, moist, loose - no odor, no staining	044-SD-2-12
4			
6			
8			
10			
12			

AECOM

045F-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #045F
Date Started 12/06/23 **Completed** 12/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Gravelly silt with sand (ML), 10-20% fine to medium sand 10-20% fine to coarse gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	045F-NS-0-2
2		Gravelly silt with sand (ML), 10-20% fine to medium sand 15-25% fine to coarse gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	045F-NS-2-12
4			
6			
8			
10			
12			

AECOM

045F-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #045F
Date Started 12/06/23 **Completed** 12/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine to medium sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	045F-R-0-2
2		Silty sand (SM), fine to medium, subangular, 5-15% silt, <10% fine gravel, <10% clay [NATIVE] - brown, moist, soft - no odor, no staining	045F-R-2-12
4			
6			
8			
10			
12			

AECOM

045F-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #045F
Date Started 12/06/23 **Completed** 12/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 5-15% fine gravel, <10% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	045F-SD-0-2
2		Well-graded sand with clay (SW-SC), fine to medium, subangular, <10% fine gravel, 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	045F-SD-2-12
4			
6			
8			
10			
12			

AECOM

046-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #046
Date Started 10/13/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine sand [NATIVE] - brown, dry, loose - no odor, no staining	046-R-0-2 FD-10132023
2		Silt (ML), <10% coarse gravel [NATIVE] - brown, dry - no odor, no staining	
4			
6			
			046-R-2-12
8			
10			
12			

AECOM

046-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #046
Date Started 10/13/23 **Completed** 10/13/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML) [NATIVE] - brown, dry, loose - no odor, no staining	046-SD-0-2
2		Silt (ML), 5-15% fine sand [NATIVE] - brown, dry, loose - no odor, no staining	
4			
6			046-SD-2-12
8			
10			
12			

AECOM

047-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #047
Date Started 10/13/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine gravel [NATIVE] - Dark brown, dry, soft - no odor, no staining	047-R-0-2
2		Silt (ML), 5-15% fine gravel [NATIVE] - brown, dry, loose - no odor, no staining	047-R-2-12
4			
6			
8			
10			
12			

AECOM

047-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #047
Date Started 10/13/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, soft - no odor, no staining	047-SD-0-2
2		Organic soil (OL), <10% cobbles, 10-12" turns to light brown [NATIVE] - Dark brown, moist - no odor, no staining	047-SD-2-12
4			
6			
8			
10			
12			

AECOM

048B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #048B
Date Started 10/12/23 **Completed** 10/12/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - gray to brown, moist, soft - no odor, no staining	048B-R-0-2
2		Organic soil (OL), 5-15% cobbles [NATIVE] - gray to brown, moist, soft - no odor, no staining	
4			
6			048B-R-2-12
8			
10			
12			

AECOM

048B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #048B
Date Started 10/12/23 **Completed** 10/12/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay, <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	048B-SD-0-2
2		Silt (ML), 15-25% clay, 5-15% cobbles [NATIVE] - gray to brown, moist, soft - no odor, no staining	048B-SD-2-12
4			
6			
8			
10			
12			

AECOM

049E-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #049E
Date Started 12/06/23 **Completed** 12/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay, 5-15% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	049E-R-0-2
2		Silt (ML), 15-25% clay, 5-15% fine to medium sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	049E-R-2-12
10		Clayey sand (SC), fine to medium, subangular, 15-25% clay, 5-15% silt [NATIVE] - brown, moist, soft - no odor, no staining	
12			

AECOM

049E-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #049E
Date Started 12/06/23 **Completed** 12/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay, <10% fine to medium sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	049E-SD-0-2
2		Silt (ML), 15-25% clay, <10% fine to medium sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			049E-SD-2-12
8			
10		Clayey sand (SC), fine to medium, subangular, 15-25% clay [NATIVE] - brown, moist, soft - no odor, no staining	
12			

AECOM

050-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #050
Date Started 10/13/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	050-NS-0-2
2		Elastic silt (MH), 5-15% fine gravel, <10% cobbles and clay [NATIVE] - gray to brown, moist, loose - no odor, no staining	050-NS-2-12
4			
6			
8			
10			
12			

AECOM

050-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #050
Date Started 10/13/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - brown, dry, loose - no odor, no staining	050-R-0-2
2		Silt (ML), 5-15% cobbles [NATIVE] - brown, dry, loose - no odor, no staining	
4			
6			050-R-2-12
8			
10			
12			

AECOM

050-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #050
Date Started 10/13/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty gravel (GM), fine, subrounded, 15-25% silt and clay [NATIVE] - Dark brown, moist, loose - no odor, no staining	050-SD-0-2
2		Silty gravel (GM), fine to coarse, subrounded, 25-35% clay and silt [NATIVE] - brown, moist, loose - no odor, no staining	050-SD-2-12
4			
6			
8			
10			
12			

AECOM

052A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #052
Date Started 10/26/23 **Completed** 10/26/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 35-45% silt, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	052A-R-0-2
2		Lean clay with gravel (CL), 15-25% silt, 15-25% fine to coarse gravel [NATIVE] - brown, dry, soft - no odor, no staining	052A-R-2-12
4			
6			
8			
10			
12			

AECOM

052A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #052
Date Started 10/26/23 **Completed** 10/26/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 35-45% silt, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	052A-SD-0-2
2		Lean clay (CL), 35-45% silt, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	052A-SD-2-12
10		Lean clay (CL), 20-30% silt, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
12			

AECOM

053B-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #053
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to coarse, subrounded, 35-45% silt, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	053B-NS-0-2
2		Silty sand (SM), fine to coarse, subrounded, 25-35% silt, 5-15% fine to coarse gravel [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			053B-NS-2-12
8			
10			
12			

AECOM

053B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #053
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 35-45% clay, <10% fine gravel [NATIVE] - gray to brown, moist, soft - no odor, no staining	053B-R-0-2
2		Silt (ML), 35-45% clay, <10% fine gravel [NATIVE] - gray to brown, moist, soft - no odor, no staining	
4			
6		Fat clay (CH), 25-35% silt, <10% fine gravel [NATIVE] - gray, moist, soft - no odor, no staining	053B-R-2-12
8			
10			
12			

AECOM

053B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #053
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand with gravel (SM), fine to medium, subrounded, 25-35% silt, 15-25% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	053B-SD-0-2
2		Silty sand with gravel (SM), fine to medium, subrounded, 25-35% silt, 15-25% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			053B-SD-2-12
8			
10			
12			

AECOM

054A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #054
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 15-25% fine gravel, 10-20% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	054A-R-0-2
2		Silt with gravel (ML), 15-25% fine gravel, 15-25% clay [NATIVE] - brown, moist, soft - no odor, no staining	054A-R-2-12
4			
6			
8			
10			
12			

AECOM

054A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #054
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 10-20% fine gravel, 15-25% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	054A-SD-0-2
2		Silt with gravel (ML), 10-20% fine gravel, 15-25% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6		Silt with gravel (ML), 10-20% coarse gravel, 15-25% clay [NATIVE] - brown, moist, firm - no odor, no staining	054A-SD-2-12
8			
10			
12			

AECOM

055-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #055
Date Started 10/24/23 **Completed** 10/24/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine sand <10% fine gravel [NATIVE] - Dark brown, moist, very soft - no odor, no staining	055-R-0-2
2		Silt with gravel (ML), <10% fine sand 5-15% fine gravel, 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	055-R-2-12
4			
6			
8			
10			
12			

AECOM

055-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #055
Date Started 10/24/23 **Completed** 10/24/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 5-15% fine sand 5-15% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	055-SD-0-2
2		Silt with gravel (ML), 5-15% fine sand 5-15% gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			055-SD-2-12
8		Silt (ML), 5-15% fine sand 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	
10			
12			

AECOM

057-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #057
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, <10% gravel [NATIVE] - brown, dry, soft - no odor, no staining	057-R-0-2
2		Gravelly silt (ML), 25-35% gravel, 15-25% clay [NATIVE] - brown, dry, soft - no odor, no staining	057-R-2-12
4			
6			
8			
10			
12			

AECOM

057-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #057
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - brown, moist, firm - no odor, no staining	057-SD-0-2
2		Silt with gravel (ML), <10% clay, 10-20% gravel [NATIVE] - brown, moist, firm - no odor, no staining	057-SD-2-12
4			
6			
8			
10			
12			

AECOM

058-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #058
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 15-25% fine gravel, 25-35% clay [NATIVE] - brown, moist, soft - no odor, no staining	058-NS-0-2
2		Silt with gravel (ML), 15-25% fine gravel, 25-35% clay [NATIVE] - brown, moist, soft - no odor, no staining	058-NS-2-12
4			
6			
8			
10			
12			

AECOM

058-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #058
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 10-20% fine gravel, 20-30% clay [NATIVE] - brown, moist, soft - no odor, no staining	058-R-0-2
2		Silt with gravel (ML), 10-20% fine gravel, 30-40% clay [NATIVE] - brown, moist, soft - no odor, no staining	058-R-2-12
4			
6			
8			
10			
12			

AECOM

058-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #058
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 15-25% fine gravel, 25-35% clay [NATIVE] - brown, moist, soft - no odor, no staining	058-SD-0-2
2		Silt with gravel (ML), 15-25% fine gravel, 25-35% clay [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			058-SD-2-12
8			
10			
12			

AECOM

059C-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #059
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel, 10-20% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	059C-NS-0-2
2		Silt (ML), <10% fine gravel, 25-35% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	059C-NS-2-12 FD-10312023
4			
6			
8			
10			
12			

AECOM

059C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #059
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	059C-R-0-2
2		Silt (ML), 10-20% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	059C-R-2-12
4			
6			
8			
10			
12			

AECOM

059C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #059
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel, 10-20% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	059C-SD-0-2
2		Silt (ML), <10% fine gravel, 10-20% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	059C-SD-2-12
4			
6			
8			
10			
12			

AECOM

061-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #061
Date Started 10/30/23 **Completed** 10/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay with gravel (CL), 30-40% clay and silt, 10-20% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	061-R-0-2
2		Lean clay with gravel (CL), 25-35% silt, 15-25% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	061-R-2-12
4			
6			
8			
10			
12			

AECOM

061-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #061
Date Started 10/30/23 **Completed** 10/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay with gravel (CL), 30-40% silt, 10-20% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	061-SD-0-2
2		Lean clay with gravel (CL), 25-35% silt, 15-25% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	061-SD-2-12
4			
6			
8			
10			
12			

AECOM

062C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #062
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Gravelly lean clay with sand (CL), 10-20% fine to coarse sand 10-20% fine gravel, 15-25% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	062C-R-0-2
2		Gravelly lean clay with sand (CL), 10-20% fine to coarse sand 10-20% fine to coarse gravel, 15-25% silt [NATIVE] - brown, moist, soft - no odor, no staining	062C-R-2-12
4			
6			
8			
10			
12			

AECOM

062C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #062
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 35-45% silt, <10% fine to medium sand <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	062C-SD-0-2
2		Lean clay (CL), 35-45% silt, <10% fine to medium sand <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	062C-SD-2-12
4			
6			
8			
10			
12			

AECOM

063-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #063
Date Started 10/24/23 **Completed** 10/24/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - brown to black, moist, soft - peaty odor, no staining	063-R-0-2
2		Silt (ML), 5-15% clay, 5-15% fine gravel [NATIVE] - brown to black, moist, soft - no odor, no staining	063-R-2-12
4			
6			
8			
10			
12			

AECOM

063-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #063
Date Started 10/24/23 **Completed** 10/24/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 35-45% clay, 5-15% coarse gravel [NATIVE] - brown, moist, soft - no odor, no staining	063-SD-0-2
2		Silt (ML), 35-45% clay, 5-15% coarse gravel [NATIVE] - brown, moist, soft - no odor, no staining	063-SD-2-12
4			
6			
8			
10			
12			

AECOM

064-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #064
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 10-20% fine gravel, <10% fine sand 5-15% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	064-R-0-2 FD-10252023
2		Silt (ML), 10-20% cobbles, 5-15% clay, <10% fine sand [NATIVE] - brown to black, moist, soft - no odor, no staining	
4		Silt (ML), 10-20% cobbles, 5-15% clay, <10% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	
6			064-R-2-12
8			
10			
12			

AECOM

064-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #064
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel, 15-25% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	064-SD-0-2
2		Silt (ML), 5-15% fine to coarse gravel, 15-25% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			064-SD-2-12
8		Silt with sand (ML), 5-15% fine sand 10-20% clay, <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
10			
12			

AECOM

066-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #066
Date Started 10/26/23 **Completed** 10/26/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, 5-15% fine to coarse gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	066-R-0-2
2		Silt (ML), 5-15% clay, 5-15% fine to coarse gravel [NATIVE] - Dark brown, dry, soft - no odor, no staining	
4			
6		Silt with gravel (ML), 5-15% clay, 5-15% fine gravel, 5-15% fine sand [NATIVE] - brown, dry, soft - no odor, no staining	066-R-2-12
8			
10			
12			

AECOM

066-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #066
Date Started 10/26/23 **Completed** 10/26/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 10-20% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	066-SD-0-2
2		Silt (ML), 10-20% clay, <10% fine to coarse gravel and cobbles [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			066-SD-2-12
8			
10			
12		Sandy silt (ML), 15-25% fine to medium sand 5-15% clay, 5-15% fine to coarse gravel [NATIVE] - brown, moist, soft - no odor, no staining	

AECOM

067-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #067
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	067-R-0-2
2		Silt (ML), 15-25% clay, 5-15% fine to coarse gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	067-R-2-12
4			
6			
8			
10			
12			

AECOM

067-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #067
Date Started 10/25/23 **Completed** 10/25/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), 5-15% fine gravel, 10-20% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	067-SD-0-2
2		Silt with sand (ML), 5-15% fine gravel, 10-20% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	067-SD-2-12
4			
6			
8			
10			
12			

AECOM

068-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #068
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	068-R-0-2
2		Silt (ML), 15-25% clay, 5-15% fine to coarse gravel [NATIVE] - brown, moist, soft - no odor, no staining	068-R-2-12
4			
6			
8			
10			
12			

AECOM

068-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #068
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel, 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	068-SD-0-2
2		Silt (ML), 5-15% fine gravel, 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			068-SD-2-12
8			
10			
12			

AECOM

069-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #069
Date Started 10/20/23 **Completed** 10/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, <10% fine gravel [NATIVE] - Dark brown, dry, soft - no odor, no staining	069-R-0-2
2		Gravelly silt (ML), 20-30% fine gravel, <10% fine sand 5-15% clay [NATIVE] - brown, dry, soft - no odor, no staining	069-R-2-12
4			
6			
8			
10			
12			

AECOM

069-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #069
Date Started 10/20/23 **Completed** 10/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 10-20% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	069-SD-0-2
2		Silt with gravel (ML), 5-15% clay, 10-20% fine gravel, 5-15% fine gravel, Coarse gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	069-SD-2-12
4			
6			
8			
10			
12			

AECOM

071-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #071
Date Started 10/30/23 **Completed** 10/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 35-45% silt, <10% fine gravel [NATIVE] - gray to brown, moist, soft - no odor, no staining	071-R-0-2
2		Lean clay (CL), 35-45% silt, <10% fine gravel [NATIVE] - gray to brown, moist, soft - no odor, no staining	071-R-2-12
4			
6			
8			
10			
12			

AECOM

071-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #071
Date Started 10/30/23 **Completed** 10/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 35-45% silt, <10% fine gravel [NATIVE] - gray to brown, moist, soft - no odor, no staining	071-SD-0-2
2		Lean clay (CL), 35-45% silt, <10% fine gravel [NATIVE] - gray to brown, moist, soft - no odor, no staining	071-SD-2-12
8		Lean clay (CL), 35-45% silt, <10% fine gravel, Lighter color [NATIVE] - gray to brown, moist, soft - no odor, no staining	
10			
12			

AECOM

072-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #072
Date Started 10/23/23 **Completed** 10/23/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 20-30% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	072-R-0-2
2		Silt (ML), 25-35% clay, 5-15% fine gravel [NATIVE] - brown to black, moist, firm - no odor, no staining	072-R-2-12
4			
6			
8			
10			
12			

AECOM

072-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #072
Date Started 10/23/23 **Completed** 10/23/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 20-30% clay [NATIVE] - brown, moist, soft - no odor, no staining	072-SD-0-2
2		Silt (ML), 5-15% clay, 5-15% fine gravel [NATIVE] - brown, moist, firm - no odor, no staining	072-SD-2-12
4			
6			
8			
10			
12			

AECOM

073-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #073
Date Started 10/24/23 **Completed** 10/24/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	073-R-0-2
2		Silt (ML), 5-15% fine gravel, 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	073-R-2-12
4			
6			
8			
10			
12			

AECOM

073-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #073
Date Started 10/24/23 **Completed** 10/24/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	
		Silt (ML), 5-15% clay, <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	073-SD-0-2
2		Silt with gravel (ML), 10-20% fine gravel, 5-15% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			
			073-SD-2-12
8			
10			
12			

AECOM

074D-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #074
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 10-20% clay, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	074D-R-0-2
2		Elastic silt (MH), 10-20% silt, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	074D-R-2-12
4			
6			
8			
10			
12			

AECOM

074D-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #074
Date Started 10/31/23 **Completed** 10/31/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 35-45% clay, <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	074D-SD-0-2
2		Silt with gravel (ML), 25-35% clay, 15-25% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			074D-SD-2-12
8			
10		Silt with gravel (ML), 15-25% fine to coarse gravel, 5-15% clay [NATIVE] - gray to brown, moist, firm - no odor, no staining	
12			

AECOM

076-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #076
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - brown to black, moist, very soft - no odor, no staining	076-R-0-2
2		Silt (ML), <10% clay [NATIVE] - brown to black, moist, very soft - no odor, no staining	
4			
6		Silt (ML), 10-20% clay [NATIVE] - gray to brown, moist, soft - no odor, no staining	076-R-2-12
8			
10			
12			

AECOM

076-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #076
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 15-25% silt, 5-15% clay [NATIVE] - brown, moist, firm - no odor, no staining	076-SD-0-2
2		Silt (ML), 15-25% clay, 15-25% peat, <10% gravel [NATIVE] - brown, moist, firm - no odor, no staining	076-SD-2-12
4			
6			
8			
10			
12			

AECOM

077B-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #077
Date Started 10/20/23 **Completed** 10/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 10-20% fine gravel, 5-15% coarse sand 10-20% clay [NATIVE] - brown, moist, firm - no odor, no staining	077B-NS-0-2
2		Silt with gravel (ML), 5-15% clay, 20-30% fine gravel [NATIVE] - brown, moist, firm - no odor, no staining	
4			
6			077B-NS-2-12
8			
10			
12			

AECOM

077B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #077
Date Started 10/20/23 **Completed** 10/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 10-20% clay, 5-15% fine gravel [NATIVE] - Dark brown, dry, soft - no odor, no staining	077B-R-0-2 FD-10202023
2		Gravelly silt (ML), 10-20% clay, 15-25% fine to coarse gravel, 5-15% fine to medium sand [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			
			077B-R-2-12
8			
10			
12			

AECOM

077B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #077
Date Started 10/20/23 **Completed** 10/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	
		Silt with gravel (ML), 10-20% clay, 5-15% fine gravel, <10% coarse sand [NATIVE] - brown, moist, soft - no odor, no staining	077B-SD-0-2
2		Silt with gravel (ML), 10-20% clay, <10% coarse sand 15-25% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			
			077B-SD-2-12
8			
10			
12			

AECOM

078-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #078
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, 5-15% gravel [NATIVE] - brown, moist, soft - no odor, no staining	078-NS-0-2
2		Silt with gravel (ML), 10-20% clay, 10-20% gravel [NATIVE] - brown, moist, soft - no odor, no staining	078-NS-2-12 FD-10192023
4			
6			
8			
10			
12			

AECOM

078-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #078
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, <10% gravel [NATIVE] - brown, dry, soft - no odor, no staining	078-R-0-2
2		Silt (ML), 10-20% clay, 5-15% gravel [NATIVE] - brown, moist, soft - no odor, no staining	078-R-2-12
4			
6			
8			
10			
12			

AECOM

078-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #078
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 25-35% silt, 15-25% clay [NATIVE] - brown, moist, soft - no odor, no staining	078-SD-0-2
2		Silt (ML), 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	
6		Silt (ML), 5-15% clay, <10% gravel [NATIVE] - brown, moist, soft - no odor, no staining	078-SD-2-12
12			

AECOM

079-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #079
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) - gray, moist, medium dense - no odor, no staining	079-NS-0-2
2		Lean clay (CL), 15-25% clay, Lighter brown clay at 10” [NATIVE] - Dark brown, moist - no odor, no staining	079-NS-2-12
4			
6			
8			
10			
12			

AECOM

079-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #079
Date Started 10/16/23 **Completed** 10/16/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - gray to brown, moist, soft - no odor, no staining	079-R-0-2
2		Organic soil (OL), 5-15% cobbles [NATIVE] - gray to brown, moist, soft - no odor, no staining	079-R-2-12
4			
6			
8			
10			
12			

AECOM

079-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #079
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, wet, very soft - no odor, no staining	079-SD-0-2
2		Lean clay (CL), 5-15% silt [NATIVE] - brown, wet, very soft - no odor, no staining	079-SD-2-12
4			
6			
8			
10			
12			

AECOM

080-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #080
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - brown to black, moist, soft - no odor, no staining	080-NS-0-2
2		Organic soil (OL), 5-15% cobbles [NATIVE] - brown to black, moist, soft - no odor, no staining	
4			
6			080-NS-2-12 FD-10182023
8			
10			
12			

AECOM

080-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #080
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - brown, dry, soft - no odor, no staining	080-R-0-2
2		Gravelly organic soil with sand (OL), 10-20% fine gravel, cobbles and fine sand [NATIVE] - brown, moist, loose - no odor, no staining	080-R-2-12
4			
6			
8			
10			
12			

AECOM

080-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #080
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay [NATIVE] - moist, soft - no odor, no staining	080-SD-0-2
2		Elastic silt (MH), 15-25% clay, <10% fine gravel and cobbles [NATIVE] - brown, moist, loose - no odor, no staining	080-SD-2-12
4			
6			
8			
10			
12			

AECOM

081C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #081C
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, soft - no odor, no staining	081C-R-0-2
2		Organic soil (OL), 5-15% fine gravel and cobbles [NATIVE] - gray, moist, soft - no odor, no staining	081C-R-2-12
4			
6			
8			
10			
12			

AECOM

081C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #081C
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, soft - no odor, no staining	081C-SD-0-2
2		Organic soil (OL), <10% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	081C-SD-2-12
4			
6			
8			
10			
12			

AECOM

083B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #083B
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 30-40% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	083B-R-0-2
2		Organic soil (OL), 35-45% clay, 5-15% fine gravel and cobbles [NATIVE] - Dark brown, moist, firm - no odor, no staining	083B-R-2-12
4			
6			
8			
10			
12			

AECOM

083B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #083B
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - brown, moist, soft - no odor, no staining	083B-SD-0-2
2		Organic soil (OL), 5-15% fine gravel and cobbles [NATIVE] - moist, soft - no odor, no staining	
4			
6			083B-SD-2-12
8			
10			
12			

AECOM

084-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #084
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	084-R-0-2
2		Silt (ML), 5-15% clay, 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	
4			
6			084-R-2-12
8			
10			
12			

AECOM

084-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #084
Date Started 10/19/23 **Completed** 10/19/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, 5-15% gravel [NATIVE] - brown, moist, firm - no odor, no staining	084-SD-0-2
2		Silt with gravel (ML), 5-15% clay, 10-20% gravel [NATIVE] - brown, moist, firm - no odor, no staining	084-SD-2-12
4			
6			
8			
10			
12			

AECOM

085A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #085A
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 20-30% fine gravel, 5-15% clay [NATIVE] - brown to black, moist, firm - no odor, no staining	085A-R-0-2
2		Silt with gravel (ML), 20-30% fine gravel, 5-15% clay [NATIVE] - brown to black, moist, firm - no odor, no staining	
4			
6			085A-R-2-12
8		Gravelly silt (ML), 25-35% fine gravel, 10-20% clay [NATIVE] - brown, moist, firm - no odor, no staining	
10			
12			

AECOM

085A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #085A
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 10-20% fine gravel, 10-20% clay [NATIVE] - brown to black, moist, firm - no odor, no staining	085A-SD-0-2
2		Silt with gravel (ML), 10-20% fine gravel, 10-20% clay [NATIVE] - brown to black, moist, firm - no odor, no staining	085A-SD-2-12
8		Silt with gravel (ML), 20-30% fine gravel, 10-20% clay [NATIVE] - brown, moist, firm - no odor, no staining	
10			
12			

AECOM

086-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #086
Date Started 10/20/23 **Completed** 10/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, <10% fine gravel [NATIVE] - brown to black, dry, soft - no odor, no staining	086-R-0-2
2		Silt (ML), <10% clay, <10% fine gravel [NATIVE] - brown, dry, soft - no odor, no staining	086-R-2-12
4			
6			
8			
10			
12			

AECOM

086-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #086
Date Started 10/20/23 **Completed** 10/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - brown, moist, soft - no odor, no staining	086-SD-0-2
2		Gravelly silt with sand (ML), <10% clay, 15-25% medium to coarse sand 15-25% fine gravel [NATIVE] - brown, dry, soft - no odor, no staining	086-SD-2-12
4			
6			
8			
10			
12			

AECOM

087E-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #087E
Date Started 10/17/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), <10% sand - Dark brown, moist, soft - no odor, no staining	087E-NS-0-2
2		Organic soil (OL), 5-15% fine gravel and cobbles [NATIVE] - brown, moist, soft - no odor, no staining	087E-NS-2-12 FD-10172023
4			
6			
8			
10			
12			

AECOM

087E-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #087E
Date Started 10/17/23 **Completed** 10/17/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, soft - no odor, no staining	087E-R-0-2
2		Organic soil (OL), <10% clay [NATIVE] - brown, moist, soft - no odor, no staining	087E-R-2-12
4			
6			
8			
10			
12			

AECOM

087E-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #087E
Date Started 10/17/23 **Completed** 10/17/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL) [NATIVE] - brown, moist, soft - no odor, no staining	087E-SD-0-2
2		Fat clay (CH), 10-20% silt, <10% fine gravel and cobbles [NATIVE] - brown, moist, soft - no odor, no staining	087E-SD-2-12
4			
6			
8			
10			
12			

AECOM

088B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #088B
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, dense - no odor, no staining	088B-R-0-2
2		Organic soil (OL), 10-20% clay [NATIVE] - brown to black, moist, loose - no odor, no staining	088B-R-2-12
4			
6			
8			
10			
12			

AECOM

088B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #088B
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - gray to brown, moist, dense - no odor, no staining	088B-SD-0-2
2		Fat clay (CH), 5-15% silt [NATIVE] - brown, moist, dense - no odor, no staining	088B-SD-2-12
4			
6			
8			
10			
12			

AECOM

089C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #089C
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), 5-15% cobbles [NATIVE] - brown to black, moist, soft - no odor, no staining	089C-R-0-2
2		Organic soil with gravel (OL), 10-20% fine gravel and cobbles [NATIVE] - Dark brown, moist, firm - no odor, no staining	089C-R-2-12
4			
6			
8			
10			
12			

AECOM

089C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #089C
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay [NATIVE] - brown, moist, soft - no odor, no staining	089C-SD-0-2
2		Organic soil (OL), <10% fine gravel, Light brown 10-11” [NATIVE] - brown, moist, firm - no odor	089C-SD-2-12
4			
6			
8			
10			
12			

AECOM

090-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #090
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Fat clay (CH), 15-25% silt [NATIVE] - gray to brown, moist, soft - no odor, no staining	090-R-0-2 FD-10162023
2		Debris, 35-45% clay and silt [NATIVE] - gray to brown, moist - no odor, no staining	
4			
6			
			090-R-2-12
8			
10			
12			

AECOM

090-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #090
Date Started 10/16/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - brown, moist, loose - no odor, no staining	090-SD-0-2
2		Organic soil (OL), 5-15% cobbles [NATIVE] - brown, moist, loose - no odor, no staining	
4			
6			090-SD-2-12
8			
10			
12			

AECOM

091B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #091B
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 5-15% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	091B-R-0-2
2		Lean clay (CL), 5-15% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			091B-R-2-12
8			
10		Well-graded sand (SW), fine to medium, subangular, <10% clay [NATIVE] - brown, moist, soft - no odor, no staining	
12			

AECOM

091B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #091B
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	091B-SD-0-2
2		Silt (ML), 5-15% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	091B-SD-2-12 FD-12052023
4			
6			
8			
10			
12			

AECOM

092A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #092
Date Started 10/23/23 **Completed** 10/23/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% clay, <10% fine sand <10% fine gravel [NATIVE] - brown, moist, very soft - no odor, no staining	092A-R-0-2
2		Silt (ML), 5-15% clay, <10% fine sand <10% fine gravel [NATIVE] - brown, moist, very soft - no odor, no staining	
4		Elastic silt (MH), <10% clay, <10% fine to medium sand <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
6			092A-R-2-12
8			
10			
12			

AECOM

092A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #092
Date Started 10/23/23 **Completed** 10/23/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 20-30% clay, <10% fine gravel [NATIVE] - brown, dry, soft - no odor, no staining	092A-SD-0-2
2		Gravelly silt (ML), 5-15% clay, 25-35% fine gravel, 5-15% fine to coarse sand [NATIVE] - brown, dry, soft - no odor, no staining	092A-SD-2-12
4			
6			
8			
10			
12			

AECOM

093-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #093
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt with gravel (ML), 20-30% fine to coarse sand <10% clay, 15-25% fine gravel [NATIVE] - brown to black, moist, hard - no odor, no staining	093-NS-0-2
2		Well-graded gravel with silt and sand (GW-GM), fine to medium, angular, 35-45% fine to coarse sand 5-15% silt [NATIVE] - brown to black, moist, hard - no odor, no staining	093-NS-2-12
4			
6			
8			
10			
12			

AECOM

093-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #093
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel, <10% clay, <10% fine sand [NATIVE] - brown to black, moist, soft - no odor, no staining	093-R-0-2
2		Silt (ML), <10% fine gravel, <10% fine sand 5-15% clay [NATIVE] - moist, medium dense - no odor, no staining	093-R-2-12
4			
6			
8			
10			
12			

AECOM

093-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #093
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), 15-25% clay, 5-15% fine sand <10% fine gravel [NATIVE] - brown to black, moist, firm - no odor, no staining	093-SD-0-2
2		Silt with sand (ML), 5-15% fine sand <10% fine gravel, 15-25% clay [NATIVE] - brown to black, moist, firm - no odor, no staining	
4			
6			093-SD-2-12
8			
10			
12			

AECOM

094-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #094
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - gray, moist, firm - no odor, no staining	094-R-0-2
2		Organic soil (OL), <10% cobbles and fine gravel [NATIVE] - gray to brown, moist, soft - no odor, no staining	094-R-2-12
4			
6			
8			
10			
12			

AECOM

094-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #094
Date Started 10/18/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), <10% fine sand - gray, moist, loose - no odor, no staining	094-SD-0-2
2		Organic soil (OL), <10% fine sand fine gravel and cobbles [NATIVE] - gray, moist, soft - no odor, no staining	094-SD-2-12
4			
6			
8			
10			
12			

AECOM

095-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #095
Date Started 10/17/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), <10% fine sand [NATIVE] - brown, moist, loose - no odor, no staining	095-R-0-2
2		Organic soil (OL), <10% sand and gravel [NATIVE] - moist, loose - no odor, no staining	095-R-2-12
4			
6			
8			
10			
12			

AECOM

095-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #095
Date Started 10/17/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 15-25% clay [NATIVE] - brown, wet, very soft - no odor, no staining	095-SD-0-2
2		Fat clay (CH), 5-15% silt and cobbles [NATIVE] - gray to brown, moist, soft - no odor, no staining	095-SD-2-12
4			
6			
8			
10			
12			

AECOM

096C-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #096C
Date Started 12/04/23 **Completed** 12/04/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, rounded, 10-20% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	096C-NS-0-2
2		Lean clay with gravel (CL), 10-20% silt, 10-20% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	096C-NS-2-12
4			
6			
8			
10			
12			

AECOM

096C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #096C
Date Started 12/04/23 **Completed** 12/04/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subangular, 10-20% silt [NATIVE] - brown, moist, soft - no odor, no staining	096C-R-0-2
2		Silty sand (SM), fine to medium, subangular, 10-20% silt, <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	096C-R-2-12
10		Clayey sand (SC), fine to medium, subangular, 10-20% clay, <10% fine gravel, Reddish brown [NATIVE] - brown, moist, soft - no odor, no staining	
12			

AECOM

096C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #096C
Date Started 12/04/23 **Completed** 12/04/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 5-15% fine sand <10% silt [NATIVE] - brown, moist, soft - no odor, no staining	096C-SD-0-2
2		Lean clay (CL), 5-15% fine sand <10% silt [NATIVE] - brown, moist, soft - no odor, no staining	096C-SD-2-12
4			
6			
8			
10			
12			

AECOM

097A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #097A
Date Started 10/17/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, soft - no odor, no staining	097A-R-0-2
2		Organic soil (OL), <10% fine gravel [NATIVE] - gray, moist, dense - no odor, no staining	097A-R-2-12
4			
6			
8			
10			
12			

AECOM

097A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #097A
Date Started 10/17/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Fat clay (CH) [NATIVE] - brown, wet, dense - no odor, no staining	097A-SD-0-2
2		Fat clay (CH) [NATIVE] - Dark brown, wet, dense - no odor, no staining	097A-SD-2-12
4			
6			
8			
10			
12			

AECOM

098-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #098
Date Started 10/17/23 **Completed** 10/17/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil with gravel (OL), 15-25% cobbles and fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	098-R-0-2
2		Organic soil with gravel (OL), 20-30% fine gravel and cobbles, <10% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			098-R-2-12
8			
10			
12			

AECOM

098-SD

Total Depth 12 **in**

Client NYSDEC **Project Name** PFAS Rural Background Study

Project Number 60679961 **Site Name** #098

Date Started 10/17/23 **Completed** **Survey By** NA **Survey Date** NA

Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]

Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in

Drilling Method HAND AUGER

Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), <10% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	098-SD-0-2
2		Organic soil with gravel (OL), 5-15% fine gravel and cobbles, <10% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	098-SD-2-12
4			
6			
8			
10			
12			

AECOM

099F-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #099
Date Started 11/21/23 **Completed** 11/21/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel, <10% fine to medium sand [NATIVE] - brown, moist, firm - no odor, no staining	099F-R-0-2
2		Silt with gravel (ML), 5-15% fine gravel, 5-15% clay, 5-15% fine to medium sand [NATIVE] - brown, moist, firm - no odor, no staining	099F-R-2-12
4			
6			
8			
10			
12			

AECOM

099F-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #099
Date Started 11/21/23 **Completed** 11/21/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel, <10% fine sand [NATIVE] - brown, moist, firm - no odor, no staining	099F-SD-0-2
2		Silt with gravel (ML), 5-15% fine gravel, 5-15% fine sand 5-15% clay [NATIVE] - brown, moist, firm - no odor, no staining	099F-SD-2-12
4			
6			
8			
10			
12			

AECOM

100A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #100A
Date Started 10/17/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 15-25% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	100A-R-0-2
2		Fat clay (CH), <10% silt and fine gravel [NATIVE] - Dark brown, moist, firm - no odor, no staining	100A-R-2-12
4			
6			
8			
10			
12			

AECOM

100A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #100A
Date Started 10/17/23 **Completed**
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Alyssa Sands **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL) [NATIVE] - Dark brown, moist, soft - no odor, no staining	100A-SD-0-2
2		Organic soil (OL), 5-15% fine gravel and cobbles [NATIVE] - Dark brown, moist, soft - no odor, no staining	100A-SD-2-12
4			
6			
8			
10			
12			

AECOM

101-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #101
Date Started 10/23/23 **Completed** 10/23/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subrounded, 30-40% silt, 5-15% fine gravel [NATIVE] - Dark brown, moist, very loose - no odor, no staining	101-NS-0-2
2		Silty sand with gravel (SM), fine to medium, subrounded, 20-30% silt, 15-25% fine gravel, <10% clay [NATIVE] - Dark brown, moist, loose - no odor, no staining	101-NS-2-12 FD-10232023
4			
6			
8			
10			
12			

AECOM

101-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #101
Date Started 10/23/23 **Completed** 10/23/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 25-35% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	101-R-0-2
2		Silt (ML), 15-25% clay, 5-15% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	101-R-2-12
4			
6			
8			
10			
12			

AECOM

101-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #101
Date Started 10/23/23 **Completed** 10/23/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 25-35% clay, <10% fine gravel [NATIVE] - Dark brown, moist, firm - no odor, no staining	101-SD-0-2
2		Silt (ML), 25-35% clay, <10% fine gravel [NATIVE] - Dark brown, moist, firm - no odor, no staining	
4			
6		Silt (ML), 10-20% clay, 5-15% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	101-SD-2-12
8			
10			
12			

AECOM

102-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #102
Date Started 11/27/23 **Completed** 11/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 35-45% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	102-R-0-2
2		Silt (ML), 35-45% clay, 5-15% fine to coarse gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	102-R-2-12
4			
6			
8			
10			
12			

AECOM

102-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #102
Date Started 11/27/23 **Completed** 11/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 20-30% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	102-SD-0-2
2		Elastic silt (MH), 20-30% clay [NATIVE] - brown, moist, soft - no odor, no staining	102-SD-2-12 FD-11272023
4			
6			
8			
10			
12			

AECOM

103C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #103
Date Started 11/03/23 **Completed** 11/03/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Gravelly silt with sand (ML), 15-25% fine to medium sand 15-25% fine gravel, 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	103C-R-0-2
2		Gravelly silt with sand (ML), 15-25% fine sand 20-30% fine gravel, 5-15% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	103C-R-2-12
4			
6			
8			
10			
12			

AECOM

103C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #103
Date Started 11/03/23 **Completed** 11/03/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 30-40% silt, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	103C-SD-0-2
2		Lean clay with gravel (CL), 20-30% silt, <10% fine sand 10-20% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			103C-SD-2-12
8			
10			
12			

AECOM

104B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #104
Date Started 10/27/23 **Completed** 10/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 10-20% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	104B-R-0-2
2		Silt (ML), 20-30% clay, <10% fine gravel [NATIVE] - Dark brown, moist, firm - no odor, no staining	104B-R-2-12
4			
6			
8			
10			
12			

AECOM

104B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #104
Date Started 10/27/23 **Completed** 10/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

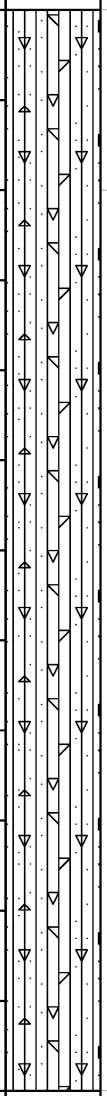
Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subrounded, 15-25% silt, 5-15% fine gravel [NATIVE] - Dark brown, dry, loose - peaty odor, no staining	104B-SD-0-2
2		Silty sand (SM), fine to medium, subrounded, 15-25% silt, 5-15% fine gravel [NATIVE] - Dark brown, dry, loose - peaty odor, no staining	
4			
6		Well-graded sand with gravel (SW), fine to medium, subrounded, 10-20% fine gravel, <10% silt [NATIVE] - brown, dry, loose - no odor, no staining	104B-SD-2-12 FD-10272023
8			
10			
12			

AECOM

105A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #105
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Gravelly silt with sand (ML), 10-20% clay, 10-20% fine sand 10-20% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	105A-R-0-2
2		Gravelly silt with sand (ML), 10-20% clay, 10-20% fine sand 10-20% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	105A-R-2-12
4			
6			
8			
10			
12			

AECOM

105A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #105
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 5-15% clay, 5-15% fine sand 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	105A-SD-0-2
2		Silt with gravel (ML), 5-15% clay, 5-15% fine sand 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	105A-SD-2-12
4			
6			
8			
10			
12			

AECOM

106-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #106
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), <10% clay, 5-15% fine gravel, 5-15% fine to coarse sand [NATIVE] - brown to black, moist, soft - no odor, no staining	106-R-0-2
2		Well-graded sand with silt and gravel (SW-SM), fine to coarse, subrounded, 30-40% fine gravel, <10% silt, <10% clay [NATIVE] - brown to black, moist, loose - no odor, no staining	106-R-2-12
4			
6			
8			
10			
12			

AECOM

106-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #106
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine to coarse sand <10% clay [NATIVE] - brown to black, moist, soft - no odor, no staining	106-SD-0-2
2		Silt (ML), <10% fine gravel, <10% clay, <10% fine to coarse sand [NATIVE] - brown to black, moist, soft - no odor, no staining	
4			
6			106-SD-2-12
8			
10			
12			

AECOM

107-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #107
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	107-R-0-2 FD-11012023-1
2		Silt (ML), <10% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6		Silt (ML), <10% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	107-R-2-12
8			
10			
12			

AECOM

107-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #107
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	107-SD-0-2
2		Silt (ML), <10% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6		Silt (ML), <10% clay, 5-15% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	107-SD-2-12
8			
10			
12			

AECOM

108-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #108
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subangular, 15-25% silt, 5-15% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	108-NS-0-2
2		Silty sand with gravel (SM), fine to medium, subangular, 15-25% silt, 15-25% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6		Silty sand with gravel (SM), fine to medium, subangular, 15-25% silt, 15-25% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	108-NS-2-12 FD-11012023-2
8			
10			
12			

AECOM

108-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #108
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), fine to medium, subangular, 15-25% clay, 10-20% fine gravel [NATIVE] - gray to brown, moist, soft - no odor, no staining	108-R-0-2
2		Silt with gravel (ML), 15-25% clay, 10-20% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4		Sandy silt (ML), 15-25% clay, 5-15% fine gravel, 15-25% fine sand [NATIVE] - brown, moist, soft - no odor, no staining	
6			108-R-2-12
8			
10			
12			

AECOM

108-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #108
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subangular, 15-25% silt, 5-15% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	108-SD-0-2
2		Silty sand (SM), fine to medium, subangular, 15-25% silt, 5-15% fine gravel [NATIVE] - Dark brown, dry, soft - no odor, no staining	
6		Silty sand with gravel (SM), fine to medium, subangular, 15-25% silt, 10-20% fine gravel [NATIVE] - brown, dry, soft - no odor, no staining	108-SD-2-12
12			

AECOM

109-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #109
Date Started 11/27/23 **Completed** 11/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML) [NATIVE] - Dark brown, moist, loose - no odor, no staining	109-R-0-2
2		Silt (ML), <10% fine to medium sand <10% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	109-R-2-12
4			
6			
8			
10			
12			

AECOM

109-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #109
Date Started 11/27/23 **Completed** 11/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine to medium sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	109-SD-0-2
2		Sandy silt (ML), 35-45% fine to medium sand [NATIVE] - brown, moist, loose - no odor, no staining	109-SD-2-12
4			
6			
8			
10			
12			

AECOM

110C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #110C
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), <10% fine sand [NATIVE] - brown, wet, soft - no odor, no staining	110C-R-0-2
2		Lean clay with sand (CL), 10-20% fine sand [NATIVE] - brown, wet, soft - no odor, no staining	110C-R-2-12
4			
6			
8			
10			
12			

AECOM

110C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #110C
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand (SW), fine to medium, subangular, <10% silt, 5-15% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	110C-SD-0-2
2		Well-graded sand (SW), fine to medium, subangular, <10% silt, <10% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	
4			
6			110C-SD-2-12
8			
10			
12			

AECOM

111-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #111
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 35-45% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	111-R-0-2
2		Silt (ML), 35-45% clay [NATIVE] - Dark brown, moist, soft - no odor, no staining	111-R-2-12
4			
6			
8			
10			
12			

AECOM

111-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #111
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 30-40% clay, <10% fine gravel [NATIVE] - Dark brown, moist, firm - no odor, no staining	111-SD-0-2
2		Silt (ML), 25-35% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			111-SD-2-12
8			
10		Silt (ML), 25-35% clay, <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
12			

AECOM

112-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #112
Date Started 11/06/23 **Completed** 11/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), <10% clay, 10-20% fine to coarse sand <10% fine gravel [NATIVE] - brown to black, dry, loose - no odor, no staining	112-NS-0-2
2		Silt with sand (ML), <10% clay, 10-20% fine to coarse sand <10% fine gravel [NATIVE] - brown to black, dry, loose - no odor, no staining	
4		Silt with sand (ML), 5-15% clay, 10-20% fine to medium sand <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
6			112-NS-2-12
8			
10			
12			

AECOM

112-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #112
Date Started 11/06/23 **Completed** 11/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Organic soil (OL), <10% clay, <10% fine sand 35-45% silt [NATIVE] - brown to black, dry, loose - no odor, no staining	112-R-0-2
2		Silt with gravel (ML), 5-15% clay, <10% fine sand 5-15% fine to coarse gravel [NATIVE] - brown, moist, loose - no odor, no staining	112-R-2-12
4			
6			
8			
10			
12			

AECOM

112-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #112
Date Started 11/06/23 **Completed** 11/06/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, <10% fine sand <10% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	112-SD-0-2
2		Silt (ML), 5-15% clay, <10% fine sand <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	112-SD-2-12
4			
6			
8			
10			
12			

AECOM

113B-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #113
Date Started 10/27/23 **Completed** 10/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% clay, 5-15% fine gravel [NATIVE] - brown, dry, very soft - no odor, no staining	113B-R-0-2
2		Silt with gravel (ML), <10% clay, <10% fine sand 10-20% fine gravel [NATIVE] - brown, dry, very soft - no odor, no staining	113B-R-2-12
4			
6			
8			
10			
12			

AECOM

113B-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #113
Date Started 10/27/23 **Completed** 10/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 10-20% clay, <10% fine sand <10% fine gravel [NATIVE] - brown, dry, soft - no odor, no staining	113B-SD-0-2
2		Silt with gravel (ML), <10% clay, <10% fine sand 5-15% fine gravel [NATIVE] - brown, dry, soft - no odor, no staining	113B-SD-2-12
4			
6			
8			
10			
12			

AECOM

114C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #114
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 35-45% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	114C-R-0-2
2		Silt (ML), 35-45% clay, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	114C-R-2-12
4			
6			
8			
10			
12			

AECOM

114C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #114
Date Started 11/01/23 **Completed** 11/01/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 35-45% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	114C-SD-0-2
2		Lean clay (CL), 35-45% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			114C-SD-2-12
8			
10			
12			

AECOM

116-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #116
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with silt (SW-SM), fine to coarse, subrounded, 5-15% silt [NATIVE] - brown, moist, soft - no odor, no staining	116-NS-0-2
2		Well-graded sand with silt (SW-SM), fine to coarse, subrounded, 5-15% silt, 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	116-NS-2-12
4			
6			
8			
10			
12			

AECOM

116-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #116
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, angular, 15-25% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	116-R-0-2
2		Silty sand (SM), fine to medium, angular, 15-25% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6		Silty sand (SM), fine to medium, angular, 15-25% silt, 5-15% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	116-R-2-12
8			
10			
12			

AECOM

116-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #116
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with silt (SW-SM), fine to coarse, subangular, 5-15% fine gravel, 5-15% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	116-SD-0-2
2		Silty sand with gravel (SM), fine to coarse, subangular, 10-20% silt, 10-20% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	116-SD-2-12
4			
6			
8			
10			
12			

AECOM

117-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #117
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 25-35% fine to medium sand <10% fine gravel [NATIVE] - brown to black, moist, soft - no odor, no staining	117-R-0-2
2		Sandy silt (ML), 25-35% fine to medium sand <10% clay [NATIVE] - brown, moist, soft - no odor, no staining	117-R-2-12
4			
6			
8			
10			
12			

AECOM

117-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #117
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), 15-25% fine to medium sand <10% fine gravel [NATIVE] - Dark brown, dry, soft - no odor, no staining	117-SD-0-2
2		Silty sand (SM), fine to medium, subangular, 25-35% silt, <10% fine gravel [NATIVE] - brown, dry, soft - no odor, no staining	117-SD-2-12
4			
6			
8			
10			
12			

AECOM

118-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #118
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	118-R-0-2
2		Well-graded sand (SW), fine to medium, subangular, <10% fine gravel, <10% clay [NATIVE] - brown, moist, soft - no odor, no staining	118-R-2-12
4			
6			
8			
10			
12			

AECOM

118-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #118
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with gravel (SW), fine to medium, subangular, 10-20% fine gravel [NATIVE] - brown, moist, loose - no odor, no staining	118-SD-0-2
2		Clayey sand (SC), fine to medium, subangular, 5-15% fine gravel, 10-20% clay [NATIVE] - brown, moist, loose - no odor, no staining	118-SD-2-12
4			
6			
8			
10			
12			

AECOM

119-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #119
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine gravel, 5-15% clay [NATIVE] - black, moist, soft - no odor, no staining	119-R-0-2
2		Silt with gravel (ML), 15-25% fine gravel, 5-15% clay [NATIVE] - black, moist, soft - no odor, no staining	119-R-2-12
4			
6			
8			
10			
12			

AECOM

119-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #119
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

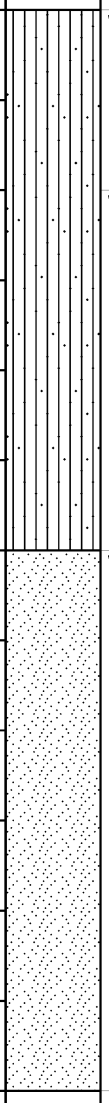
Depth	Graphic	Material Description	Sample ID
0		Lean clay (CL), 35-45% silt, <10% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	119-SD-0-2
2		Lean clay (CL), 25-35% silt, 5-15% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	
4			
6			119-SD-2-12 FD-11022023
8			
10			
12			

AECOM

120-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #120
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy



Depth	Material Description	Sample ID
0	Well-graded sand with silt (SW-SM), fine to medium, subangular, 5-15% silt [NATIVE] - Dark brown, moist, loose - no odor, no staining	120-NS-0-2
2	Well-graded sand with silt (SW-SM), fine to medium, subangular, 5-15% silt [NATIVE] - Dark brown, moist, loose - no odor, no staining	
4		
6	Well-graded sand (SW), fine to medium, subangular, <10% silt [NATIVE] - brown, moist, very loose - no odor, no staining	120-NS-2-12
8		
10		
12		

AECOM

120-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #120
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with silt (SW-SM), fine to medium, subangular, 5-15% silt, 5-15% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	120-R-0-2
2		Silty sand (SM), fine to medium, subangular, 5-15% silt, 5-15% clay, 5-15% fine gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	120-R-2-12
4			
6			
8			
10			
12			

AECOM

120-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #120
Date Started 12/05/23 **Completed** 12/05/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Well-graded sand with silt (SW-SM), fine to medium, subangular, 5-15% silt, 5-15% fine to coarse gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	120-SD-0-2
2		Silty sand (SM), fine to medium, subangular, 5-15% silt, 5-15% clay, 5-15% fine to coarse gravel [NATIVE] - Dark brown, moist, loose - no odor, no staining	120-SD-2-12
4			
6			
8			
10			
12			

AECOM

121-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #121
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	121-R-0-2
2		Silt (ML), <10% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	121-R-2-12 FD-11202023
4			
6			
8			
10			
12			

AECOM

121-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #121
Date Started 11/20/23 **Completed** 11/20/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Andrew Dietz **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 5-15% fine gravel - brown, moist, soft - no odor, no staining	121-SD-0-2
2		Silt (ML), <10% fine to medium sand <10% fine gravel - brown, moist, soft - no odor, no staining	121-SD-2-12
4			
6			
8			
10			
12			

AECOM

122A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #122
Date Started 11/03/23 **Completed** 11/03/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silty sand (SM), fine to medium, subrounded, <10% fine gravel, 10-20% clay, 15-25% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	122A-R-0-2
2		Silty sand (SM), fine to medium, subrounded, 25-35% silt, 5-15% fine to coarse gravel [NATIVE] - brown, moist, soft - no odor, no staining	122A-R-2-12
4			
6			
8			
10			
12			

AECOM

122A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #122
Date Started 11/03/23 **Completed** 11/03/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), <10% fine gravel, 10-20% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	122A-SD-0-2
2		Silty sand (SM), fine to medium, subrounded, <10% fine gravel, 15-25% silt [NATIVE] - Dark brown, moist, soft - no odor, no staining	
6		Silty sand (SM), fine to medium, subrounded, <10% fine gravel, 15-25% silt [NATIVE] - brown, moist, soft - no odor, no staining	122A-SD-2-12
12			

AECOM

123A-NS

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #123
Date Started 10/27/23 **Completed** 10/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with gravel (ML), 10-20% clay, 10-20% fine gravel [NATIVE] - Dark brown, moist, soft - no odor, no staining	123A-NS-0-2
2		Gravelly silt (ML), 5-15% clay, 25-35% fine to coarse gravel, <10% fine sand [NATIVE] - Dark brown, moist, loose - no odor, no staining	123A-NS-2-12
4			
6			
8			
10			
12			

AECOM

123A-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #123
Date Started 10/27/23 **Completed** 10/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA
Latitude [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER
Ground Elevation NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 10-20% clay, <10% fine gravel [NATIVE] - Dark brown, moist, firm - no odor, no staining	123A-R-0-2
2		Silt (ML), 15-25% clay, 5-15% fine gravel [NATIVE] - brown, moist, firm - no odor, no staining	123A-R-2-12
4			
6			
8			
10			
12			

AECOM

123A-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #123
Date Started 10/27/23 **Completed** 10/27/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt (ML), 25-35% clay [NATIVE] - Dark brown, moist, firm - no odor, no staining	123A-SD-0-2
2		Silt (ML), 25-35% clay, 5-15% fine gravel [NATIVE] - brown, moist, firm - no odor, no staining	123A-SD-2-12
4			
6			
8			
10			
12			

AECOM

124C-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #124C
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), 15-25% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	124C-R-0-2
2		Silt with sand (ML), 15-25% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	124C-R-2-12
4			
6			
8			
10			
12			

AECOM

124C-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #124C
Date Started 11/30/23 **Completed** 11/30/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Silt with sand (ML), 15-25% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	124C-SD-0-2
2		Silt with sand (ML), 15-25% fine sand [NATIVE] - Dark brown, moist, soft - no odor, no staining	124C-SD-2-12 FD-11302023
4			
6			
8			
10			
12			

AECOM

125-R

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #125
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 15-25% fine sand 5-15% fine gravel [NATIVE] - brown to black, moist, soft - no odor, no staining	125-R-0-2
2		Sandy silt (ML), 15-25% fine sand 5-15% fine gravel [NATIVE] - brown to black, moist, soft - no odor, no staining	
4			
6			125-R-2-12
8		Sandy silt (ML), 15-25% fine sand 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
10			
12			

AECOM

125-SD

Total Depth 12 **in**

Client NYSDEC
Project Name PFAS Rural Background Study
Project Number 60679961
Site Name #125
Date Started 11/02/23 **Completed** 11/02/23
Survey By NA **Survey Date** NA
Drilling Contractor NA **Latitude** [redacted] **Longitude** [redacted]
Drilling Equipment HAND AUGER **Ground Elevation** NA **Hole Size** 2 in
Drilling Method HAND AUGER
Logged By Tom Urban **Checked By** Rob Murphy

Depth	Graphic	Material Description	Sample ID
0		Sandy silt (ML), 15-25% fine sand 5-15% fine gravel [NATIVE] - brown to black, moist, soft - no odor, no staining	125-SD-0-2
2		Sandy silt (ML), 15-25% fine sand 5-15% fine gravel [NATIVE] - brown to black, moist, soft - no odor, no staining	
4		Sandy silt (ML), 25-35% fine sand 5-15% fine gravel [NATIVE] - brown, moist, soft - no odor, no staining	
6			125-SD-2-12
8			
10			
12			

AECOM

Attachment C Data Usability Summary Reports

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Robert Thielke
SDG NUMBER:	FC7325
SAMPLING DATE(S):	June 27, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
FC7325-1	EB-230627	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – FC7325

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

There were no major issues associated with this SDG.

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The sample was analyzed outside of holding time and all results were qualified as estimated (J/UJ).

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and <10x the blank result	J+ biased high

Instrument Blank (IB):

EtFOSA, Perfluorooctanoic acid, and Perfluorononanoic acid were detected in instrument blanks and continuing calibration blanks. No qualification was made based on this finding because all sample results were non-detected.

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blank, EB-230627 was free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

The MS / MSD analyses were performed on a sample not associated with this SDG. No action was taken.

VII.) Laboratory Control Samples (LCS):

All LCS and Low Level LCS Recovery criteria were met for this SDG. No qualification was necessary.

VIII.) Field Duplicates:

No Field Duplicates were associated with this SDG.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were greater than the lower control criteria of 50% for all EIS.

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance Criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

RJT 5/24/24

SGS North America Inc.

Report of Analysis

Client Sample ID: EB-230627
Lab Sample ID: FC7325-1
Matrix: AQ - Water
Method: EPA DRAFT 1633 EPA 1633 DRAFT

Date Sampled: 06/27/23
Date Received: 06/28/23
Percent Solids: n/a

4.1

2706-90-3	Perfluoropentanoic acid	ND	0.0038	0.00095	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00048	ug/l	UJ
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00048	ug/l	UJ
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00048	ug/l	UJ
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00058	ug/l	UJ
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00048	ug/l	UJ
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00057	ug/l	UJ
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00057	ug/l	UJ
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00080	ug/l	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00048	ug/l	UJ
						UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00095	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.0011	ug/l	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.00095	ug/l	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00095	ug/l	UJ
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00095	ug/l	UJ
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.00095	ug/l	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.00095	ug/l	UJ
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.0011	ug/l	UJ
						UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0076	0.0038	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0076	0.0038	ug/l	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0076	0.0039	ug/l	UJ
						UJ
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00095	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00095	ug/l	UJ
4151-50-2	EtFOSA	ND	0.0019	0.00095	ug/l	UJ
						UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-230627		
Lab Sample ID:	FC7325-1	**Date Sampled:**	06/27/23
Matrix:	AQ - Water	**Date Received:**	06/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	Rural Background Study for PFAS in Soil; NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00095	ug/l	UJ
2991-50-6	EtFOSAA	ND	0.0019	0.0013	ug/l	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0095	ug/l	UJ
1691-99-2	EtFOSE	ND	0.019	0.0095	ug/l	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0076	0.0019	ug/l	UJ
919005-14-4	ADONA	ND	0.0076	0.0019	ug/l	UJ
377-73-1	PFMPA	ND	0.0038	0.00095	ug/l	UJ
863090-89-5	PFMBA	ND	0.0038	0.0011	ug/l	UJ
151772-58-6	NFDHA	ND	0.0038	0.0011	ug/l	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0076	0.0019	ug/l	UJ
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0076	0.0019	ug/l	UJ
113507-82-7	PFEESA	ND	0.0038	0.00095	ug/l	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0095	0.0048	ug/l	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0095	ug/l	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0095	ug/l	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	109%		20-150%
	13C5-PFPeA	100%		20-150%
	13C5-PFHxA	112%		20-150%
	13C4-PFHpA	113%		20-150%
	13C8-PFOA	104%		20-150%
	13C9-PFNA	100%		20-150%
	13C6-PFDA	108%		20-150%
	13C7-PFUnDA	104%		20-150%
	13C2-PFDoDA	80%		20-150%
	13C2-PFTeDA	60%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	108%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

AECOM

VALIDATION REPORT – JD74737 Correction/Replacement

Project Name: NYSDEC WA#44.1 Rural Background Study for PFAS in Soil

AECOM Project #60679961

The text of the validation report by 3rd party validator – Validata Chemical Services Inc. (Validata) indicated certain compounds should be rejected. However, this was not done on the associated Form Is in the validation report. The Form Is noted below have been changed by AECOM.

The Form I for sample JD74737-42 (field sample ID 039-R-2-12) had PFBA incorrectly flagged with a 'J' by Validata. The 'J' qualifier was crossed out and an 'R' qualifier applied to the Form I.

The Form I for sample JD74737-49 (field sample ID 048B-SD-0-2) had PFMPA, PFMBA, and 3:3FTCA incorrectly flagged with a 'UJ' by Validata. The 'UJ' qualifiers were crossed out and 'R' qualifiers applied to the Form I.

The detected result for PFBA was qualified 'UJ' on the Form I for sample JD74737-70 (field sample ID 026-R-0-2) by Validata. The validation text also has a 'UJ' listed. This was an error. The blanks associated with this sample did not show any detections for this compound. The correct qualification should be 'J' due to the low % recovery of the extracted internal standard (EIS) as indicated in the text of the validation report. The 'UJ' qualifier has been crossed out and a 'J' qualifier applied to the Form I in the validation report and the text corrected in the validation report.

The changes are noted in red and initialed/dated. No other changes have been made to the validation report.

Prepared By: Ann Marie Kropovitch, Chemist **Date:** **1/17/25**

Reviewed By: Peter R. Fairbanks, Senior Chemist **Date:** **1/17/25**

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD74737
SAMPLING DATE(S):	October 10, 11 and 12, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD74737-1	033C-SD-0-2	X
JD74737-2	033C-SD-2-12	X
JD74737-3	033C-R-0-2	X
JD74737-4	033C-R-2-12	X
JD74737-5	037-SD-0-2	X
JD74737-6	037-SD-2-12	X
JD74737-6MS	037-SD-2-12MS	X
JD74737-6MSD	037-SD-2-12MSD	X
JD74737-7	037-R-0-2	X
JD74737-7RE	037-R-0-2RE	X
JD74737-8	037-R-2-12	X
JD74737-9	029C-SD-0-2	X
JD74737-10	029C-SD-2-12	X
JD74737-11	029C-R-0-2	X
JD74737-12	029C-R-2-12	X
JD74737-13	030-NS-0-2	X
JD74737-13MS	030-NS-0-2MS	X
JD74737-13MSD	030-NS-0-2MSD	X

LAB ID	CLIENT ID	PFAS
JD74737-14	030-NS-2-12	X
JD74737-15	030-SD-0-2	X
JD74737-16	030-SD-2-12	X
JD74737-17	030-R-0-2	X
JD74737-18	030-R-2-12	X
JD74737-19	034-SD-0-2	X
JD74737-20	034-SD-2-12	X
JD74737-20MS	034-SD-2-12MS	X
JD74737-20MSD	034-SD-2-12MSD	X
JD74737-21	FD-10102023	X
JD74737-22	034-R-0-2	X
JD74737-23	034-R-2-12	X
JD74737-24	RB-10102023	X
JD74737-25	041-SD-0-2	X
JD74737-26	041-SD-2-12	X
JD74737-27	041-R-0-2	X
JD74737-28	041-R-2-12	X
JD74737-29	038-SD-0-2	X
JD74737-30	038-SD-2-12	X
JD74737-31	038-R-0-2	X
JD74737-32	038-R-2-12	X
JD74737-33	043-NS-0-2	X
JD74737-34	043-NS-2-12	X
JD74737-35	043-SD-0-2	X
JD74737-36	043-SD-2-12	X
JD74737-37	043-R-0-2	X
JD74737-38	043-R-2-12	X
JD74737-39	039-SD-0-2	X
JD74737-40	039-SD-2-12	X
JD74737-41	039-R-0-2	X
JD74737-42	039-R-2-12	X
JD74737-42MS	039-R-2-12MS	X
JD74737-42MSD	039-R-2-12MSD	X
JD74737-43	FD-10112023	X
JD74737-44	027C-SD-0-2	X
JD74737-45	027C-SD-2-12	X
JD74737-46	027C-R-0-2	X
JD74737-47	027C-R-2-12	X
JD74737-48	RB-10112023	X
JD74737-49	048B-SD-0-2	X
JD74737-50	048B-SD-2-12	X
JD74737-51	048B-R-0-2	X
JD74737-52	048B-R-2-12	X
JD74737-53	035B-NS-0-2	X
JD74737-54	035B-NS-2-12	X
JD74737-55	035B-SD-0-2	X

LAB ID	CLIENT ID	PFAS
JD74737-56	035B-SD-2-12	X
JD74737-57	035B-R-0-2	X
JD74737-58	035B-R-2-12	X
JD74737-59	042C-SD-0-2	X
JD74737-60	042C-SD-2-12	X
JD74737-61	042C-R-0-2	X
JD74737-62	042C-R-2-12	X
JD74737-63	031A-SD-0-2	X
JD74737-64	031A-SD-2-12	X
JD74737-65	031A-R-0-2	X
JD74737-66	FD-10122023	X
JD74737-67	031A-R-2-12	X
JD74737-67MS	031A-R-2-12MS	X
JD74737-67MSD	031A-R-2-12MSD	X
JD74737-68	026-SD-0-2	X
JD74737-69	026-SD-2-12	X
JD74737-70	026-R-0-2	X
JD74737-71	026-R-2-12	X
JD74737-72	RB-10122023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD74737

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74737-14	030-NS-2-12	13C4PFBA	PFBA	R
JD74737-15	030-SD-0-2	13C4PFBA	PFBA	R
JD74737-16	030-SD-2-12	13C4PFBA	PFBA	R
JD74737-17	030-R-0-2	13C4PFBA	PFBA	R
JD74737-20	034-SD-2-12	13C4PFBA	PFBA	R
JD74737-23	034-R-2-12	13C4PFBA	PFBA	R
JD74737-27	041-R-0-2	13C4PFBA	PFBA	R
JD74737-31	038-R-0-2	13C4PFBA	PFBA	R
JD74737-33	043-NS-0-2	13C4PFBA	PFBA	R
JD74737-34	043-NS-2-12	13C4PFBA	PFBA	R
JD74737-35	043-SD-0-2	13C4PFBA	PFBA	R
JD74737-36	043-SD-2-12	13C4PFBA	PFBA	R
JD74737-37	043-R-0-2	13C4PFBA	PFBA	R
JD74737-41	039-R-0-2	13C4PFBA	PFBA	R
JD74737-42	039-R-2-12	13C4PFBA	PFBA	R
JD74737-44	027C-SD-0-2	13C4PFBA	PFBA	R
JD74737-46	027C-R-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74737-47	027C-R-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-49	048B-SD-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-50	048B-SD-2-12	13C4PFBA	PFBA	R
JD74737-52	048B-R-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-53	035B-NS-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-54	035B-NS-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-55	035B-SD-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-56	035B-SD-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-58	035B-R-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-60	042C-SD-2-12	13C4PFBA	PFBA	R
JD74737-61	042C-R-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-62	042C-R-2-12	13C4PFBA	PFBA	R
JD74737-63	031A-SD-0-2	13C4PFBA	PFB	R

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
		13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-64	031A-SD-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-65	031A-R-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD74737-67	031A-R-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and	No qualification

	>10x the blank result	
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blank, RB-10102023, RB-10112023, RB-10122023 were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using samples JD74737-6/037-SD-2-12, JD74737-13/030-NS-0-2, JD74737-20/034-SD-2-12, JD74737-42/039-R-2-12, JD74737-67/031A-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD74737-13	030-NS-0-2	RPD > 30%	4:2 FTS	UJ
JD74737-20	034-SD-2-12	Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ
JD74737-67	031A-R-2-12	RPD > 30% Recovery < lower control limit of 70%	PFBS PFMPA 3:3FTCA	UJ R for EIS R for EIS

For MS/MSD recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification.

VII.) Laboratory Control Samples (LCS):

All Low Level LCS (LLCS) recovery criteria were met with the following exceptions:

BATCH	Analyte(s)	Lab ID(s)	Client ID(s)	Qualification

BATCH	Analyte(s)	Lab ID(s)	Client ID(s)	Qualification
OP49852	PFTrDA PFDoS	JD74737-46 JD74737-47 JD74737-49 JD74737-50 JD74737-51 JD74737-52 JD74737-53 JD74737-54 JD74737-55 JD74737-56 JD74737-57 JD74737-58 JD74737-59 JD74737-60 JD74737-61 JD74737-62 JD74737-63 JD74737-64 JD74737-65 JD74737-67	027C-R-0-2 027C-R-2-12 048B-SD-0-2 048B-SD-2-12 048B-R-0-2 048B-R-2-12 035B-NS-0-2 035B-NS-2-12 035B-SD-0-2 035B-SD-2-12 035B-R-0-2 035B-R-2-12 042C-SD-0-2 042C-SD-2-12 042C-R-0-2 042C-R-2-12 031A-SD-0-2 031A-SD-2-12 031A-R-0-2 031A-R-2-12	UJ
OP49862	PFNS PFDoS PFMPA 3:3FTCA	JD74737-20 JD74737-66 JD74737-68 JD74737-69 JD74737-70 JD74737-71	034-SD-2-12 FD-10122023 026-SD-0-2 026-SD-2-12 026-R-0-2 026-R-2-12	UJ
OP49838	PFNA* PFOA* PFHpS PFNS MeFOSE PFMPA 3:3FTC	JD74737-27 JD74737-28 JD74737-29 JD74737-30 JD74737-31 JD74737-32 JD74737-33 JD74737-34 JD74737-35 JD74737-36 JD74737-37 JD74737-38 JD74737-39 JD74737-40 JD74737-41 JD74737-42 JD74737-43 JD74737-44 JD74737-45	041-R-0-2 041-R-2-12 038-SD-0-2 038-SD-2-12 038-R-0-2 038-R-2-12 043-NS-0-2 043-NS-2-12 043-SD-0-2 043-SD-2-12 043-R-0-2 043-R-2-12 039-SD-0-2 039-SD-2-12 039-R-0-2 039-R-2-12 FD-10112023 027C-SD-0-2 027C-SD-2-12	UJ

BATCH	Analyte(s)	Lab ID(s)	Client ID(s)	Qualification
OP49835	PFOA *	JD74737-11	029C-R-0-2	J
	EtFOSA	JD74737-12	029C-R-2-12	UJ
	PFMPA	JD74737-13	030-NS-0-2	UJ
	NFDHA	JD74737-14	030-NS-2-12	UJ
	3:3FTCA	JD74737-15	030-SD-0-2	UJ
		JD74737-16	030-SD-2-12	
		JD74737-17	030-R-0-2	
		JD74737-19	034-SD-0-2	
		JD74737-21	FD-10102023	
		JD74737-22	034-R-0-2	
		JD74737-23	034-R-2-12	
		JD74737-25	041-SD-0-2	
		JD74737-26	041-SD-2-12	
OP49971	PFBA	JD74737-18	030-R-2-12	J
	PFPeS			UJ
	PFOS			J
	PFOSA			UJ
	MeFOSAA			UJ
OP49827	PFNS	JD74737-48	RB-10112023	UJ
	MeFOSAA	JD74737-72	RB-10122023	
OP49820	PFNS	JD74737-1	033C-SD-0-2	J
		JD74737-2	033C-SD-2-12	UJ
		JD74737-3	033C-R-0-2	
		JD74737-4	033C-R-2-12	
		JD74737-5	037-SD-0-2	
		JD74737-6	037-SD-2-12	
		JD74737-7	037-R-0-2	
		JD74737-8	037-R-2-12	
		JD74737-9	029C-SD-0-2	
		JD74737-10	029C-SD-2-12	

PFOA is J in all associated samples for batch OP49835 and JD74737-28,JD74737-32 AND EtFOSA is J in JD74737-23 AND PFNA and PFOA is J in JD74737-27, JD74737-29, JD74737-31, JD74737-33, JD74737-34,JD74737-35, JD74737-36, JD74737-38, JD74737-39, JD74737-40, JD74737-41, JD74737-44, and JD74737-45

For LLCS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification.

The LCS recoveries were met with the following exceptions:

Batch	Analyte(s)	Lab ID	Client ID	Qualification
OP49835	PFMPA	JD74737-11	029C-R-0-2	U
	3:3FTCA	JD74737-12	029C-R-2-12	
		JD74737-13	030-NS-0-2	
		JD74737-14	030-NS-2-12	
		JD74737-15	030-SD-0-2	
		JD74737-16	030-SD-2-12	
		JD74737-17	030-R-0-2	

		JD74737-19 JD74737-21 JD74737-22 JD74737-23	034-SD-0-2 FD-10102023 034-R-0-2 034-R-2-12	
OP49835	PFMPA 3:3FTCA	JD74737-25 JD74737-26	041-SD-0-2 041-SD-2-12	UJ
OP49838	PFMPA 3:3FTCA	JD74737-27 JD74737-28 JD74737-29 JD74737-30 JD74737-31 JD74737-32 JD74737-33 JD74737-34 JD74737-35 JD74737-36 JD74737-37 JD74737-38 JD74737-39 JD74737-40 JD74737-41 JD74737-42 JD74737-43 JD74737-44 JD74737-45	041-R-0-2 041-R-2-12 038-SD-0-2 038-SD-2-12 038-R-0-2 038-R-2-12 043-NS-0-2 043-NS-2-12 043-SD-0-2 043-SD-2-12 043-R-0-2 043-R-2-12 039-SD-0-2 039-SD-2-12 039-R-0-2 039-R-2-12 FD-10112023 027C-SD-0-2 027C-SD-2-12	UJ
OP49971	PFMPA 3:3FTCA	JD74737-18	030-R-2-12	UJ

VIII.) Field Duplicates:

Three sets of field duplicate samples (034-SD-2-12 / FD-10102023), (039-R-2-12 / FD-10112023) and (031A-R-0-2 / FD-10122023) was identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD74737-12	029C-R-2-12	13C4PFBA	PFBA	UJ
JD74737-13	030-NS-0-2	13C4PFBA	PFBA	UJ
JD74737-14	030-NS-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74737-15	030-SD-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ
JD74737-16	030-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ
JD74737-19	034-SD-0-2	13C4PFBA	PFBA	J
JD74737-20	034-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-21	FD-10102023	13C4PFBA	PFBA	UJ
JD74737-22	034-R-0-2	13C4PFBA	PFBA	UJ
JD74737-23	034-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-25	041-SD-0-2	13C4PFBA	PFBA	UJ
JD74737-26	041-SD-2-12	13C4PFBA	PFBA	UJ
JD74737-27	041-R-0-2	D9EtFOSE 13C5PFPeA	EtFOSE PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-28	041-R-2-12	13C4PFBA	PFBA	UJ
JD74737-29	038-SD-0-2	13C24:2FTS 13C4PFBA 13C5PFPeA	4:2FTS PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ J UJ
JD74737-30	038-SD-2-12	13C4PFBA	PFBA	UJ
JD74737-31	038-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ
JD74737-32	038-R-2-12	13C4PFBA	PFBA	J
JD74737-33	043-NS-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-34	043-NS-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-35	043-SD-0-2	13C5PFPeA	PFPeA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74737-35	043-SD-0-2	13C5PFPeA	3:3FTCA PFMPA PFMBA	U
JD74737-36	043-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-37	043-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-38	043-R-2-12	13C4PFBA	PFBA	UJ
JD74737-39	039-SD-0-2	13C4PFBA	PFBA	UJ
JD74737-40	039-SD-2-12	13C4PFBA	PFBA	UJ
JD74737-42	039-R-2-12	13C4PFBA	PFBA	J
JD74737-43	FD-10112023	13C4PFBA	PFBA	J
JD74737-44	027C-SD-0-2	13C3HFPO-DA 13C5PFPeA	HFPODA PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-45	027C-SD-2-12	13C4PFBA	PFBA	J
JD74737-46	027C-R-0-2	13C3HFPO-DA	HFPO-DA	UJ
JD74737-47	027C-R-2-12	13C3HFPO-DA 13C5PFHxA	HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ
JD74737-49	048B-SD-0-2	13C24:2FTS 13C3HFPO-DA 13C5PFHxA	4:2FTS HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ
JD74737-50	048B-SD-2-12	13C3HFPO-DA 13C5PFPeA 13C5PFHxA	HFPO-DA PFPeA 3:3FTCA PFMPA PFMBA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ
JD74737-52	048B-R-2-12	13C3HFPO-DA 13C5PFHxA	HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ J UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74737-53	035B-NS-0-2	13C3HFPO-DA 13C5PFHxA	HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ
JD74737-54	035B-NS-2-12	13C3HFPO_DA	HFPO-DA	UJ
JD74737-55	035B-SD-0-2	13C3HFPO_DA	HFPO-DA	UJ
JD74737-56	035B-SD-2-12	13C3HFPO-DA 13C5PFHxA	HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ
JD74737-57	035B-R-0-2	13C4PFBA	PFBA	UJ
JD74737-58	035B-R-2-12	13C3HFPO-DA	HFPO-DA	UJ
JD74737-59	042C-SD-0-2	13C4PFBA	PFBA	UJ
JD74737-60	042C-SD-2-12	13C3HFPO-DA 13C5PFPeA	HFPO-DA 3:3FTCA PFMPA PFMBA	UJ
JD74737-61	042C-R-0-2	13C24:2FTS 13C3HFPO-DA 13C5PFHxA	4:2FTS HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ
JD74737-62	042C-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD74737-63	031A-SD-0-2	13C3HFPO-DA	HFPO-DA	UJ
JD74737-64	031A-SD-2-12	13C3HFPO-DA 13C5PFHxA	HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ
JD74737-65	031A-R-0-2	13C24:2FTS 13C3HFPO-DA 13C5PFHxA	4:2FTS HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ
JD74737-66	FD-10122023	13C4PFBA	PFBA	UJ
JD74737-67	031A-R-2-12	13C3HFPO-DA 13C5PFHxA	HFPO-DA PFHxA 5:3FTCA 7:3FTCA NFDHA	UJ J UJ
JD74737-68	026-SD-0-2	13C4PFBA	PFBA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74737-69	026-SD-2-12	13C4PFBA	PFBA	UJ
JD74737-70	026-R-0-2	13C4PFBA D9-EtFOSE D3-MeFOSA D5-EtFOSA	PFBA EtFOSE MeFOSA EtFOSA	~~UJ~~ J UJ UJ UJ
JD74737-71	026-R-2-12	13C4PFBA	PFBA	UJ

J added AMK 1/16/25

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification, with the exception of D5EtFOSAA which resulted in the qualification of J for EtFOSAA in sample JD74737-1.

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	033C-SD-0-2		
Lab Sample ID:	JD74737-1	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1456.D	1	10/18/23 00:31	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	9.9	0.92	0.13	ug/kg	
2706-90-3	Perfluoropentanoic acid	5.1	0.46	0.081	ug/kg	
307-24-4	Perfluorohexanoic acid	2.6	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	2.4	0.23	0.058	ug/kg	
335-67-1	Perfluorooctanoic acid	2.6	0.23	0.092	ug/kg	
375-95-1	Perfluorononanoic acid	2.8	0.23	0.058	ug/kg	
335-76-2	Perfluorodecanoic acid	2.6	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	2.6	0.23	0.069	ug/kg	
307-55-1	Perfluorododecanoic acid	2.4	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	2.3	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	2.4	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	2.3	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	2.1	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	2.2	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	2.2	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.5	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	2.2	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	2.3	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	2.3	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	10.2	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	10.3	0.92	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	9.8	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	5.0	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	5.0	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	5.1	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	033C-SD-0-2		
Lab Sample ID:	JD74737-1	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	2.5	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	2.2	0.23	0.15	ug/kg	J
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	11.9	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	11.7	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	10.3	0.92	0.21	ug/kg	
919005-14-4	ADONA	10.8	0.92	0.14	ug/kg	
377-73-1	PFMPA	5.0	0.46	0.035	ug/kg	
863090-89-5	PFMBA	5.1	0.46	0.069	ug/kg	
151772-58-6	NFDHA	5.2	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	11.1	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	10.2	0.92	0.21	ug/kg	
113507-82-7	PFEESA	5.2	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	12.8	1.2	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	63.0	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	62.0	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		5-130%
	13C5-PFPeA	104%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	120%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	033C-SD-0-2		
Lab Sample ID:	JD74737-1	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	114%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	134%		40-170%
	d5-EtFOSAA	140% [a]		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	137%		40-200%
	13C2-6:2FTS	143%		40-200%
	13C2-8:2FTS	154%		40-300%
	13C3-HFPO-DA	97%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	033C-SD-2-12		
Lab Sample ID:	JD74737-2	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1457.D	1	10/18/23 00:47	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.24	0.90	0.12	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.086	0.45	0.078	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.10	0.22	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.056	ug/kg	
335-67-1	Perfluorooctanoic acid	0.21	0.22	0.090	ug/kg	J
375-95-1	Perfluorononanoic acid	0.082	0.22	0.056	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.093	0.22	0.078	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.075	0.22	0.067	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.22	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.33	0.22	0.078	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.22	0.056	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.056	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.078	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.067	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	033C-SD-2-12		
Lab Sample ID:	JD74737-2	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.13	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	
863090-89-5	PFMBA	ND	0.45	0.067	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.69	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	103%		5-130%
	13C5-PFPeA	105%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	112%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	116%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	033C-SD-2-12		
Lab Sample ID:	JD74737-2	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	124%		40-170%
	d5-EtFOSAA	153% [a]		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	157%		40-200%
	13C2-6:2FTS	176%		40-200%
	13C2-8:2FTS	143%		40-300%
	13C3-HFPO-DA	96%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	033C-R-0-2		
Lab Sample ID:	JD74737-3	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1458.D	1	10/18/23 01:02	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.083	ug/kg	
307-24-4	Perfluorohexanoic acid	0.067	0.24	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.059	ug/kg	
335-67-1	Perfluorooctanoic acid	0.13	0.24	0.094	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.24	0.059	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.17	0.24	0.083	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.24	0.059	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	033C-R-0-2		
Lab Sample ID:	JD74737-3	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	97%		5-130%
	13C5-PFPeA	101%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	119%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	116%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	033C-R-0-2		
Lab Sample ID:	JD74737-3	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	131%		40-170%
	d5-EtFOSAA	147% [a]		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	146%		40-200%
	13C2-6:2FTS	142%		40-200%
	13C2-8:2FTS	165%		40-300%
	13C3-HFPO-DA	93%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	033C-R-2-12		
Lab Sample ID:	JD74737-4	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1459.D	1	10/18/23 01:17	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.15	1.0	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	0.15	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.063	ug/kg	
335-67-1	Perfluorooctanoic acid	0.30	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.094	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.25	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.62	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	033C-R-2-12		
Lab Sample ID:	JD74737-4	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.50	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	84%		5-130%
	13C5-PFPeA	88%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	79%		40-130%
	13C6-PFDA	81%		40-130%
	13C7-PFUnDA	81%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	58%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	033C-R-2-12		
Lab Sample ID:	JD74737-4	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	62%		10-130%
	d5-EtFOSA	55%		10-130%
	d3-MeFOSAA	143%		40-170%
	d5-EtFOSAA	164% [a]		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	137%		40-200%
	13C2-6:2FTS	186%		40-200%
	13C2-8:2FTS	155%		40-300%
	13C3-HFPO-DA	76%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	037-SD-0-2		
Lab Sample ID:	JD74737-5	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1460.D	1	10/18/23 01:32	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.19	1.0	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.090	ug/kg	
307-24-4	Perfluorohexanoic acid	0.048	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	0.31	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.21	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.099	0.26	0.090	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.35	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.71	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-SD-0-2		
Lab Sample ID:	JD74737-5	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	50%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	111%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-SD-0-2		
Lab Sample ID:	JD74737-5	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	146%		40-170%
	d5-EtFOSAA	191% [a]		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	184%		40-200%
	13C2-6:2FTS	228%		40-200%
	13C2-8:2FTS	293%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	037-SD-2-12		
Lab Sample ID:	JD74737-6	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1461.D	1	10/18/23 01:47	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.19	0.91	0.13	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	
307-24-4	Perfluorohexanoic acid	0.078	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.057	ug/kg	
335-67-1	Perfluorooctanoic acid	0.14	0.23	0.091	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-SD-2-12		
Lab Sample ID:	JD74737-6	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.21	ug/kg	
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	
863090-89-5	PFMBA	ND	0.46	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	99%		5-130%
	13C5-PFPeA	105%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-SD-2-12		
Lab Sample ID:	JD74737-6	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	147%		40-170%
	d5-EtFOSAA	149% [a]		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	155%		40-200%
	13C2-6:2FTS	162%		40-200%
	13C2-8:2FTS	158%		40-300%
	13C3-HFPO-DA	96%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	037-R-0-2		
Lab Sample ID:	JD74737-7	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1462.D	1	10/18/23 02:03	PC	10/17/23 12:10	OP49820	T1Q55
Run #2	1Q1466.D	1	10/18/23 03:04	PC	10/17/23 12:10	OP49820	T1Q55

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2	5.00 g	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	
375-22-4	Perfluorobutanoic acid	0.17 [a]	0.99	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND [a]	0.49	0.086	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	0.042 [a]	0.25	0.037	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND [a]	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	0.13	0.25	0.099	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.12 [a]	0.25	0.099	ug/kg	J
375-95-1	Perfluorononanoic acid	0.070	0.25	0.062	ug/kg	J
375-95-1	Perfluorononanoic acid	0.084 [a]	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND [a]	0.25	0.086	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND [a]	0.25	0.074	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
307-55-1	Perfluorododecanoic acid	ND [a]	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND [a]	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND [a]	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND [a]	0.25	0.086	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND [a]	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND [a]	0.25	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-R-0-2		
Lab Sample ID:	JD74737-7	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
375-92-8	Perfluoroheptanesulfonic acid	ND [a]	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28 [a]	0.25	0.062	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND [a]	0.25	0.17	ug/kg	UJ
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND [a]	0.25	0.14	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND [a]	0.25	0.062	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [a]	0.99	0.34	ug/kg	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [a]	0.99	0.12	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND [a]	0.99	0.23	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
754-91-6	PFOSA	ND [a]	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
31506-32-8	MeFOSA	ND [a]	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND [a]	0.25	0.062	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [a]	0.25	0.099	ug/kg	
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	
2991-50-6	EtFOSAA	ND [a]	0.25	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND [a]	2.5	0.34	ug/kg	
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND [a]	2.5	0.90	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND [a]	0.99	0.22	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-R-0-2		
Lab Sample ID:	JD74737-7	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
919005-14-4	ADONA	ND [a]	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND [a]	0.49	0.037	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	
863090-89-5	PFMBA	ND [a]	0.49	0.074	ug/kg	
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND [a]	0.49	0.16	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND [a]	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND [a]	0.99	0.22	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND [a]	0.49	0.037	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND [a]	1.2	0.30	ug/kg	
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND [a]	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND [a]	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	103%	103%	5-130%
	13C5-PFPeA	104%	108%	40-130%
	13C5-PFHxA	106%	111%	40-130%
	13C4-PFHpA	106%	113%	40-130%
	13C8-PFOA	98%	97%	40-130%
	13C9-PFNA	96%	109%	40-130%
	13C6-PFDA	100%	114%	40-130%
	13C7-PFUnDA	104%	129%	30-130%
	13C2-PFDoDA	108%	114%	10-130%
	13C2-PFTeDA	77%	86%	10-130%
	13C3-PFBS	109%	99%	40-135%
	13C3-PFHxS	119%	96%	40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-R-0-2		
Lab Sample ID:	JD74737-7	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%	102%	40-130%
	13C8-FOSA	102%	108%	40-130%
	d3-MeFOSA	74%	83%	10-130%
	d5-EtFOSA	69%	77%	10-130%
	d3-MeFOSAA	132%	166%	40-170%
	d5-EtFOSAA	145% [b]	150% [b]	25-135%
	d7-MeFOSE	71%	85%	10-130%
	d9-EtFOSE	73%	79%	10-130%
	13C2-4:2FTS	144%	141%	40-200%
	13C2-6:2FTS	142%	147%	40-200%
	13C2-8:2FTS	153%	148%	40-300%
	13C3-HFPO-DA	93%	98%	40-130%

(a) Result is from Run# 2
(b) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	037-R-2-12		
Lab Sample ID:	JD74737-8	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1467.D	1	10/18/23 03:19	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.14	0.90	0.12	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.079	ug/kg	
307-24-4	Perfluorohexanoic acid	0.047	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.056	ug/kg	
335-67-1	Perfluorooctanoic acid	0.16	0.23	0.090	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.23	0.056	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.079	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.079	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.23	0.056	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.056	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.079	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-R-2-12		
Lab Sample ID:	JD74737-8	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.14	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	
863090-89-5	PFMBA	ND	0.45	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		5-130%
	13C5-PFPeA	105%		40-130%
	13C5-PFHxA	109%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	110%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	037-R-2-12		
Lab Sample ID:	JD74737-8	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	145%		40-170%
	d5-EtFOSAA	171% [a]		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	73%		10-130%
	13C2-4:2FTS	154%		40-200%
	13C2-6:2FTS	160%		40-200%
	13C2-8:2FTS	149%		40-300%
	13C3-HFPO-DA	89%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	029C-SD-0-2		
Lab Sample ID:	JD74737-9	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1468.D	1	10/18/23 03:34	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.31	1.2	0.16	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.086	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.087	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.59	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.16	0.30	0.075	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.090	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.52	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	029C-SD-0-2		
Lab Sample ID:	JD74737-9	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	85%		5-130%
	13C5-PFPeA	101%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	86%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	120%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	029C-SD-0-2		
Lab Sample ID:	JD74737-9	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	126%		40-170%
	d5-EtFOSAA	145% [a]		25-135%
	d7-MeFOSE	77%		10-130%
	d9-EtFOSE	68%		10-130%
	13C2-4:2FTS	127%		40-200%
	13C2-6:2FTS	186%		40-200%
	13C2-8:2FTS	152%		40-300%
	13C3-HFPO-DA	92%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	029C-SD-2-12		
Lab Sample ID:	JD74737-10	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1469.D	1	10/18/23 03:49	PC	10/17/23 12:10	OP49820	T1Q55
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.21	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	0.075	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.068	ug/kg	
335-67-1	Perfluorooctanoic acid	0.39	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.078	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	029C-SD-2-12		
Lab Sample ID:	JD74737-10	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	106%		5-130%
	13C5-PFPeA	109%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	121%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	88%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	029C-SD-2-12		
Lab Sample ID:	JD74737-10	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	117%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	69%		10-130%
	d3-MeFOSAA	145%		40-170%
	d5-EtFOSAA	150% [a]		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	171%		40-200%
	13C2-6:2FTS	166%		40-200%
	13C2-8:2FTS	111%		40-300%
	13C3-HFPO-DA	99%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	029C-R-0-2		
Lab Sample ID:	JD74737-11	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1522.D	1	10/19/23 14:18	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.065	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.10	0.29	0.073	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.57	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.21	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.088	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.57	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.088	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	029C-R-0-2		
Lab Sample ID:	JD74737-11	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.044	ug/kg	UJ
863090-89-5	PFMBA	ND	0.59	0.088	ug/kg	
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.91	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	72%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	115%		40-130%
	13C8-PFOA	113%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	113%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	100%		40-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	029C-R-0-2		
Lab Sample ID:	JD74737-11	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	133% [a]		40-130%
	d3-MeFOSA	99%		10-130%
	d5-EtFOSA	98%		10-130%
	d3-MeFOSAA	180% [a]		40-170%
	d5-EtFOSAA	197% [a]		25-135%
	d7-MeFOSE	96%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	144%		40-200%
	13C2-6:2FTS	186%		40-200%
	13C2-8:2FTS	201%		40-300%
	13C3-HFPO-DA	96%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	029C-R-2-12		
Lab Sample ID:	JD74737-12	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1523.D	1	10/19/23 14:33	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.090	ug/kg	
307-24-4	Perfluorohexanoic acid	0.071	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.066	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.60	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	029C-R-2-12		
Lab Sample ID:	JD74737-12	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	55%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	029C-R-2-12		
Lab Sample ID:	JD74737-12	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	115%		40-130%
	d3-MeFOSA	85%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	156%		40-170%
	d5-EtFOSAA	159% [a]		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	107%		40-200%
	13C2-6:2FTS	160%		40-200%
	13C2-8:2FTS	184%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	030-NS-0-2		
Lab Sample ID:	JD74737-13	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1524.D	1	10/19/23 14:48	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.91	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.080	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.23	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.057	ug/kg	
335-67-1	Perfluorooctanoic acid	0.14	0.23	0.091	ug/kg	J J
375-95-1	Perfluorononanoic acid	ND	0.23	0.057	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.23	0.057	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-NS-0-2		
Lab Sample ID:	JD74737-13	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.20	ug/kg	
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	113%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	124%		10-130%
	13C2-PFTeDA	106%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	126%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-NS-0-2		
Lab Sample ID:	JD74737-13	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	133%		40-170%
	d5-EtFOSAA	160% [a]		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	131%		40-200%
	13C2-6:2FTS	179%		40-200%
	13C2-8:2FTS	172%		40-300%
	13C3-HFPO-DA	87%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	030-NS-2-12		
Lab Sample ID:	JD74737-14	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1525.D	1	10/19/23 15:03	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.85	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.43	0.075	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.21	0.032	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.053	ug/kg	
335-67-1	Perfluorooctanoic acid	0.13	0.21	0.085	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.066	0.21	0.053	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.21	0.075	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.064	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.085	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.096	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.075	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.15	0.21	0.053	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.053	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.85	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.85	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.85	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.075	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.064	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.053	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-NS-2-12		
Lab Sample ID:	JD74737-14	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.085	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.78	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.85	0.19	ug/kg	
919005-14-4	ADONA	ND	0.85	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.43	0.064	ug/kg	UJ
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.85	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.85	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.3	0.66	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.3	0.67	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	112%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	121%		30-130%
	13C2-PFDoDA	117%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-NS-2-12		
Lab Sample ID:	JD74737-14	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	128%		40-130%
	13C8-FOSA	122%		40-130%
	d3-MeFOSA	109%		10-130%
	d5-EtFOSA	95%		10-130%
	d3-MeFOSAA	162%		40-170%
	d5-EtFOSAA	178% [a]		25-135%
	d7-MeFOSE	99%		10-130%
	d9-EtFOSE	94%		10-130%
	13C2-4:2FTS	130%		40-200%
	13C2-6:2FTS	137%		40-200%
	13C2-8:2FTS	102%		40-300%
	13C3-HFPO-DA	92%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	030-SD-0-2		
Lab Sample ID:	JD74737-15	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1526.D	1	10/19/23 15:18	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.13	0.47	0.082	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.11	0.24	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.24	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.36	0.24	0.094	ug/kg	J
375-95-1	Perfluorononanoic acid	0.085	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.24	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-SD-0-2		
Lab Sample ID:	JD74737-15	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	UJ
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	43%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	121%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	128%		40-135%
	13C3-PFHxS	125%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-SD-0-2		
Lab Sample ID:	JD74737-15	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	87%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	137%		40-170%
	d5-EtFOSAA	160% [a]		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	144%		40-200%
	13C2-6:2FTS	178%		40-200%
	13C2-8:2FTS	158%		40-300%
	13C3-HFPO-DA	88%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	030-SD-2-12		
Lab Sample ID:	JD74737-16	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1527.D	1	10/19/23 17:08	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.86	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.091	0.43	0.075	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.080	0.21	0.032	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.054	ug/kg	
335-67-1	Perfluorooctanoic acid	0.26	0.21	0.086	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.21	0.054	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.21	0.075	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.064	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.086	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.096	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.075	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.21	0.054	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.054	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.86	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.86	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.86	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.075	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.064	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.054	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-SD-2-12		
Lab Sample ID:	JD74737-16	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.086	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.78	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.86	0.19	ug/kg	
919005-14-4	ADONA	ND	0.86	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.43	0.064	ug/kg	UJ
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.86	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.86	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.66	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	111%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	110%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-SD-2-12		
Lab Sample ID:	JD74737-16	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%		40-130%
	13C8-FOSA	127%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	90%		10-130%
	d3-MeFOSAA	136%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	97%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	157%		40-200%
	13C2-6:2FTS	236% [a]		40-200%
	13C2-8:2FTS	142%		40-300%
	13C3-HFPO-DA	71%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	030-R-0-2		
Lab Sample ID:	JD74737-17	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1528.D	1	10/19/23 17:23	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	
307-24-4	Perfluorohexanoic acid	0.054	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.060	ug/kg	
335-67-1	Perfluorooctanoic acid	0.17	0.24	0.096	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.15	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-R-0-2		
Lab Sample ID:	JD74737-17	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	65%		40-130%
	13C5-PFHxA	115%		40-130%
	13C4-PFHpA	114%		40-130%
	13C8-PFOA	111%		40-130%
	13C9-PFNA	114%		40-130%
	13C6-PFDA	118%		40-130%
	13C7-PFUnDA	125%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-R-0-2		
Lab Sample ID:	JD74737-17	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	114%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	143%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	137%		40-200%
	13C2-6:2FTS	131%		40-200%
	13C2-8:2FTS	180%		40-300%
	13C3-HFPO-DA	85%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	030-R-2-12		
Lab Sample ID:	JD74737-18	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1924.D	1	10/26/23 22:03	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.14	0.88	0.12	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.077	ug/kg	
307-24-4	Perfluorohexanoic acid	0.043	0.22	0.033	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.055	ug/kg	
335-67-1	Perfluorooctanoic acid	0.17	0.22	0.088	ug/kg	J
375-95-1	Perfluorononanoic acid	0.058	0.22	0.055	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.088	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.099	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.077	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.22	0.055	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.88	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.88	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.88	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-R-2-12		
Lab Sample ID:	JD74737-18	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.088	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.80	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.88	0.20	ug/kg	
919005-14-4	ADONA	ND	0.88	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.88	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.88	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	74%		5-130%
	13C5-PFPeA	107%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	116%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	118%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	124%		30-130%
	13C2-PFDoDA	112%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	115%		40-135%
	13C3-PFHxS	124%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	030-R-2-12		
Lab Sample ID:	JD74737-18	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	114%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	137%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	68%		10-130%
	13C2-4:2FTS	154%		40-200%
	13C2-6:2FTS	161%		40-200%
	13C2-8:2FTS	141%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWl 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	034-SD-0-2		
Lab Sample ID:	JD74737-19	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1530.D	1	10/19/23 17:53	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.55	0.93	0.13	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.081	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.38	0.23	0.093	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.083	0.23	0.070	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.57	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	034-SD-0-2		
Lab Sample ID:	JD74737-19	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	109%		40-130%
	13C4-PFHpA	107%		40-130%
	13C8-PFOA	110%		40-130%
	13C9-PFNA	129%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	120%		30-130%
	13C2-PFDoDA	118%		10-130%
	13C2-PFTeDA	108%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	034-SD-0-2		
Lab Sample ID:	JD74737-19	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	122%		40-130%
	d3-MeFOSA	89%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	152%		40-170%
	d5-EtFOSAA	163% [a]		25-135%
	d7-MeFOSE	92%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	162%		40-200%
	13C2-6:2FTS	168%		40-200%
	13C2-8:2FTS	153%		40-300%
	13C3-HFPO-DA	85%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	034-SD-2-12		
Lab Sample ID:	JD74737-20	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1607.D	1	10/20/23 18:14	PC	10/19/23 15:45	OP49862	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.86	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.43	0.075	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.22	0.032	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.054	ug/kg	
335-67-1	Perfluorooctanoic acid	0.21	0.22	0.086	ug/kg	J
375-95-1	Perfluorononanoic acid	0.085	0.22	0.054	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.075	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.065	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.086	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.097	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.075	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.22	0.054	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.054	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.86	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.86	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.86	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.075	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.065	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.054	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	034-SD-2-12		
Lab Sample ID:	JD74737-20	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.086	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.79	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.86	0.19	ug/kg	
919005-14-4	ADONA	ND	0.86	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.43	0.065	ug/kg	UJ
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.86	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.86	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.67	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	48%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	034-SD-2-12		
Lab Sample ID:	JD74737-20	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	125%		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	135%		40-200%
	13C2-6:2FTS	127%		40-200%
	13C2-8:2FTS	131%		40-300%
	13C3-HFPO-DA	74%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	FD-10102023		
Lab Sample ID:	JD74737-21	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1531.D	1	10/19/23 18:09	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.87	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.076	ug/kg	
307-24-4	Perfluorohexanoic acid	0.050	0.22	0.033	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.075	0.22	0.054	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.26	0.22	0.087	ug/kg	J
375-95-1	Perfluorononanoic acid	0.086	0.22	0.054	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.076	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.065	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.087	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.098	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.076	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.22	0.054	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.054	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.87	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.87	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.87	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.076	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.065	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.054	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10102023		
Lab Sample ID:	JD74737-21	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.087	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.79	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.87	0.20	ug/kg	
919005-14-4	ADONA	ND	0.87	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.065	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.87	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.87	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.67	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.69	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	116%		40-130%
	13C6-PFDA	120%		40-130%
	13C7-PFUnDA	125%		30-130%
	13C2-PFDoDA	115%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	117%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10102023		
Lab Sample ID:	JD74737-21	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%		40-130%
	13C8-FOSA	123%		40-130%
	d3-MeFOSA	95%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	160%		40-170%
	d5-EtFOSAA	164% [a]		25-135%
	d7-MeFOSE	92%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	133%		40-200%
	13C2-6:2FTS	149%		40-200%
	13C2-8:2FTS	145%		40-300%
	13C3-HFPO-DA	95%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	034-R-0-2		
Lab Sample ID:	JD74737-22	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1536.D	1	10/19/23 19:25	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.90	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.079	ug/kg	
307-24-4	Perfluorohexanoic acid	0.077	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.086	0.23	0.056	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.091	0.23	0.090	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.13	0.23	0.056	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.15	0.23	0.079	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.15	0.23	0.068	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.23	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.079	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.82	0.23	0.056	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.056	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.079	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.056	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	034-R-0-2		
Lab Sample ID:	JD74737-22	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.14	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	118%		40-130%
	13C6-PFDA	127%		40-130%
	13C7-PFUnDA	123%		30-130%
	13C2-PFDoDA	122%		10-130%
	13C2-PFTeDA	103%		10-130%
	13C3-PFBS	123%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	034-R-0-2		
Lab Sample ID:	JD74737-22	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	117%		40-130%
	13C8-FOSA	134% [a]		40-130%
	d3-MeFOSA	96%		10-130%
	d5-EtFOSA	99%		10-130%
	d3-MeFOSAA	172% [a]		40-170%
	d5-EtFOSAA	197% [a]		25-135%
	d7-MeFOSE	103%		10-130%
	d9-EtFOSE	95%		10-130%
	13C2-4:2FTS	171%		40-200%
	13C2-6:2FTS	217% [a]		40-200%
	13C2-8:2FTS	201%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	034-R-2-12		
Lab Sample ID:	JD74737-23	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1537.D	1	10/19/23 19:40	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.84	0.11	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.42	0.073	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.21	0.031	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.052	ug/kg	
335-67-1	Perfluorooctanoic acid	0.11	0.21	0.084	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.095	0.21	0.052	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.21	0.073	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.087	0.21	0.063	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.21	0.084	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.094	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.10	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.073	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.10	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.11	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.10	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.49	0.21	0.052	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.11	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.052	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.84	0.29	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.84	0.10	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.84	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.073	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.063	ug/kg	
4151-50-2	EtFOSA	0.058	0.21	0.052	ug/kg	J J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	034-R-2-12		
Lab Sample ID:	JD74737-23	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.084	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.29	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.76	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.84	0.19	ug/kg	
919005-14-4	ADONA	ND	0.84	0.13	ug/kg	
377-73-1	PFMPA	ND	0.42	0.031	ug/kg	UJ
863090-89-5	PFMBA	ND	0.42	0.063	ug/kg	UJ
151772-58-6	NFDHA	ND	0.42	0.14	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.84	0.27	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.84	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.42	0.031	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.2	0.65	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.2	0.66	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	109%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	112%		40-135%
	13C3-PFHxS	116%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	034-R-2-12		
Lab Sample ID:	JD74737-23	**Date Sampled:**	10/10/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	113%		40-130%
	d3-MeFOSA	96%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	149%		40-170%
	d5-EtFOSAA	157% [a]		25-135%
	d7-MeFOSE	92%		10-130%
	d9-EtFOSE	92%		10-130%
	13C2-4:2FTS	148%		40-200%
	13C2-6:2FTS	164%		40-200%
	13C2-8:2FTS	142%		40-300%
	13C3-HFPO-DA	88%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10102023		
Lab Sample ID:	JD74737-24	**Date Sampled:**	10/10/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1494.D	1	10/18/23 10:11	PC	10/17/23 14:42	OP49834	T1Q55
Run #2							

	Initial Volume	Final Volume
Run #1	537 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0074	0.00087	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0037	0.00068	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00047	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00070	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00037	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00058	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00051	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00072	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00074	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00071	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00061	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00094	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00091	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0013	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00037	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0074	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0074	0.00085	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0074	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00064	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00060	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00049	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10102023		
Lab Sample ID:	JD74737-24	**Date Sampled:**	10/10/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00047	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00085	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0074	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0074	0.0011	ug/l	
377-73-1	PFMPA	ND	0.0037	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0037	0.00052	ug/l	
151772-58-6	NFDHA	ND	0.0037	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0074	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0074	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0037	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0093	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.047	0.0066	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.047	0.0058	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		5-130%
	13C5-PFPeA	107%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	111%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	124%		40-135%
	13C3-PFHxS	125%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10102023		
Lab Sample ID:	JD74737-24	**Date Sampled:**	10/10/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	118%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	134%		40-170%
	d5-EtFOSAA	148% [a]		25-135%
	d7-MeFOSE	98%		10-130%
	d9-EtFOSE	94%		10-130%
	13C2-4:2FTS	196%		40-200%
	13C2-6:2FTS	131%		40-200%
	13C2-8:2FTS	160%		40-300%
	13C3-HFPO-DA	93%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	041-SD-0-2		
Lab Sample ID:	JD74737-25	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1538.D	1	10/19/23 19:56	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.071	ug/kg	
335-67-1	Perfluorooctanoic acid	0.15	0.29	0.11	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.14	0.29	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.34	0.29	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.071	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	041-SD-0-2		
Lab Sample ID:	JD74737-25	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	55%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	041-SD-0-2		
Lab Sample ID:	JD74737-25	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	126%		40-170%
	d5-EtFOSAA	154% [a]		25-135%
	d7-MeFOSE	77%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	159%		40-200%
	13C2-6:2FTS	166%		40-200%
	13C2-8:2FTS	166%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	041-SD-2-12		
Lab Sample ID:	JD74737-26	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1539.D	1	10/19/23 20:11	PC	10/18/23 16:10	OP49835	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.098	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.070	ug/kg	
335-67-1	Perfluorooctanoic acid	0.20	0.28	0.11	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.073	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.084	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.28	0.070	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	041-SD-2-12		
Lab Sample ID:	JD74737-26	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	111%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	120%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	113%		40-135%
	13C3-PFHxS	107%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	041-SD-2-12		
Lab Sample ID:	JD74737-26	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	107%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	145%		40-170%
	d5-EtFOSAA	164% [a]		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	163%		40-200%
	13C2-6:2FTS	169%		40-200%
	13C2-8:2FTS	160%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.27

Client Sample ID:	041-R-0-2		
Lab Sample ID:	JD74737-27	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	48.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1545.D	1	10/19/23 21:42	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.6	0.22	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.79	0.14	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.40	0.059	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.40	0.099	ug/kg	
335-67-1	Perfluorooctanoic acid	0.33	0.40	0.16	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.24	0.40	0.099	ug/kg	J J
335-76-2	Perfluorodecanoic acid	ND	0.40	0.14	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.40	0.12	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.40	0.16	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.40	0.18	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.40	0.20	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.40	0.14	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.40	0.20	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.40	0.22	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.40	0.20	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.55	0.40	0.099	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.40	0.28	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.40	0.22	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.40	0.099	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.6	0.56	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.6	0.20	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.6	0.38	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.32	0.40	0.14	ug/kg	J
31506-32-8	MeFOSA	ND	0.40	0.12	ug/kg	
4151-50-2	EtFOSA	ND	0.40	0.099	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	041-R-0-2		
Lab Sample ID:	JD74737-27	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	48.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.40	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	0.40	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	4.0	0.56	ug/kg	UJ
1691-99-2	EtFOSE	ND	4.0	1.4	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.6	0.36	ug/kg	
919005-14-4	ADONA	ND	1.6	0.24	ug/kg	
377-73-1	PFMPA	ND	0.79	0.059	ug/kg	UJ
863090-89-5	PFMBA	ND	0.79	0.12	ug/kg	UJ
151772-58-6	NFDHA	ND	0.79	0.26	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.6	0.52	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.6	0.36	ug/kg	
113507-82-7	PFEESA	ND	0.79	0.059	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.0	0.48	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.9	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.9	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	26% [a]		40-130%
	13C5-PFHxA	75%		40-130%
	13C4-PFHpA	82%		40-130%
	13C8-PFOA	85%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	65%		10-130%
	13C3-PFBS	74%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	041-R-0-2		
Lab Sample ID:	JD74737-27	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	48.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	74%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	58%		10-130%
	d3-MeFOSAA	77%		40-170%
	d5-EtFOSAA	118%		25-135%
	d7-MeFOSE	52%		10-130%
	d9-EtFOSE	47%		10-130%
	13C2-4:2FTS	96%		40-200%
	13C2-6:2FTS	105%		40-200%
	13C2-8:2FTS	156%		40-300%
	13C3-HFPO-DA	61%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	041-R-2-12		
Lab Sample ID:	JD74737-28	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1546.D	1	10/19/23 21:58	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.30	0.045	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.30	0.074	ug/kg	
335-67-1	Perfluorooctanoic acid	0.13	0.30	0.12	ug/kg	J J
375-95-1	Perfluorononanoic acid	ND	0.30	0.074	ug/kg	UJ
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.089	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.30	0.074	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.074	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.19	0.30	0.10	ug/kg	J
31506-32-8	MeFOSA	ND	0.30	0.089	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.074	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	041-R-2-12		
Lab Sample ID:	JD74737-28	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	UJ
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.089	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.4	0.92	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.4	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	76%		40-130%
	13C4-PFHpA	78%		40-130%
	13C8-PFOA	77%		40-130%
	13C9-PFNA	71%		40-130%
	13C6-PFDA	82%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	57%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	75%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	041-R-2-12		
Lab Sample ID:	JD74737-28	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	53%		10-130%
	d5-EtFOSA	56%		10-130%
	d3-MeFOSAA	103%		40-170%
	d5-EtFOSAA	127%		25-135%
	d7-MeFOSE	55%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	116%		40-200%
	13C2-6:2FTS	115%		40-200%
	13C2-8:2FTS	105%		40-300%
	13C3-HFPO-DA	70%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	038-SD-0-2		
Lab Sample ID:	JD74737-29	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1547.D	1	10/19/23 22:13	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.66	0.95	0.13	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.18	0.48	0.083	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.099	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.094	0.24	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.24	0.095	ug/kg	J
375-95-1	Perfluorononanoic acid	0.095	0.24	0.059	ug/kg	J J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.19	0.24	0.071	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.095	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.71	0.24	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	0.37	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.95	0.33	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.95	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.95	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.12	0.24	0.083	ug/kg	J
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	038-SD-0-2		
Lab Sample ID:	JD74737-29	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.095	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.95	0.21	ug/kg	
919005-14-4	ADONA	ND	0.95	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.071	ug/kg	UJ
151772-58-6	NFDHA	ND	0.48	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.95	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.95	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	47%		40-130%
	13C5-PFHxA	76%		40-130%
	13C4-PFHpA	86%		40-130%
	13C8-PFOA	79%		40-130%
	13C9-PFNA	82%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	81%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	56%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	83%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	038-SD-0-2		
Lab Sample ID:	JD74737-29	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	81%		40-130%
	13C8-FOSA	91%		40-130%
	d3-MeFOSA	59%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	133%		40-170%
	d5-EtFOSAA	145% [a]		25-135%
	d7-MeFOSE	56%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	47%		40-200%
	13C2-6:2FTS	110%		40-200%
	13C2-8:2FTS	160%		40-300%
	13C3-HFPO-DA	63%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	038-SD-2-12		
Lab Sample ID:	JD74737-30	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1548.D	1	10/19/23 22:28	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.87	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.076	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.055	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.087	ug/kg	UJ
375-95-1	Perfluorononanoic acid	ND	0.22	0.055	ug/kg	UJ
335-76-2	Perfluorodecanoic acid	ND	0.22	0.076	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.087	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.098	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.076	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.52	0.22	0.055	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.87	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.87	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.87	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.076	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	038-SD-2-12		
Lab Sample ID:	JD74737-30	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.087	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.2	0.80	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.87	0.20	ug/kg	
919005-14-4	ADONA	ND	0.87	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.87	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.87	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	86%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	038-SD-2-12		
Lab Sample ID:	JD74737-30	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	64%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	133%		40-170%
	d5-EtFOSAA	125%		25-135%
	d7-MeFOSE	66%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	137%		40-200%
	13C2-6:2FTS	136%		40-200%
	13C2-8:2FTS	134%		40-300%
	13C3-HFPO-DA	74%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	038-R-0-2		
Lab Sample ID:	JD74737-31	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1549.D	1	10/19/23 22:43	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	1.5	1.1	0.15	ug/kg		R
2706-90-3	Perfluoropentanoic acid	0.38	0.56	0.098	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	0.38	0.28	0.042	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.33	0.28	0.070	ug/kg		
335-67-1	Perfluorooctanoic acid	1.3	0.28	0.11	ug/kg		J
375-95-1	Perfluorononanoic acid	0.24	0.28	0.070	ug/kg	J	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.089	0.28	0.084	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.17	0.28	0.098	ug/kg	J	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	0.16	0.28	0.15	ug/kg	J	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg		UJ
1763-23-1	Perfluorooctanesulfonic acid	1.2	0.28	0.070	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg		UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.28	0.098	ug/kg		
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg		
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	038-R-0-2		
Lab Sample ID:	JD74737-31	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	UJ
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	88%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	038-R-0-2		
Lab Sample ID:	JD74737-31	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	115%		40-130%
	13C8-FOSA	127%		40-130%
	d3-MeFOSA	94%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	166%		40-170%
	d5-EtFOSAA	204% [a]		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	192%		40-200%
	13C2-8:2FTS	208%		40-300%
	13C3-HFPO-DA	70%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	038-R-2-12		
Lab Sample ID:	JD74737-32	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1550.D	1	10/19/23 22:58	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.35	0.97	0.13	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	0.13	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	0.39	0.24	0.097	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.24	0.061	ug/kg	UJ
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.18	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	038-R-2-12		
Lab Sample ID:	JD74737-32	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	42%		5-130%
	13C5-PFPeA	72%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	038-R-2-12		
Lab Sample ID:	JD74737-32	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	140%		40-170%
	d5-EtFOSAA	157% [a]		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	141%		40-200%
	13C2-6:2FTS	150%		40-200%
	13C2-8:2FTS	146%		40-300%
	13C3-HFPO-DA	77%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	043-NS-0-2		
Lab Sample ID:	JD74737-33	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1551.D	1	10/19/23 23:14	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.088	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.063	ug/kg	
335-67-1	Perfluorooctanoic acid	0.16	0.25	0.10	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.16	0.25	0.063	ug/kg	J J
335-76-2	Perfluorodecanoic acid	0.14	0.25	0.088	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.097	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.86	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.51	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-NS-0-2		
Lab Sample ID:	JD74737-33	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	44%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	111%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	120%		40-135%
	13C3-PFHxS	130%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-NS-0-2		
Lab Sample ID:	JD74737-33	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	124%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	57%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	154%		40-200%
	13C2-6:2FTS	182%		40-200%
	13C2-8:2FTS	173%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	043-NS-2-12
Lab Sample ID:	JD74737-34
Matrix:	SO - Soil
Method:	EPA DRAFT 1633 EPA 1633 DRAFT
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY
Date Sampled:	10/11/23
Date Received:	10/13/23
Percent Solids:	81.6

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1556.D	1	10/20/23 00:15	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.055	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.060	ug/kg	
335-67-1	Perfluorooctanoic acid	0.16	0.24	0.096	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.095	0.24	0.060	ug/kg	J J
335-76-2	Perfluorodecanoic acid	0.088	0.24	0.084	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.081	0.24	0.072	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.53	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	0.23	0.24	0.13	ug/kg	J
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.29	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-NS-2-12		
Lab Sample ID:	JD74737-34	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	UJ
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-NS-2-12		
Lab Sample ID:	JD74737-34	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	65%		10-130%
	d5-EtFOSA	62%		10-130%
	d3-MeFOSAA	108%		40-170%
	d5-EtFOSAA	129%		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	113%		40-200%
	13C2-6:2FTS	124%		40-200%
	13C2-8:2FTS	136%		40-300%
	13C3-HFPO-DA	85%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	043-SD-0-2		
Lab Sample ID:	JD74737-35	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1557.D	1	10/20/23 00:30	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.27	0.11	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.14	0.27	0.067	ug/kg	J J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.44	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.27	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	0.20	0.27	0.081	ug/kg	J
4151-50-2	EtFOSA	0.22	0.27	0.067	ug/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-SD-0-2		
Lab Sample ID:	JD74737-35	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	UJ
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	48%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-SD-0-2		
Lab Sample ID:	JD74737-35	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	131%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	140%		40-200%
	13C2-6:2FTS	160%		40-200%
	13C2-8:2FTS	147%		40-300%
	13C3-HFPO-DA	81%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	043-SD-2-12		
Lab Sample ID:	JD74737-36	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1558.D	1	10/20/23 00:45	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.075	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.068	0.25	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.25	0.10	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.15	0.25	0.064	ug/kg	J J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.25	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.19	0.25	0.089	ug/kg	J
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-SD-2-12		
Lab Sample ID:	JD74737-36	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	37% [a]		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-SD-2-12		
Lab Sample ID:	JD74737-36	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	145% [a]		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	63%		10-130%
	13C2-4:2FTS	124%		40-200%
	13C2-6:2FTS	137%		40-200%
	13C2-8:2FTS	127%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	043-R-0-2		
Lab Sample ID:	JD74737-37	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1559.D	1	10/20/23 01:00	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.65	0.11	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.073	0.33	0.049	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.14	0.33	0.082	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.33	0.13	ug/kg	J J
375-95-1	Perfluorononanoic acid	0.27	0.33	0.082	ug/kg	J J
335-76-2	Perfluorodecanoic acid	ND	0.33	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.19	0.33	0.098	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.16	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.80	0.33	0.082	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.082	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.46	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.15	0.33	0.11	ug/kg	J
31506-32-8	MeFOSA	ND	0.33	0.098	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.082	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-R-0-2		
Lab Sample ID:	JD74737-37	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.46	ug/kg	UJ
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.65	0.049	ug/kg	UJ
863090-89-5	PFMBA	ND	0.65	0.098	ug/kg	UJ
151772-58-6	NFDHA	ND	0.65	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.65	0.049	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.2	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.2	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	122%		30-130%
	13C2-PFDoDA	124%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	143% [a]		40-135%
	13C3-PFHxS	156% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-R-0-2		
Lab Sample ID:	JD74737-37	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	116%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	146%		40-170%
	d5-EtFOSAA	178% [a]		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	191%		40-200%
	13C2-6:2FTS	216% [a]		40-200%
	13C2-8:2FTS	238%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	043-R-2-12		
Lab Sample ID:	JD74737-38	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1560.D	1	10/20/23 01:15	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg		
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.11	0.29	0.072	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.49	0.29	0.12	ug/kg		J
375-95-1	Perfluorononanoic acid	0.16	0.29	0.072	ug/kg	J	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.089	0.29	0.086	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	UJ	
1763-23-1	Perfluorooctanesulfonic acid	0.87	0.29	0.072	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	UJ	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	0.10	0.29	0.10	ug/kg	J	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg		
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-R-2-12		
Lab Sample ID:	JD74737-38	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	127%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	043-R-2-12		
Lab Sample ID:	JD74737-38	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	129%		40-170%
	d5-EtFOSAA	138% [a]		25-135%
	d7-MeFOSE	67%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	124%		40-200%
	13C2-6:2FTS	135%		40-200%
	13C2-8:2FTS	142%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	039-SD-0-2		
Lab Sample ID:	JD74737-39	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1561.D	1	10/20/23 01:31	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	0.079	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.072	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.28	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.27	0.067	ug/kg	J J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.12	0.27	0.093	ug/kg	J
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	039-SD-0-2		
Lab Sample ID:	JD74737-39	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	116%		40-130%
	13C7-PFUnDA	110%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	039-SD-0-2		
Lab Sample ID:	JD74737-39	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	65%		10-130%
	d5-EtFOSA	58%		10-130%
	d3-MeFOSAA	120%		40-170%
	d5-EtFOSAA	137% [a]		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	64%		10-130%
	13C2-4:2FTS	123%		40-200%
	13C2-6:2FTS	145%		40-200%
	13C2-8:2FTS	137%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	039-SD-2-12		
Lab Sample ID:	JD74737-40	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1562.D	1	10/20/23 01:46	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.52	0.090	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.10	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.078	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.36	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.26	0.065	ug/kg	J J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.37	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.14	0.26	0.090	ug/kg	J
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	039-SD-2-12		
Lab Sample ID:	JD74737-40	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	112%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	121%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	039-SD-2-12		
Lab Sample ID:	JD74737-40	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	132%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	64%		10-130%
	13C2-4:2FTS	143%		40-200%
	13C2-6:2FTS	162%		40-200%
	13C2-8:2FTS	201%		40-300%
	13C3-HFPO-DA	83%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	039-R-0-2		
Lab Sample ID:	JD74737-41	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1563.D	1	10/20/23 02:01	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.42	0.60	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.39	0.30	0.045	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.15	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.65	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.20	0.30	0.075	ug/kg	J J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.51	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.31	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	039-R-0-2		
Lab Sample ID:	JD74737-41	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	UJ
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	039-R-0-2		
Lab Sample ID:	JD74737-41	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	128%		40-170%
	d5-EtFOSAA	136% [a]		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	117%		40-200%
	13C2-6:2FTS	130%		40-200%
	13C2-8:2FTS	141%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/20/23

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.42

Client Sample ID:	039-R-2-12		
Lab Sample ID:	JD74737-42	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1564.D	1	10/20/23 02:16	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	1.0	1.1	0.15	ug/kg	~~J~~ ~~J~~ R	R added AMK 1/15/25
2706-90-3	Perfluoropentanoic acid	0.52	0.55	0.096	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.58	0.27	0.041	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.22	0.27	0.069	ug/kg	J	
335-67-1	Perfluorooctanoic acid	1.2	0.27	0.11	ug/kg	J	
375-95-1	Perfluorononanoic acid	0.29	0.27	0.069	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.096	ug/kg		
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg		
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.16	0.27	0.096	ug/kg	J	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	UJ	
1763-23-1	Perfluorooctanesulfonic acid	0.66	0.27	0.069	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.069	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	0.12	0.27	0.096	ug/kg	J	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg		
4151-50-2	EtFOSA	ND	0.27	0.069	ug/kg		

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	039-R-2-12		
Lab Sample ID:	JD74737-42	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	83%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	039-R-2-12		
Lab Sample ID:	JD74737-42	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	130%		40-170%
	d5-EtFOSAA	145% [a]		25-135%
	d7-MeFOSE	58%		10-130%
	d9-EtFOSE	62%		10-130%
	13C2-4:2FTS	129%		40-200%
	13C2-6:2FTS	164%		40-200%
	13C2-8:2FTS	154%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10112023		
Lab Sample ID:	JD74737-43	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1568.D	1	10/20/23 03:17	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.1	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.52	0.54	0.095	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.50	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.24	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	1.1	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.27	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.14	0.27	0.095	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.39	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.16	0.27	0.095	ug/kg	J
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10112023		
Lab Sample ID:	JD74737-43	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	21%		5-130%
	13C5-PFPeA	77%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	53%		10-130%
	13C2-PFTeDA	1% [a]		10-130%
	13C3-PFBS	149% [a]		40-135%
	13C3-PFHxS	116%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10112023		
Lab Sample ID:	JD74737-43	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	63%		40-130%
	d3-MeFOSA	46%		10-130%
	d5-EtFOSA	32%		10-130%
	d3-MeFOSAA	160%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	42%		10-130%
	d9-EtFOSE	33%		10-130%
	13C2-4:2FTS	171%		40-200%
	13C2-6:2FTS	192%		40-200%
	13C2-8:2FTS	193%		40-300%
	13C3-HFPO-DA	85%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	027C-SD-0-2		
Lab Sample ID:	JD74737-44	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1569.D	1	10/20/23 03:33	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.2	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.53	0.56	0.098	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.25	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.25	0.28	0.070	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.64	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.54	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.51	0.28	0.098	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.84	0.28	0.084	ug/kg	
307-55-1	Perfluorododecanoic acid	0.29	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	0.41	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	2.2	0.28	0.070	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	027C-SD-0-2		
Lab Sample ID:	JD74737-44	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	UJ
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	UJ
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	71%		40-130%
	13C4-PFHpA	76%		40-130%
	13C8-PFOA	80%		40-130%
	13C9-PFNA	77%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	84%		30-130%
	13C2-PFDoDA	78%		10-130%
	13C2-PFTeDA	41%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	027C-SD-0-2		
Lab Sample ID:	JD74737-44	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	57%		10-130%
	d3-MeFOSAA	132%		40-170%
	d5-EtFOSAA	166% [a]		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	154%		40-200%
	13C2-6:2FTS	206% [a]		40-200%
	13C2-8:2FTS	218%		40-300%
	13C3-HFPO-DA	49%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	027C-SD-2-12		
Lab Sample ID:	JD74737-45	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1570.D	1	10/20/23 03:48	PC	10/19/23 09:01	OP49838	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.38	0.94	0.13	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.10	0.47	0.082	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.10	0.23	0.035	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.12	0.23	0.059	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.60	0.23	0.094	ug/kg		J
375-95-1	Perfluorononanoic acid	0.24	0.23	0.059	ug/kg		J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.082	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.072	0.23	0.070	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.094	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.11	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.082	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	UJ	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.23	0.059	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	UJ	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.059	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.23	0.082	ug/kg		
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg		
4151-50-2	EtFOSA	ND	0.23	0.059	ug/kg		

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	027C-SD-2-12		
Lab Sample ID:	JD74737-45	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.3	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	46%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	113%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	027C-SD-2-12		
Lab Sample ID:	JD74737-45	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	142%		40-170%
	d5-EtFOSAA	166% [a]		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	68%		10-130%
	13C2-4:2FTS	137%		40-200%
	13C2-6:2FTS	190%		40-200%
	13C2-8:2FTS	159%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	027C-R-0-2		
Lab Sample ID:	JD74737-46	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1576.D	1	10/20/23 05:19	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.80	0.50	0.088	ug/kg	R
307-24-4	Perfluorohexanoic acid	0.36	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.24	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.57	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.27	0.25	0.063	ug/kg	
335-76-2	Perfluorodecanoic acid	0.12	0.25	0.088	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.21	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.5	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	027C-R-0-2		
Lab Sample ID:	JD74737-46	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	UJ
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	R
863090-89-5	PFMBA	ND	0.50	0.076	ug/kg	R
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	8% [a]		40-130%
	13C5-PFHxA	50%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	120%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	110%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	58%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	027C-R-0-2		
Lab Sample ID:	JD74737-46	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	115%		40-130%
	d3-MeFOSA	104%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	175% [a]		40-170%
	d5-EtFOSAA	216% [a]		25-135%
	d7-MeFOSE	102%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	68%		40-200%
	13C2-6:2FTS	188%		40-200%
	13C2-8:2FTS	211%		40-300%
	13C3-HFPO-DA	42%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	027C-R-2-12		
Lab Sample ID:	JD74737-47	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1577.D	1	10/20/23 05:35	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	R
307-24-4	Perfluorohexanoic acid	0.16	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.70	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.24	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.52	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	027C-R-2-12		
Lab Sample ID:	JD74737-47	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	R
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	R
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	7% [a]		40-130%
	13C5-PFHxA	48%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	58%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	027C-R-2-12		
Lab Sample ID:	JD74737-47	**Date Sampled:**	10/11/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	124%		40-130%
	13C8-FOSA	132% [a]		40-130%
	d3-MeFOSA	99%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	183% [a]		40-170%
	d5-EtFOSAA	204% [a]		25-135%
	d7-MeFOSE	98%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	50%		40-200%
	13C2-6:2FTS	179%		40-200%
	13C2-8:2FTS	169%		40-300%
	13C3-HFPO-DA	35% [a]		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10112023		
Lab Sample ID:	JD74737-48	**Date Sampled:**	10/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1437.D	1	10/17/23 19:42	PC	10/17/23 11:19	OP49827	T1Q55
Run #2							

	Initial Volume	Final Volume
Run #1	518 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0077	0.00090	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0039	0.00070	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00048	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00072	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00039	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00060	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00073	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00064	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00097	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00095	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00042	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00039	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0077	0.00088	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00062	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10112023		
Lab Sample ID:	JD74737-48	**Date Sampled:**	10/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	UJ
2991-50-6	EtFOSAA	ND	0.0019	0.00088	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0039	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0039	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0039	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0039	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0097	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0069	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0060	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	104%		5-130%
	13C5-PFPeA	107%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	122%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	112%		40-135%
	13C3-PFHxS	116%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10112023		
Lab Sample ID:	JD74737-48	**Date Sampled:**	10/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	123%		40-170%
	d5-EtFOSAA	123%		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	167%		40-200%
	13C2-6:2FTS	113%		40-200%
	13C2-8:2FTS	151%		40-300%
	13C3-HFPO-DA	97%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	048B-SD-0-2		
Lab Sample ID:	JD74737-49	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1581.D	1	10/20/23 06:36	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.081	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	UJ
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.058	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.23	0.093	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.23	0.058	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.49

Client Sample ID:	048B-SD-0-2		
Lab Sample ID:	JD74737-49	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS							
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg		
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg		
PERFLUOROOCTANE SULFONAMIDO ETHANOLS							
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg		
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg		
PER and POLYFLUOROETHER CARBOXYLIC ACIDS							
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	UJ	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg		
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	~~UJ~~- R	R added by AMK 1/15/25
863090-89-5	PFMBA	ND	0.46	0.070	ug/kg	-~~UJ~~ R	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	UJ	
PER and POLYFLUOROETHER SULFONIC ACIDS							
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg		
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg		
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg		
FLUOROTELOMER CARBOXYLIC ACIDS							
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	~~UJ~~- R	R added by AMK 1/15/25
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	UJ	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	UJ	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	7% [a]		40-130%
	13C5-PFHxA	47%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	57%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	048B-SD-0-2		
Lab Sample ID:	JD74737-49	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	116%		40-170%
	d5-EtFOSAA	127%		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	49%		40-200%
	13C2-6:2FTS	166%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	34% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	048B-SD-2-12		
Lab Sample ID:	JD74737-50	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1582.D	1	10/20/23 06:51	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.082	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	UJ
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.058	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.23	0.093	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.23	0.058	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	048B-SD-2-12		
Lab Sample ID:	JD74737-50	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	UJ
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	UJ
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.74	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	10% [a]		40-130%
	13C5-PFHxA	63%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	048B-SD-2-12		
Lab Sample ID:	JD74737-50	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	89%		10-130%
	d3-MeFOSAA	138%		40-170%
	d5-EtFOSAA	140% [a]		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	87%		40-200%
	13C2-6:2FTS	166%		40-200%
	13C2-8:2FTS	152%		40-300%
	13C3-HFPO-DA	45%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	048B-R-0-2		
Lab Sample ID:	JD74737-51	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1583.D	1	10/20/23 07:06	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.32	0.99	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	0.083	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.087	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.25	0.099	ug/kg	J
375-95-1	Perfluorononanoic acid	0.24	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	048B-R-0-2		
Lab Sample ID:	JD74737-51	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	70%		5-130%
	13C5-PFPeA	98%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	117%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	129%		10-130%
	13C2-PFTeDA	115%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	048B-R-0-2		
Lab Sample ID:	JD74737-51	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	141%		40-170%
	d5-EtFOSAA	159% [a]		25-135%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	83%		10-130%
	13C2-4:2FTS	171%		40-200%
	13C2-6:2FTS	176%		40-200%
	13C2-8:2FTS	149%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.52

Client Sample ID:	048B-R-2-12		
Lab Sample ID:	JD74737-52	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1584.D	1	10/20/23 07:22	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.91	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	R
307-24-4	Perfluorohexanoic acid	0.12	0.23	0.034	ug/kg	J J
375-85-9	Perfluoroheptanoic acid	0.081	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.34	0.23	0.091	ug/kg	
375-95-1	Perfluorononanoic acid	0.071	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	048B-R-2-12		
Lab Sample ID:	JD74737-52	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.21	ug/kg	UJ
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	R
863090-89-5	PFMBA	ND	0.46	0.068	ug/kg	R
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	7% [a]		40-130%
	13C5-PFHxA	46%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	117%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	57%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	048B-R-2-12		
Lab Sample ID:	JD74737-52	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	93%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	132%		40-170%
	d5-EtFOSAA	136% [a]		25-135%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	57%		40-200%
	13C2-6:2FTS	165%		40-200%
	13C2-8:2FTS	127%		40-300%
	13C3-HFPO-DA	35% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	035B-NS-0-2		
Lab Sample ID:	JD74737-53	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1585.D	1	10/20/23 07:37	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	1.4	0.51	0.089	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	UJ
375-85-9	Perfluoroheptanoic acid	0.081	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.091	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.88	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-NS-0-2		
Lab Sample ID:	JD74737-53	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	UJ
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	R
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	R
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	8% [a]		40-130%
	13C5-PFHxA	48%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	64%		40-135%
	13C3-PFHxS	111%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-NS-0-2		
Lab Sample ID:	JD74737-53	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	88%		10-130%
	d3-MeFOSAA	135%		40-170%
	d5-EtFOSAA	143% [a]		25-135%
	d7-MeFOSE	92%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	57%		40-200%
	13C2-6:2FTS	160%		40-200%
	13C2-8:2FTS	147%		40-300%
	13C3-HFPO-DA	37% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	035B-NS-2-12		
Lab Sample ID:	JD74737-54	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1586.D	1	10/20/23 07:52	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.064	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.075	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.60	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-NS-2-12		
Lab Sample ID:	JD74737-54	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	UJ
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	R
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	R
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	R
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	8% [a]		40-130%
	13C5-PFHxA	52%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	63%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-NS-2-12		
Lab Sample ID:	JD74737-54	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%		40-130%
	13C8-FOSA	121%		40-130%
	d3-MeFOSA	94%		10-130%
	d5-EtFOSA	87%		10-130%
	d3-MeFOSAA	151%		40-170%
	d5-EtFOSAA	148% [a]		25-135%
	d7-MeFOSE	94%		10-130%
	d9-EtFOSE	87%		10-130%
	13C2-4:2FTS	72%		40-200%
	13C2-6:2FTS	161%		40-200%
	13C2-8:2FTS	142%		40-300%
	13C3-HFPO-DA	37% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	035B-SD-0-2		
Lab Sample ID:	JD74737-55	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1587.D	1	10/20/23 08:07	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	0.14	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.34	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-SD-0-2		
Lab Sample ID:	JD74737-55	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	UJ
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	R
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	R
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	9% [a]		40-130%
	13C5-PFHxA	56%		40-130%
	13C4-PFHpA	112%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	118%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	64%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-SD-0-2		
Lab Sample ID:	JD74737-55	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	126%		40-130%
	d3-MeFOSA	93%		10-130%
	d5-EtFOSA	99%		10-130%
	d3-MeFOSAA	182% [a]		40-170%
	d5-EtFOSAA	191% [a]		25-135%
	d7-MeFOSE	96%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	43%		40-200%
	13C2-6:2FTS	175%		40-200%
	13C2-8:2FTS	184%		40-300%
	13C3-HFPO-DA	42%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	035B-SD-2-12		
Lab Sample ID:	JD74737-56	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1588.D	1	10/20/23 08:23	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	UJ
375-85-9	Perfluoroheptanoic acid	0.11	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.22	0.24	0.096	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-SD-2-12		
Lab Sample ID:	JD74737-56	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	UJ
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	R
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	R
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	8% [a]		40-130%
	13C5-PFHxA	46%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	67%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-SD-2-12		
Lab Sample ID:	JD74737-56	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	152%		40-170%
	d5-EtFOSAA	160% [a]		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	68%		40-200%
	13C2-6:2FTS	179%		40-200%
	13C2-8:2FTS	199%		40-300%
	13C3-HFPO-DA	35% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	035B-R-0-2		
Lab Sample ID:	JD74737-57	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1589.D	1	10/20/23 08:38	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.29	0.044	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.074	ug/kg	
335-67-1	Perfluorooctanoic acid	0.15	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.083	0.29	0.074	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.11	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.088	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.29	0.074	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.074	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.088	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.074	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-R-0-2		
Lab Sample ID:	JD74737-57	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.044	ug/kg	
863090-89-5	PFMBA	ND	0.59	0.088	ug/kg	
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.4	0.91	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.4	0.93	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	121%		40-130%
	13C7-PFUnDA	119%		30-130%
	13C2-PFDoDA	120%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-R-0-2		
Lab Sample ID:	JD74737-57	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	123%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	76%		10-130%
	13C2-4:2FTS	154%		40-200%
	13C2-6:2FTS	173%		40-200%
	13C2-8:2FTS	145%		40-300%
	13C3-HFPO-DA	83%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	035B-R-2-12		
Lab Sample ID:	JD74737-58	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1590.D	1	10/20/23 08:53	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	R
307-24-4	Perfluorohexanoic acid	0.097	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.095	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.20	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-R-2-12		
Lab Sample ID:	JD74737-58	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	UJ
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	R
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	R
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	8% [a]		40-130%
	13C5-PFHxA	51%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	75%		40-135%
	13C3-PFHxS	122%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	035B-R-2-12		
Lab Sample ID:	JD74737-58	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%		40-130%
	13C8-FOSA	116%		40-130%
	d3-MeFOSA	88%		10-130%
	d5-EtFOSA	89%		10-130%
	d3-MeFOSAA	145%		40-170%
	d5-EtFOSAA	155% [a]		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	62%		40-200%
	13C2-6:2FTS	158%		40-200%
	13C2-8:2FTS	159%		40-300%
	13C3-HFPO-DA	40%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	042C-SD-0-2		
Lab Sample ID:	JD74737-59	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1594.D	1	10/20/23 09:54	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.91	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	
307-24-4	Perfluorohexanoic acid	0.050	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.076	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.23	0.091	ug/kg	
375-95-1	Perfluorononanoic acid	0.077	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.12	0.23	0.057	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	042C-SD-0-2		
Lab Sample ID:	JD74737-59	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.21	ug/kg	
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	
863090-89-5	PFMBA	ND	0.46	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	25%		5-130%
	13C5-PFPeA	93%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	119%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	042C-SD-0-2		
Lab Sample ID:	JD74737-59	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	120%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	144%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	93%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	162%		40-200%
	13C2-6:2FTS	140%		40-200%
	13C2-8:2FTS	154%		40-300%
	13C3-HFPO-DA	87%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.60

Client Sample ID:	042C-SD-2-12		
Lab Sample ID:	JD74737-60	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1595.D	1	10/20/23 10:10	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.86	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.43	0.075	ug/kg	
307-24-4	Perfluorohexanoic acid	0.089	0.21	0.032	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.060	0.21	0.054	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.21	0.086	ug/kg	J
375-95-1	Perfluorononanoic acid	0.068	0.21	0.054	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.21	0.075	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.064	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.086	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.097	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.075	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.21	0.054	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.054	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.86	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.86	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.86	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.075	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.064	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.054	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	042C-SD-2-12		
Lab Sample ID:	JD74737-60	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.086	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.78	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.86	0.19	ug/kg	UJ
919005-14-4	ADONA	ND	0.86	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.43	0.064	ug/kg	UJ
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.86	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.86	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.67	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	10% [a]		40-130%
	13C5-PFHxA	49%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	87%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	72%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	042C-SD-2-12		
Lab Sample ID:	JD74737-60	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	86%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	108%		25-135%
	d7-MeFOSE	77%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	66%		40-200%
	13C2-6:2FTS	176%		40-200%
	13C2-8:2FTS	135%		40-300%
	13C3-HFPO-DA	43%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	042C-R-0-2		
Lab Sample ID:	JD74737-61	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1596.D	1	10/20/23 10:25	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.081	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.085	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.23	0.092	ug/kg	J
375-95-1	Perfluorononanoic acid	0.081	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.069	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	042C-R-0-2		
Lab Sample ID:	JD74737-61	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	UJ
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	R
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	R
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.71	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	6% [a]		40-130%
	13C5-PFHxA	36% [a]		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	117%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	53%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	042C-R-0-2		
Lab Sample ID:	JD74737-61	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	114%		40-130%
	d3-MeFOSA	92%		10-130%
	d5-EtFOSA	98%		10-130%
	d3-MeFOSAA	159%		40-170%
	d5-EtFOSAA	171% [a]		25-135%
	d7-MeFOSE	100%		10-130%
	d9-EtFOSE	95%		10-130%
	13C2-4:2FTS	41%		40-200%
	13C2-6:2FTS	143%		40-200%
	13C2-8:2FTS	170%		40-300%
	13C3-HFPO-DA	28% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	042C-R-2-12		
Lab Sample ID:	JD74737-62	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1597.D	1	10/20/23 10:40	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.89	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.078	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.056	ug/kg	
335-67-1	Perfluorooctanoic acid	0.20	0.22	0.089	ug/kg	J
375-95-1	Perfluorononanoic acid	0.072	0.22	0.056	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.078	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.067	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.089	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.078	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.22	0.056	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.056	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.89	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.89	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.89	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.078	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.067	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	042C-R-2-12		
Lab Sample ID:	JD74737-62	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.089	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.89	0.20	ug/kg	
919005-14-4	ADONA	ND	0.89	0.13	ug/kg	
377-73-1	PFMPA	ND	0.45	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.067	ug/kg	UJ
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.89	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.89	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.69	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	11% [a]		40-130%
	13C5-PFHxA	63%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	042C-R-2-12		
Lab Sample ID:	JD74737-62	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	116%		40-130%
	d3-MeFOSA	101%		10-130%
	d5-EtFOSA	95%		10-130%
	d3-MeFOSAA	142%		40-170%
	d5-EtFOSAA	164% [a]		25-135%
	d7-MeFOSE	93%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	87%		40-200%
	13C2-6:2FTS	192%		40-200%
	13C2-8:2FTS	173%		40-300%
	13C3-HFPO-DA	50%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	031A-SD-0-2		
Lab Sample ID:	JD74737-63	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1598.D	1	10/20/23 10:55	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	R
307-24-4	Perfluorohexanoic acid	0.15	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.44	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.11	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031A-SD-0-2		
Lab Sample ID:	JD74737-63	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	UJ
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	R
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	R
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	9% [a]		40-130%
	13C5-PFHxA	53%		40-130%
	13C4-PFHpA	115%		40-130%
	13C8-PFOA	109%		40-130%
	13C9-PFNA	123%		40-130%
	13C6-PFDA	125%		40-130%
	13C7-PFUnDA	122%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031A-SD-0-2		
Lab Sample ID:	JD74737-63	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	146%		40-170%
	d5-EtFOSAA	149% [a]		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	55%		40-200%
	13C2-6:2FTS	172%		40-200%
	13C2-8:2FTS	164%		40-300%
	13C3-HFPO-DA	45%		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.64

Client Sample ID:	031A-SD-2-12		
Lab Sample ID:	JD74737-64	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1599.D	1	10/20/23 11:11	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.88	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.077	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	UJ
375-85-9	Perfluoroheptanoic acid	0.085	0.22	0.055	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.22	0.22	0.088	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.22	0.055	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.088	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.099	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.077	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.22	0.055	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.88	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.88	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.88	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031A-SD-2-12		
Lab Sample ID:	JD74737-64	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.088	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.81	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.88	0.20	ug/kg	UJ
919005-14-4	ADONA	ND	0.88	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	R
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	R
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.88	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.88	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	7% [a]		40-130%
	13C5-PFHxA	44%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	59%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031A-SD-2-12		
Lab Sample ID:	JD74737-64	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	95%		10-130%
	d3-MeFOSAA	128%		40-170%
	d5-EtFOSAA	140% [a]		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	55%		40-200%
	13C2-6:2FTS	146%		40-200%
	13C2-8:2FTS	99%		40-300%
	13C3-HFPO-DA	39% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.65

Client Sample ID:	031A-R-0-2		
Lab Sample ID:	JD74737-65	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1600.D	1	10/20/23 11:26	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.24	0.037	ug/kg	UJ
375-85-9	Perfluoroheptanoic acid	0.077	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.24	0.098	ug/kg	J
375-95-1	Perfluorononanoic acid	0.19	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.097	0.24	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.12	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031A-R-0-2		
Lab Sample ID:	JD74737-65	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	UJ
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	R
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	R
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	6% [a]		40-130%
	13C5-PFHxA	37% [a]		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	116%		30-130%
	13C2-PFDoDA	118%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	52%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031A-R-0-2		
Lab Sample ID:	JD74737-65	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	115%		40-130%
	d3-MeFOSA	91%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	154%		40-170%
	d5-EtFOSAA	171% [a]		25-135%
	d7-MeFOSE	90%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	34% [a]		40-200%
	13C2-6:2FTS	165%		40-200%
	13C2-8:2FTS	160%		40-300%
	13C3-HFPO-DA	27% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10122023		
Lab Sample ID:	JD74737-66	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1608.D	1	10/20/23 18:29	PC	10/19/23 15:45	OP49862	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	0.085	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.086	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.24	0.097	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.092	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10122023		
Lab Sample ID:	JD74737-66	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	64%		40-130%
	13C5-PFHxA	111%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	117%		40-130%
	13C9-PFNA	118%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	130%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	120%		40-135%
	13C3-PFHxS	125%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10122023		
Lab Sample ID:	JD74737-66	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	119%		40-130%
	13C8-FOSA	134% [a]		40-130%
	d3-MeFOSA	102%		10-130%
	d5-EtFOSA	86%		10-130%
	d3-MeFOSAA	166%		40-170%
	d5-EtFOSAA	194% [a]		25-135%
	d7-MeFOSE	95%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	156%		40-200%
	13C2-6:2FTS	159%		40-200%
	13C2-8:2FTS	200%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside in house control limits biased high. Sample ND.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	031A-R-2-12		
Lab Sample ID:	JD74737-67	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1601.D	1	10/20/23 11:41	PC	10/19/23 09:12	OP49852	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.88	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.077	ug/kg	R
307-24-4	Perfluorohexanoic acid	0.13	0.22	0.033	ug/kg	J J
375-85-9	Perfluoroheptanoic acid	0.081	0.22	0.055	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.37	0.22	0.088	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.22	0.055	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.088	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.099	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.077	ug/kg	UJ
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.22	0.055	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.88	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.88	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.88	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031A-R-2-12		
Lab Sample ID:	JD74737-67	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.088	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.80	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.88	0.20	ug/kg	UJ
919005-14-4	ADONA	ND	0.88	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	R
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	R
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.88	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.88	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	7% [a]		40-130%
	13C5-PFHxA	42%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	59%		40-135%
	13C3-PFHxS	126%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	031A-R-2-12		
Lab Sample ID:	JD74737-67	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	120%		40-130%
	13C8-FOSA	114%		40-130%
	d3-MeFOSA	104%		10-130%
	d5-EtFOSA	104%		10-130%
	d3-MeFOSAA	160%		40-170%
	d5-EtFOSAA	165% [a]		25-135%
	d7-MeFOSE	97%		10-130%
	d9-EtFOSE	89%		10-130%
	13C2-4:2FTS	72%		40-200%
	13C2-6:2FTS	173%		40-200%
	13C2-8:2FTS	165%		40-300%
	13C3-HFPO-DA	33% [a]		40-130%

(a) Outside control limits due to possible matrix interference

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	026-SD-0-2		
Lab Sample ID:	JD74737-68	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1612.D	1	10/20/23 19:30	PC	10/19/23 15:45	OP49862	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	0.053	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.097	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	026-SD-0-2		
Lab Sample ID:	JD74737-68	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	80%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	026-SD-0-2		
Lab Sample ID:	JD74737-68	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	116%		40-130%
	d3-MeFOSA	89%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	152%		40-170%
	d5-EtFOSAA	175% [a]		25-135%
	d7-MeFOSE	92%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	132%		40-200%
	13C2-6:2FTS	161%		40-200%
	13C2-8:2FTS	139%		40-300%
	13C3-HFPO-DA	87%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.69

Client Sample ID:	026-SD-2-12		
Lab Sample ID:	JD74737-69	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1613.D	1	10/20/23 19:46	PC	10/19/23 15:45	OP49862	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.95	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.083	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.059	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.095	ug/kg	
375-95-1	Perfluorononanoic acid	0.11	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.095	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.24	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.95	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.95	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.95	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	026-SD-2-12		
Lab Sample ID:	JD74737-69	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.095	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.95	0.21	ug/kg	
919005-14-4	ADONA	ND	0.95	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.95	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.95	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	47%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	026-SD-2-12		
Lab Sample ID:	JD74737-69	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	114%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	150%		40-170%
	d5-EtFOSAA	162% [a]		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	76%		10-130%
	13C2-4:2FTS	156%		40-200%
	13C2-6:2FTS	189%		40-200%
	13C2-8:2FTS	153%		40-300%
	13C3-HFPO-DA	77%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.70

Client Sample ID:	026-R-0-2		
Lab Sample ID:	JD74737-70	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1614.D	1	10/20/23 20:01	PC	10/19/23 15:45	OP49862	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.3	1.1	0.15	ug/kg	~~UJ~~ J
2706-90-3	Perfluoropentanoic acid	28.5	0.53	0.094	ug/kg	
307-24-4	Perfluorohexanoic acid	0.36	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.41	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	2.0	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.58	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	0.95	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.25	0.27	0.080	ug/kg	J
307-55-1	Perfluorododecanoic acid	0.14	0.27	0.11	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.15	0.27	0.094	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	0.33	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.8	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	UJ

J added AMK 1/16/25

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

4.70

Client Sample ID:	026-R-0-2		
Lab Sample ID:	JD74737-70	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	32%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	74%		40-130%
	13C4-PFHpA	74%		40-130%
	13C8-PFOA	72%		40-130%
	13C9-PFNA	72%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	83%		30-130%
	13C2-PFDoDA	70%		10-130%
	13C2-PFTeDA	72%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	75%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	026-R-0-2		
Lab Sample ID:	JD74737-70	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	65%		40-130%
	13C8-FOSA	75%		40-130%
	d3-MeFOSA	46%		10-130%
	d5-EtFOSA	45%		10-130%
	d3-MeFOSAA	127%		40-170%
	d5-EtFOSAA	129%		25-135%
	d7-MeFOSE	51%		10-130%
	d9-EtFOSE	49%		10-130%
	13C2-4:2FTS	144%		40-200%
	13C2-6:2FTS	182%		40-200%
	13C2-8:2FTS	239%		40-300%
	13C3-HFPO-DA	55%		40-130%

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	026-R-2-12		
Lab Sample ID:	JD74737-71	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1615.D	1	10/20/23 20:16	PC	10/19/23 15:45	OP49862	T1Q56
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	3.2	0.48	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	0.077	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.083	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.093	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.11	0.24	0.085	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	026-R-2-12		
Lab Sample ID:	JD74737-71	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	32%		5-130%
	13C5-PFPeA	77%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	026-R-2-12		
Lab Sample ID:	JD74737-71	**Date Sampled:**	10/12/23
Matrix:	SO - Soil	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	176% [a]		40-170%
	d5-EtFOSAA	200% [a]		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	165%		40-200%
	13C2-6:2FTS	193%		40-200%
	13C2-8:2FTS	224%		40-300%
	13C3-HFPO-DA	74%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 11/30/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	RB-10122023		
Lab Sample ID:	JD74737-72	**Date Sampled:**	10/12/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1438.D	1	10/17/23 19:57	PC	10/17/23 11:19	OP49827	T1Q55
Run #2							

	Initial Volume	Final Volume
Run #1	517 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0077	0.00090	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0039	0.00071	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00048	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00073	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00039	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00060	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00074	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00064	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00098	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00095	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00042	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00039	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0077	0.00088	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00062	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10122023		
Lab Sample ID:	JD74737-72	**Date Sampled:**	10/12/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	UJ
2991-50-6	EtFOSAA	ND	0.0019	0.00088	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0039	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0039	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0039	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0039	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0097	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0069	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0060	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	103%		5-130%
	13C5-PFPeA	108%		40-130%
	13C5-PFHxA	111%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10122023		
Lab Sample ID:	JD74737-72	**Date Sampled:**	10/12/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/13/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	135%		40-170%
	d5-EtFOSAA	136% [a]		25-135%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	157%		40-200%
	13C2-6:2FTS	153%		40-200%
	13C2-8:2FTS	158%		40-300%
	13C3-HFPO-DA	93%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/30/23

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VALIDATA
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2159 Wynnton Pointe, Duluth, GA 30097
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(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD74836
SAMPLING DATE(S):	October 13, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD74836-1	050-NS-0-2	X
JD74836-2	050-NS-2-12	X
JD74836-3	050-SD-0-2	X
JD74836-4	050-SD-2-12	X
JD74836-5	050-R-0-2	X
JD74836-6	050-R-2-12	X
JD74836-7	036-SD-0-2	X
JD74836-8	036-SD-2-12	X
JD74836-9	036-R-0-2	X
JD74836-10	036-R-2-12	X
JD74836-11	046-SD-0-2	X
JD74836-12	046-SD-2-12	X
JD74836-13	046-R-0-2	X
JD74836-14	FD-10132023	X
JD74836-15	046-R-2-12	X
JD74836-15MS	046-R-2-12MS	X
JD74836-15MSD	046-R-2-12MSD	X
JD74836-16	047-SD-0-2	X

LAB ID	CLIENT ID	PFAS
JD74836-17	047-SD-2-12	X
JD74836-18	047-R-0-2	X
JD74836-19	047-R-2-12	X
JD74836-20	RB-10132023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD74836

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74836-1	050-NS-0-2	13C4PFBA	PFBA	R
JD74836-14	FD-10132023	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blank, RB-101302023 was free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD74836-15/046-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD74836-15	046-R-2-12	RPD > 30%	PFMPA 3:3FTCA	UJ UJ
		Recovery < lower control limit of 70%	3:3FTCA 5:3FTCA 7:3FTCA	UJ UJ UJ

VII.) Laboratory Control Samples (LCS):

All Low Level LCS Recovery criteria were met. No qualification was necessary.

LCS OP49934-LBS met all recovery criteria. No qualification was necessary.

LCS OP49970-LBS reported PFTrDA < the lower control limit of 70%. The associated sample, 74836-20, reported this analyte as non-detect. This result is estimated and has been qualified “UJ”.

LCS OP50063-LBS reported PFMPA and 3:3FTCA < the 70% lower control limit. These analytes in

samples 74836-11 and 74836-12 were non-detects. These analytes are estimated and have been qualified "UJ".

VIII.) Field Duplicates:

One set of field duplicate samples (046-R-0-2 / FD-10132023) was identified as part of this SDG. The 30% Relative Percent Difference criteria were met except for PFOS which was 45%. This analyte in both samples is considered estimated and has been qualified "J"/

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74836-1	050-NS-0-2	13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD74836-2	050-NS-2-12	13C4PFBA	PFBA	UJ
JD74836-3	050-SD-0-2	13C4PFBA	PFBA	UJ
JD74836-4	050-SD-2-12	13C4PFBA	PFBA	UJ
JD74836-5	050-R-0-2	13C4PFBA	PFBA	J
JD74836-6	050-R-2-12	13C4PFBA	PFBA	J
JD74836-7	036-SD-0-2	13C4PFBA	PFBA	UJ
		D3-MeFOSA	MeFOSA	UJ
JD74836-8	036-SD-2-12	D5-EtFOSA	EtFOSA	UJ
JD74836-9	036-R-0-2	D7-MeFOSE	MeFOSE	UJ
		13C2-4:2FTS	4:2FTS	UJ
JD74836-11	046-SD-0-2	13C4PFBA	PFBA	UJ
JD74836-12	046-SD-2-12	13C4PFBA	PFBA	UJ
JD74836-13	046-R-0-2	13C4PFBA	PFBA	J
		D7-MeFOSE	MeFOSE	UJ
		13C2-4:2FTS	4:2FTS	UJ
JD74836-14	FD-10132023	13C5-PFPeA	PFPeA	J
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
		D3-MeFOSA	MeFOSA	UJ
		D5-EtFOSA	EtFOSA	UJ
		D7-MeFOSE	MeFOSE	UJ
		D9-EtFOSE	EtFOSE	UJ
		13C2-4:2FTS	4:2FTS	UJ
		13C2-6:2FTS	6:2FTS	UJ
JD74836-15	046-R-2-12	13C4PFBA	PFBA	UJ
JD74836-16	047-SD-0-2	13C4PFBA	PFBA	UJ
		D3-MeFOSA	MeFOSA	UJ
		D5-EtFOSA	EtFOSA	UJ
		D7-MeFOSE	MeFOSE	UJ
		D9-EtFOSE	EtFOSE	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74836-17	047-SD-2-12	13C4PFBA D3-MeFOSA D5-EtFOSA D7-MeFOSE	PFBA MeFOSA EtFOSA MeFOSE	UJ UJ UJ UJ
JD74836-18	047-R-0-2	13C4PFBA D3-MeFOSA	PFBA MEFOSA	J UJ
JD74836-19	047-R-2-12	13C4PFBA	PFBA	

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	050-NS-0-2		
Lab Sample ID:	JD74836-1	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1738.D	1	10/24/23 20:38	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.91	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.080	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.23	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.057	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.23	0.091	ug/kg	
375-95-1	Perfluorononanoic acid	0.094	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.41	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.56	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-NS-0-2		
Lab Sample ID:	JD74836-1	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.20	ug/kg	
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.068	ug/kg	UJ
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-NS-0-2		
Lab Sample ID:	JD74836-1	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	57%		10-130%
	d3-MeFOSAA	98%		40-170%
	d5-EtFOSAA	136% [a]		25-135%
	d7-MeFOSE	54%		10-130%
	d9-EtFOSE	62%		10-130%
	13C2-4:2FTS	89%		40-200%
	13C2-6:2FTS	94%		40-200%
	13C2-8:2FTS	121%		40-300%
	13C3-HFPO-DA	83%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	050-NS-2-12		
Lab Sample ID:	JD74836-2	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1739.D	1	10/24/23 20:53	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.89	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.12	0.44	0.078	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.056	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.089	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.22	0.056	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.078	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.067	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.089	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.078	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.22	0.056	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.056	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.89	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.89	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.89	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.63	0.22	0.078	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.067	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-NS-2-12		
Lab Sample ID:	JD74836-2	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.089	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.81	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.89	0.20	ug/kg	
919005-14-4	ADONA	ND	0.89	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	
863090-89-5	PFMBA	ND	0.44	0.067	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.89	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.89	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.69	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-NS-2-12		
Lab Sample ID:	JD74836-2	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	52%		10-130%
	d5-EtFOSA	55%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	149% [a]		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	65%		10-130%
	13C2-4:2FTS	85%		40-200%
	13C2-6:2FTS	83%		40-200%
	13C2-8:2FTS	116%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	050-SD-0-2		
Lab Sample ID:	JD74836-3	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1743.D	1	10/24/23 21:55	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.86	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.43	0.075	ug/kg	
307-24-4	Perfluorohexanoic acid	0.064	0.21	0.032	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.054	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.21	0.086	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.21	0.054	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.21	0.075	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.064	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.086	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.096	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.075	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.21	0.054	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.054	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.86	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.86	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.86	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.68	0.21	0.075	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.064	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.054	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-SD-0-2		
Lab Sample ID:	JD74836-3	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.086	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.78	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.86	0.19	ug/kg	
919005-14-4	ADONA	ND	0.86	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	
863090-89-5	PFMBA	ND	0.43	0.064	ug/kg	
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.86	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.86	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.66	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	25%		5-130%
	13C5-PFPeA	62%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	107%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	108%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-SD-0-2		
Lab Sample ID:	JD74836-3	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	125%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	56%		10-130%
	d5-EtFOSA	60%		10-130%
	d3-MeFOSAA	124%		40-170%
	d5-EtFOSAA	143% [a]		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	126%		40-200%
	13C2-6:2FTS	69%		40-200%
	13C2-8:2FTS	118%		40-300%
	13C3-HFPO-DA	94%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	050-SD-2-12		
Lab Sample ID:	JD74836-4	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1744.D	1	10/24/23 22:10	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.82	0.11	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.41	0.072	ug/kg	
307-24-4	Perfluorohexanoic acid	0.042	0.21	0.031	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.051	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.21	0.082	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.21	0.051	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.21	0.072	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.062	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.082	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.092	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.10	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.072	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.10	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.11	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.10	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.068	0.21	0.051	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.14	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.11	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.051	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.82	0.29	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.82	0.10	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.82	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.51	0.21	0.072	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.062	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.051	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-SD-2-12		
Lab Sample ID:	JD74836-4	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.082	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.13	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.29	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.75	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.82	0.18	ug/kg	
919005-14-4	ADONA	ND	0.82	0.12	ug/kg	
377-73-1	PFMPA	ND	0.41	0.031	ug/kg	
863090-89-5	PFMBA	ND	0.41	0.062	ug/kg	
151772-58-6	NFDHA	ND	0.41	0.13	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.82	0.27	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.82	0.18	ug/kg	
113507-82-7	PFEESA	ND	0.41	0.031	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.1	0.64	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.1	0.65	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	53%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	112%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-SD-2-12		
Lab Sample ID:	JD74836-4	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%		40-130%
	13C8-FOSA	83%		40-130%
	d3-MeFOSA	57%		10-130%
	d5-EtFOSA	62%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	122%		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	64%		10-130%
	13C2-4:2FTS	144%		40-200%
	13C2-6:2FTS	101%		40-200%
	13C2-8:2FTS	132%		40-300%
	13C3-HFPO-DA	91%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	050-R-0-2		
Lab Sample ID:	JD74836-5	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1745.D	1	10/24/23 22:25	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.68	1.0	0.14	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.17	0.52	0.090	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.26	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.23	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.45	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.28	0.26	0.064	ug/kg	
335-76-2	Perfluorodecanoic acid	0.15	0.26	0.090	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.16	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.78	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	1.0	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-R-0-2		
Lab Sample ID:	JD74836-5	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	61%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	87%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	127%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-R-0-2		
Lab Sample ID:	JD74836-5	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	46%		10-130%
	d5-EtFOSA	56%		10-130%
	d3-MeFOSAA	139%		40-170%
	d5-EtFOSAA	159% [a]		25-135%
	d7-MeFOSE	38%		10-130%
	d9-EtFOSE	48%		10-130%
	13C2-4:2FTS	51%		40-200%
	13C2-6:2FTS	63%		40-200%
	13C2-8:2FTS	145%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	050-R-2-12		
Lab Sample ID:	JD74836-6	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1746.D	1	10/24/23 22:41	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.87	0.91	0.13	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.19	0.46	0.080	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.22	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.46	0.23	0.091	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.069	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.35	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.18	0.23	0.080	ug/kg	J
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-R-2-12		
Lab Sample ID:	JD74836-6	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.21	ug/kg	
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	42%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	110%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	050-R-2-12		
Lab Sample ID:	JD74836-6	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	59%		10-130%
	d5-EtFOSA	58%		10-130%
	d3-MeFOSAA	154%		40-170%
	d5-EtFOSAA	165% [a]		25-135%
	d7-MeFOSE	58%		10-130%
	d9-EtFOSE	59%		10-130%
	13C2-4:2FTS	91%		40-200%
	13C2-6:2FTS	146%		40-200%
	13C2-8:2FTS	185%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	036-SD-0-2		
Lab Sample ID:	JD74836-7	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1747.D	1	10/24/23 22:56	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	
307-24-4	Perfluorohexanoic acid	0.091	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.066	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.19	0.23	0.092	ug/kg	J
375-95-1	Perfluorononanoic acid	0.074	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.069	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.63	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	036-SD-0-2		
Lab Sample ID:	JD74836-7	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	74%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	119%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	108%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	036-SD-0-2		
Lab Sample ID:	JD74836-7	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	47%		10-130%
	d5-EtFOSA	57%		10-130%
	d3-MeFOSAA	99%		40-170%
	d5-EtFOSAA	124%		25-135%
	d7-MeFOSE	47%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	99%		40-200%
	13C2-6:2FTS	76%		40-200%
	13C2-8:2FTS	112%		40-300%
	13C3-HFPO-DA	98%		40-130%

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	036-SD-2-12		
Lab Sample ID:	JD74836-8	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1748.D	1	10/24/23 23:11	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.90	0.12	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.079	ug/kg	
307-24-4	Perfluorohexanoic acid	0.058	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.058	0.23	0.056	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.23	0.090	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.23	0.056	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.079	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.079	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.63	0.23	0.056	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.056	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.39	0.23	0.079	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.056	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	036-SD-2-12		
Lab Sample ID:	JD74836-8	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.14	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	
863090-89-5	PFMBA	ND	0.45	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	96%		5-130%
	13C5-PFPeA	98%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	036-SD-2-12		
Lab Sample ID:	JD74836-8	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	107%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	51%		10-130%
	d5-EtFOSA	49%		10-130%
	d3-MeFOSAA	102%		40-170%
	d5-EtFOSAA	134%		25-135%
	d7-MeFOSE	52%		10-130%
	d9-EtFOSE	56%		10-130%
	13C2-4:2FTS	124%		40-200%
	13C2-6:2FTS	96%		40-200%
	13C2-8:2FTS	85%		40-300%
	13C3-HFPO-DA	88%		40-130%

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	036-R-0-2		
Lab Sample ID:	JD74836-9	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1749.D	1	10/24/23 23:26	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.32	0.89	0.12	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.14	0.45	0.078	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.13	0.22	0.033	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.056	ug/kg	
335-67-1	Perfluorooctanoic acid	0.11	0.22	0.089	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.22	0.056	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.078	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.22	0.067	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.22	0.089	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.078	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.47	0.22	0.056	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.056	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.89	0.31	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.89	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.89	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.84	0.22	0.078	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.067	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	036-R-0-2		
Lab Sample ID:	JD74836-9	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.089	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.2	0.81	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.89	0.20	ug/kg	
919005-14-4	ADONA	ND	0.89	0.13	ug/kg	
377-73-1	PFMPA	ND	0.45	0.033	ug/kg	
863090-89-5	PFMBA	ND	0.45	0.067	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.89	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.89	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.69	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		5-130%
	13C5-PFPeA	97%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	68%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	036-R-0-2		
Lab Sample ID:	JD74836-9	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	54%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	186% [a]		40-170%
	d5-EtFOSAA	163% [a]		25-135%
	d7-MeFOSE	40%		10-130%
	d9-EtFOSE	59%		10-130%
	13C2-4:2FTS	45%		40-200%
	13C2-6:2FTS	74%		40-200%
	13C2-8:2FTS	139%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	036-R-2-12		
Lab Sample ID:	JD74836-10	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1750.D	1	10/24/23 23:41	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.24	0.86	0.12	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.19	0.43	0.075	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.046	0.22	0.032	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.084	0.22	0.054	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.22	0.086	ug/kg	J
375-95-1	Perfluorononanoic acid	0.067	0.22	0.054	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.075	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.065	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.086	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.097	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.075	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.22	0.054	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.054	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.86	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.86	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.86	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.075	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.065	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.054	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	036-R-2-12		
Lab Sample ID:	JD74836-10	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.086	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.79	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.86	0.19	ug/kg	
919005-14-4	ADONA	ND	0.86	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	
863090-89-5	PFMBA	ND	0.43	0.065	ug/kg	
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.86	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.86	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.67	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	100%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	111%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	036-R-2-12		
Lab Sample ID:	JD74836-10	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	133%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	66%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	168%		40-200%
	13C2-6:2FTS	169%		40-200%
	13C2-8:2FTS	191%		40-300%
	13C3-HFPO-DA	83%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	046-SD-0-2		
Lab Sample ID:	JD74836-11	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4500.D	1	10/28/23 19:25	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.38	0.51	0.089	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.11	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.15	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.20	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.11	0.25	0.089	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.16	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.45	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	046-SD-0-2		
Lab Sample ID:	JD74836-11	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	107%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	112%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	046-SD-0-2		
Lab Sample ID:	JD74836-11	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	104%		40-170%
	d5-EtFOSAA	103%		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	85%		40-200%
	13C2-6:2FTS	132%		40-200%
	13C2-8:2FTS	96%		40-300%
	13C3-HFPO-DA	104%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	046-SD-2-12		
Lab Sample ID:	JD74836-12	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4504.D	1	10/28/23 20:27	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.11	0.49	0.086	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.15	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.47	0.25	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.088	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	046-SD-2-12		
Lab Sample ID:	JD74836-12	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	30%		5-130%
	13C5-PFPeA	79%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	120%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	110%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	046-SD-2-12		
Lab Sample ID:	JD74836-12	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	88%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	104%		40-170%
	d5-EtFOSAA	104%		25-135%
	d7-MeFOSE	77%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	88%		40-200%
	13C2-6:2FTS	72%		40-200%
	13C2-8:2FTS	81%		40-300%
	13C3-HFPO-DA	96%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	046-R-0-2		
Lab Sample ID:	JD74836-13	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1756.D	1	10/25/23 01:13	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.70	0.99	0.14	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.30	0.50	0.087	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.20	0.25	0.037	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.062	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.26	0.25	0.099	ug/kg		
375-95-1	Perfluorononanoic acid	0.26	0.25	0.062	ug/kg		
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.12	0.25	0.074	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.56	0.25	0.062	ug/kg	J	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	UJ	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.24	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	0.90	0.25	0.087	ug/kg		
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg		
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	046-R-0-2		
Lab Sample ID:	JD74836-13	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	
863090-89-5	PFMBA	ND	0.50	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	63%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	046-R-0-2		
Lab Sample ID:	JD74836-13	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	57%		10-130%
	d5-EtFOSA	57%		10-130%
	d3-MeFOSAA	158%		40-170%
	d5-EtFOSAA	179% [a]		25-135%
	d7-MeFOSE	49%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	39% [a]		40-200%
	13C2-6:2FTS	52%		40-200%
	13C2-8:2FTS	156%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10132023		
Lab Sample ID:	JD74836-14	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1757.D	1	10/25/23 01:29	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.90	0.98	0.14	ug/kg	J	R
2706-90-3	Perfluoropentanoic acid	0.29	0.49	0.086	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	0.26	0.25	0.037	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.17	0.25	0.061	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.37	0.25	0.098	ug/kg		
375-95-1	Perfluorononanoic acid	0.29	0.25	0.061	ug/kg		
335-76-2	Perfluorodecanoic acid	0.12	0.25	0.086	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.20	0.25	0.074	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.89	0.25	0.061	ug/kg	J	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.061	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	UJ	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	UJ	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	1.2	0.25	0.086	ug/kg		
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	UJ	
4151-50-2	EtFOSA	ND	0.25	0.061	ug/kg	UJ	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10132023		
Lab Sample ID:	JD74836-14	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	38% [a]		40-130%
	13C5-PFHxA	63%		40-130%
	13C4-PFHpA	71%		40-130%
	13C8-PFOA	68%		40-130%
	13C9-PFNA	77%		40-130%
	13C6-PFDA	77%		40-130%
	13C7-PFUnDA	74%		30-130%
	13C2-PFDoDA	75%		10-130%
	13C2-PFTeDA	51%		10-130%
	13C3-PFBS	67%		40-135%
	13C3-PFHxS	71%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10132023		
Lab Sample ID:	JD74836-14	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	74%		40-130%
	13C8-FOSA	71%		40-130%
	d3-MeFOSA	36%		10-130%
	d5-EtFOSA	46%		10-130%
	d3-MeFOSAA	120%		40-170%
	d5-EtFOSAA	124%		25-135%
	d7-MeFOSE	33%		10-130%
	d9-EtFOSE	41%		10-130%
	13C2-4:2FTS	34% [a]		40-200%
	13C2-6:2FTS	44%		40-200%
	13C2-8:2FTS	119%		40-300%
	13C3-HFPO-DA	52%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	046-R-2-12		
Lab Sample ID:	JD74836-15	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1758.D	1	10/25/23 01:44	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.092	0.47	0.082	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.066	0.23	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.28	0.23	0.094	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.23	0.059	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.23	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.21	0.23	0.082	ug/kg	J
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	046-R-2-12		
Lab Sample ID:	JD74836-15	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	92%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	046-R-2-12		
Lab Sample ID:	JD74836-15	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	81%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	62%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	134%		25-135%
	d7-MeFOSE	59%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	110%		40-200%
	13C2-6:2FTS	80%		40-200%
	13C2-8:2FTS	118%		40-300%
	13C3-HFPO-DA	87%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	047-SD-0-2		
Lab Sample ID:	JD74836-16	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1759.D	1	10/25/23 01:59	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.10	0.59	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.14	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.089	0.29	0.073	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.20	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.20	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.088	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.65	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.89	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.088	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	047-SD-0-2		
Lab Sample ID:	JD74836-16	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.044	ug/kg	
863090-89-5	PFMBA	ND	0.59	0.088	ug/kg	
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.91	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	62%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	64%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	047-SD-0-2		
Lab Sample ID:	JD74836-16	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	89%		40-130%
	d3-MeFOSA	41%		10-130%
	d5-EtFOSA	38%		10-130%
	d3-MeFOSAA	103%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	34%		10-130%
	d9-EtFOSE	45%		10-130%
	13C2-4:2FTS	85%		40-200%
	13C2-6:2FTS	70%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	78%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	047-SD-2-12		
Lab Sample ID:	JD74836-17	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1760.D	1	10/25/23 02:14	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.16	0.28	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.16	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.55	0.28	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.73	0.28	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	047-SD-2-12		
Lab Sample ID:	JD74836-17	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	72%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	047-SD-2-12		
Lab Sample ID:	JD74836-17	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	49%		10-130%
	d5-EtFOSA	46%		10-130%
	d3-MeFOSAA	114%		40-170%
	d5-EtFOSAA	154% [a]		25-135%
	d7-MeFOSE	44%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	109%		40-200%
	13C2-6:2FTS	56%		40-200%
	13C2-8:2FTS	114%		40-300%
	13C3-HFPO-DA	85%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	047-R-0-2		
Lab Sample ID:	JD74836-18	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1761.D	1	10/25/23 02:29	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.79	1.3	0.17	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.31	0.63	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.35	0.31	0.047	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.27	0.31	0.078	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.93	0.31	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.36	0.31	0.078	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.31	0.094	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.31	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.4	0.31	0.078	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.078	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	0.25	0.31	0.11	ug/kg	J
31506-32-8	MeFOSA	ND	0.31	0.094	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.31	0.078	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	047-R-0-2		
Lab Sample ID:	JD74836-18	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.28	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.047	ug/kg	
863090-89-5	PFMBA	ND	0.63	0.094	ug/kg	
151772-58-6	NFDHA	ND	0.63	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.8	0.97	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.8	0.99	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	21%		5-130%
	13C5-PFPeA	73%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	68%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	047-R-0-2		
Lab Sample ID:	JD74836-18	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	45%		10-130%
	d5-EtFOSA	51%		10-130%
	d3-MeFOSAA	152%		40-170%
	d5-EtFOSAA	168% [a]		25-135%
	d7-MeFOSE	56%		10-130%
	d9-EtFOSE	52%		10-130%
	13C2-4:2FTS	99%		40-200%
	13C2-6:2FTS	131%		40-200%
	13C2-8:2FTS	147%		40-300%
	13C3-HFPO-DA	74%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	047-R-2-12		
Lab Sample ID:	JD74836-19	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1762.D	1	10/25/23 02:45	PC	10/24/23 07:24	OP49934	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	0.069	0.28	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.069	ug/kg	
335-67-1	Perfluorooctanoic acid	0.12	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.28	0.069	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.28	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.083	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.28	0.069	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	047-R-2-12		
Lab Sample ID:	JD74836-19	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	61%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	112%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	123%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	123%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	047-R-2-12		
Lab Sample ID:	JD74836-19	**Date Sampled:**	10/13/23
Matrix:	SO - Soil	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	119%		40-130%
	d3-MeFOSA	61%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	174% [a]		40-170%
	d5-EtFOSAA	182% [a]		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	133%		40-200%
	13C2-6:2FTS	198%		40-200%
	13C2-8:2FTS	181%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10132023		
Lab Sample ID:	JD74836-20	**Date Sampled:**	10/13/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1822.D	1	10/25/23 20:08	PC	10/24/23 09:21	OP49970	T1Q58
Run #2							

	Initial Volume	Final Volume
Run #1	545 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0073	0.00085	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0037	0.00067	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0018	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0018	0.00046	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0018	0.00069	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0018	0.00037	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0018	0.00057	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0018	0.00050	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0018	0.00071	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0018	0.00072	ug/l	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.0018	0.00070	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0018	0.00061	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0018	0.00093	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0018	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0018	0.00090	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0018	0.00039	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0018	0.0013	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0018	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0018	0.00037	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0073	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0073	0.00083	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0073	0.0013	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0018	0.00063	ug/l	
31506-32-8	MeFOSA	ND	0.0018	0.00059	ug/l	
4151-50-2	EtFOSA	ND	0.0018	0.00049	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10132023		
Lab Sample ID:	JD74836-20	**Date Sampled:**	10/13/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0018	0.00047	ug/l	
2991-50-6	EtFOSAA	ND	0.0018	0.00083	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.018	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.018	0.0034	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0073	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0073	0.0011	ug/l	
377-73-1	PFMPA	ND	0.0037	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0037	0.00051	ug/l	
151772-58-6	NFDHA	ND	0.0037	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0073	0.0022	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0073	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0037	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0092	0.0022	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.046	0.0065	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.046	0.0057	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	108%		5-130%
	13C5-PFPeA	104%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	119%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	122%		40-135%
	13C3-PFHxS	129%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10132023		
Lab Sample ID:	JD74836-20	**Date Sampled:**	10/13/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	116%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	137%		40-170%
	d5-EtFOSAA	153% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	168%		40-200%
	13C2-6:2FTS	159%		40-200%
	13C2-8:2FTS	143%		40-300%
	13C3-HFPO-DA	91%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT REVISED

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Robert Thielke
SDG NUMBER:	JD74986
SAMPLING DATE(S):	October 16-17, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD74986-1	028A-NS-0-2-ACTD-JD74986SO	X
JD74986-2	028A-NS-2-12-ACTD-JD74986SO	X
JD74986-3	028A-SD-0-2	X
JD74986-4	028A-SD-2-12-ACTD-JD74986SO	X
JD74986-5	028A-R-0-2-ACTD-JD74986SO	X
JD74986-6	028A-R-2-12-ACTD-JD74986SO	X
JD74986-7	044-SD-0-2-ACTD-JD74986SO	X
JD74986-8	044-SD-2-12-ACTD-JD74986SO	X
JD74986-9	044-R-0-2-ACTD-JD74986SO	X
JD74986-10	044-R-2-12-ACTD-JD74986SO	X
JD74986-11	088B-SD-0-2-ACTD-JD74986SO	X
JD74986-12	088B-SD-2-12-ACTD-JD74986SO	X
JD74986-13	088D-R-0-2-ACTD-JD74986SO	X
JD74986-14	088D-R-2-12-ACTD-JD74986SO	X
JD74986-15	090-SD-0-2-ACTD-JD74986SO	X
JD74986-16	090-SD-2-12-ACTD-JD74986SO	X
JD74986-17 FD	090-R-0-2-ACTD-JD74986SO	X
JD74986-18 FD	FD-10162023-ACTD-JD74986SO	X

LAB ID	CLIENT ID	PFAS
JD74986-19	090-R-2-12-ACTD-JD74986SO	X
JD74986-19 MS	090-R-2-12-ACTD-JD74986SO MS	X
JD74986-19 MSD	090-R-2-12-ACTD-JD74986SO MSD	X
JD74986-20	079-NS-0-2-ACTD-JD74986SO	X
JD74986-21	079-NS-2-12-ACTD-JD74986SO	X
JD74986-22	079-SD-0-2-ACTD-JD74986SO	X
JD74986-23	079-SD-2-12-ACTD-JD74986SO	X
JD74986-24	079-R-0-2-ACTD-JD74986SO	X
JD74986-25	079-R-2-12-ACTD-JD74986SO	X
JD74986-26	RB-10162023-ACTD-JD74986AQ	X
JD74986-27	095-SD-0-2-ACTD-JD74986SO	X
JD74986-28	095-SD-2-12-ACTD-JD74986SO	X
JD74986-29	095-R-0-2-ACTD-JD74986SO	X
JD74986-30	095-R-2-12-ACTD-JD74986SO	X
JD74986-30 MS	095-R-2-12-ACTD-JD74986SO MS	X
JD74986-30 MSD	095-R-2-12-ACTD-JD74986SO MSD	X
JD74986-31	097A-SD-0-2-ACTD-JD74986SO	X
JD74986-32	097A-SD-2-12-ACTD-JD74986SO	X
JD74986-33	097A-R-0-2-ACTD-JD74986SO	X
JD74986-34	097A-R-2-12-ACTD-JD74986SO	X
JD74986-35	098-SD-0-2-ACTD-JD74986SO	X
JD74986-36	098-SD-2-12-ACTD-JD74986SO	X
JD74986-37	098-R-0-2-ACTD-JD74986SO	X
JD74986-38	098-R-2-12-ACTD-JD74986SO	X
JD74986-39	087E-NS-0-2-ACTD-JD74986SO	X
JD74986-40 FD	087E-NS-2-12-ACTD-JD74986SO	X
JD74986-41 FD	FD-10172023-ACTD-JD74986SO	X
JD74986-42	087E-SD-0-2-ACTD-JD74986SO	X
JD74986-43	087E-SD-2-12-ACTD-JD74986SO	X
JD74986-44	087E-R-0-2-ACTD-JD74986SO	X
JD74986-45	087E-R-2-12-ACTD-JD74986SO	X
JD74986-45 MS	087E-R-2-12-ACTD-JD74986SO MS	X
JD74986-45 MSD	087E-R-2-12-ACTD-JD74986SO MSD	X
JD74986-46	100A-SD-0-2-ACTD-JD74986SO	X
JD74986-47	100A-SD-2-12-ACTD-JD74986SO	X
JD74986-48	100A-R-0-2-ACTD-JD74986SO	X
JD74986-49	100A-R-2-12-ACTD-JD74986SO	X
JD74986-50	RB-10172023-ACTD-JD74986AQ	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD74986

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74986-19	090-R-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R R R R R
JD74986-20	079-NS-0-2	13C4PFBA	PFBA	R
JD74986-22	079-SD-0-2	13C4PFBA	PFBA	R
JD74986-23	079-SD-2-12	13C4PFBA	PFBA	R
JD74986-27	095-SD-0-2	13C4PFBA	PFBA	R
JD74986-28	095-SD-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R R R R R
JD74986-42	087E-SD-0-2	13C4PFBA	PFBA	R
JD74986-44	087E-R-0-2	13C4PFBA	PFBA	R
JD74986-45	087E-R-0-2	13C4PFBA	PFBA	R
JD74986-46	100A-SD-0-2	13C4PFBA	PFBA	R
JD74986-47	100A-SD-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R R R R R

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD74986-48	100A-R-0-2	13C4PFBA	PFBA	R
JD74986-49	100A-R-2-12	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks RB-10162023-ACTD-JD74986AQ and RB-10172023-ACTD-JD74986AQ were identified in this SDG. All Equipment Blank results were undetected.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD74986-19/090-R-2-12-ACTD-JD74986SO, JD74986-30/095-R-2-12-ACTD-JD74986SO, and JD74986-45/087E-R-2-12-ACTD-JD74986SO. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD74986-19	090-R-2-12-ACTD-JD74986SO	Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ
JD74986-30	095-R-2-12-ACTD-JD74986SO	RPD > 30%	Perfluoroheptanesulfonic acid	UJ
		Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ
JD74986-45	087E-R-2-12-ACTD-JD74986SO	RPD > 30%	Perfluorododecanesulfonic acid	UJ

VII.) Laboratory Control Samples (LCS):

All Low Level LCS Recovery criteria were met. No qualification was necessary.

LCS OP49924-LLBS reported Perfluorotridecanoic acid, Perfluorotetradecanoic acid, MeFOSAA, PFMPA, and 3:3 FTCA at < the lower control limit of 70%. The associated samples, JD74986-11, JD74986-12, JD74986-13, JD74986-14, JD74986-15, JD74986-16, JD74986-17, JD74986-18, JD74986-19, JD74986-20, JD74986-21, JD74986-22, JD74986-23, JD74986-24, JD74986-25, JD74986-27, JD74986-28, JD74986-29 were qualified as estimated (J/UJ).

LCS OP49924-BS reported PFMPA and 3:3 FTCA at < the lower control limit of 70%. The associated samples, JD74986-11, JD74986-12, JD74986-13, JD74986-14, JD74986-15, JD74986-16, JD74986-17, JD74986-18, JD74986-19, JD74986-20, JD74986-21, JD74986-22, JD74986-23, JD74986-24, JD74986-25, JD74986-27, JD74986-28, JD74986-29 were qualified as estimated (J/UJ).

LCS OP49924-LLBS reported Perfluoropentanesulfonic acid, ADONA, PFMBA, 19Cl-PF3ONS, 911Cl-PF3OUdS, and PFEESA at > the upper control limit of 130%. The associated detected results in samples, JD74986-11, JD74986-12, JD74986-13, JD74986-14, JD74986-15, JD74986-16, JD74986-17, JD74986-18, JD74986-19, JD74986-20, JD74986-21, JD74986-22, JD74986-23, JD74986-24, JD74986-25, JD74986-27, JD74986-28, JD74986-29 were qualified as estimated (J).

LCS OP49935-LLBS and OP49935-BS reported PFMPA and 3:3 FTCA at < the lower control limit of 70%. The associated samples JD74986-1, JD74986-2, JD74986-3, JD74986-4, JD74986-5, JD74986-6, JD74986-7, JD74986-8, JD74986-9, JD74986-10, JD74986-30, JD74986-31, JD74986-32, JD74986-33, JD74986-34, JD74986-35, and JD74986-36 were qualified as estimated (J/UJ).

LCS OP49995-LLBS reported Perfluoroundecanoic acid, PFOSA, 3:3 FTCA at < the lower control limit of 70%. The associated samples JD74986-37, JD74986-38, JD74986-39, JD74986-40, JD74986-41, JD74986-42, JD74986-43, JD74986-44, JD74986-45, JD74986-46, JD74986-47, JD74986-48, and JD74986-49 were qualified as estimated (J/UJ).

LCS OP49995-BS reported, PFMPA and 3:3 FTCA at < the lower control limit of 70%. The associated samples JD74986-37, JD74986-38, JD74986-39, JD74986-40, JD74986-41, JD74986-42, JD74986-43, JD74986-44, JD74986-45, JD74986-46, JD74986-47, JD74986-48, and JD74986-49 were qualified as estimated (J/UJ).

VIII.) Field Duplicates:

Two sets of field duplicate samples (090-R-0-2 / FD-10162023; 087E-NS-2-12/ FD-10172023) were identified as part of this SDG. The 30% Relative Percent Difference criteria were met for all results that were greater than the reporting limit.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD74986-1	028A-NS-0-2	13C4PFBA	PFBA	UJ
JD74986-2	028A-NS-2-12	13C4PFBA	PFBA	J
JD74986-3	028A-SD-0-2	13C4PFBA	PFBA	UJ
JD74986-4	028A-SD-2-12	13C4PFBA	PFBA	UJ
JD74986-5	028A-R-0-2	13C4PFBA	PFBA	UJ
JD74986-6	028A-R-2-12	13C4PFBA	PFBA	J
JD74986-7	044-SD-0-2	13C4PFBA	PFBA	J
JD74986-8	044-SD-2-12	13C4PFBA	PFBA	UJ
JD74986-9	044-R-0-2	13C4PFBA	PFBA	UJ
JD74986-10	044-R-2-12	13C4PFBA	PFBA	UJ
JD74986-11	088B-SD-0-2	13C4PFBA	PFBA	UJ
JD74986-12	088B-SD-2-12	13C4PFBA 13C6-PFDA 13C2-PFTeDA 13C3-PFBS 13C3-PFHxS d3-MeFOSA 13C3-HFPO-DA 13C5-PFPeA	PFBA PFDA PFTeDA PFBS PFHxS MeFOSA HFPO-DA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ UJ UJ UJ UJ UJ UJ
JD74986-13	088D-R-0-2	13C4PFBA	PFBA	UJ
JD74986-14	088D-R-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA	UJ UJ UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
			PFMPA PFMBA	UJ UJ
JD74986-15	090-SD-0-2	13C4PFBA	PFBA	UJ
JD74986-16	090-SD-2-12	13C4PFBA	PFBA	UJ
JD74986-17	090-R-0-2	13C4PFBA	PFBA	UJ
JD74986-19	090-R-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R R R R R
JD74986-20	079-NS-0-2	13C4PFBA	PFBA	R
JD74986-21	079-NS-2-12	13C4PFBA	PFBA	UJ
JD74986-22	079-SD-0-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R UJ UJ UJ UJ
JD74986-23	079-SD-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R UJ UJ UJ UJ
JD74986-25	079-R-2-12	13C4PFBA	PFBA	UJ
JD74986-27	095-SD-0-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R J UJ UJ UJ
JD74986-28	095-SD-2-12	13C4PFBA 13C5-PFPeA 13C3-HFPO-DA	PFBA PFPeA 3:3FTCA PFMPA PFMBA HFPO-DA	R R R R R UJ
JD74986-29	095-R-0-2	13C4PFBA	PFBA	UJ
JD74986-30	095-R-2-12	13C4PFBA	PFBA	J
JD74986-31	097A-SD-0-2	13C4PFBA	PFBA	UJ
JD74986-32	097A-SD-2-12	13C4PFBA	PFBA	UJ
JD74986-33	097A-R-0-2	13C4PFBA	PFBA	UJ
JD74986-34	097A-R-2-12	13C4PFBA	PFBA	UJ
JD74986-37	098-R-0-2	13C4PFBA	PFBA	UJ
JD74986-38	098-R-2-12	13C4PFBA	PFBA	UJ
JD74986-39	087E-NS-0-2	13C4PFBA	PFBA	UJ
JD74986-40	087E-NS-2-12	13C4PFBA	PFBA	UJ
JD74986-41	FD-10172023	13C4PFBA	PFBA	UJ
JD74986-42	087E-SD-0-2	13C4PFBA	PFBA	R

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
		13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD74986-43	087E-SD-2-12	13C4PFBA	PFBA	UJ
JD74986-44	087E-R-0-2	13C4PFBA	PFBA	R
		13C5-PFPeA	PFPeA	J
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD74986-45	087E-R-0-2	13C4PFBA	PFBA	R
		13C5-PFPeA	PFPeA	J
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
		d9-EtFOSE	EtFOSE	UJ
JD74986-46	100A-SD-0-2	13C4PFBA	PFBA	R
		13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD74986-47	100A-SD-2-12	13C4PFBA	PFBA	R
		13C5-PFPeA	PFPeA	R
			3:3FTCA	R
			PFMPA	R
			PFMBA	R
		13C5-PFHxA	PFHxA	UJ
		13C2-4:2FTS	4:2FTS	UJ
		13C3-HFPO-DA	13C3-HFPO-DA	UJ
JD74986-48	100A-R-0-2	13C4PFBA	PFBA	R
		13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD74986-49	100A-R-2-12	13C4PFBA	PFBA	R
		13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	028A-NS-0-2		
Lab Sample ID:	JD74986-1	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1684.D	1	10/23/23 21:32	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.65	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.18	0.32	0.049	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.32	0.081	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.42	0.32	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.24	0.32	0.081	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.32	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.32	0.097	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.32	0.081	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.081	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.45	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.097	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.081	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	028A-NS-0-2		
Lab Sample ID:	JD74986-1	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.45	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.65	0.049	ug/kg	UJ
863090-89-5	PFMBA	ND	0.65	0.097	ug/kg	
151772-58-6	NFDHA	ND	0.65	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.42	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.65	0.049	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.1	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.1	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	27%		5-130%
	13C5-PFPeA	78%		40-130%
	13C5-PFHxA	92%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	028A-NS-2-12		
Lab Sample ID:	JD74986-2	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1685.D	1	10/23/23 21:47	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.35	1.2	0.17	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.13	0.61	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.20	0.31	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.31	0.077	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.33	0.31	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.11	0.31	0.077	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.31	0.092	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.31	0.077	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.077	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.077	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	028A-NS-2-12		
Lab Sample ID:	JD74986-2	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.7	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.7	0.97	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	47%		5-130%
	13C5-PFPeA	95%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	115%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/20/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	028A-SD-0-2		
Lab Sample ID:	JD74986-3	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1686.D	1	10/23/23 22:03	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.18	0.65	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.19	0.33	0.049	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.20	0.33	0.081	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.48	0.33	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.33	0.33	0.081	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.33	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.33	0.098	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.54	0.33	0.081	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid [a]	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.081	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.46	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.098	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.081	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	028A-SD-0-2		
Lab Sample ID:	JD74986-3	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.46	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.65	0.049	ug/kg	UJ
863090-89-5	PFMBA	ND	0.65	0.098	ug/kg	
151772-58-6	NFDHA	ND	0.65	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.42	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.65	0.049	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.1	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.1	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		8-130%
	13C5-PFPeA	82%		35-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	108% [b]		40-130%
	13C2-PFDoDA	96%		40-130%
	13C2-PFTeDA	78%		20-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	028A-SD-2-12		
Lab Sample ID:	JD74986-4	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1687.D	1	10/23/23 22:18	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.38	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.17	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.087	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	028A-SD-2-12		
Lab Sample ID:	JD74986-4	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	31%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	113%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	77%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	028A-R-0-2		
Lab Sample ID:	JD74986-5	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1688.D	1	10/23/23 22:33	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.19	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.67	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	0.090	0.34	0.051	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.34	0.084	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.28	0.34	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.16	0.34	0.084	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.34	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.34	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.34	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.34	0.084	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.084	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.084	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	028A-R-0-2		
Lab Sample ID:	JD74986-5	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.4	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.4	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	82%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	028A-R-2-12		
Lab Sample ID:	JD74986-6	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1689.D	1	10/23/23 22:48	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.43	1.2	0.17	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg		
307-24-4	Perfluorohexanoic acid	0.19	0.31	0.046	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.16	0.31	0.076	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.35	0.31	0.12	ug/kg		
375-95-1	Perfluorononanoic acid	0.18	0.31	0.076	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.11	0.31	0.092	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.47	0.31	0.076	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.21	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.076	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.31	0.11	ug/kg		
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg		
4151-50-2	EtFOSA	ND	0.31	0.076	ug/kg		

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	028A-R-2-12		
Lab Sample ID:	JD74986-6	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	29%		5-130%
	13C5-PFPeA	88%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.7

Client Sample ID:	044-SD-0-2		
Lab Sample ID:	JD74986-7	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1690.D	1	10/23/23 23:04	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.26	1.2	0.16	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.073	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.095	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.087	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.11	0.29	0.072	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	044-SD-0-2		
Lab Sample ID:	JD74986-7	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	41%		5-130%
	13C5-PFPeA	99%		40-130%
	13C5-PFHxA	109%		40-130%
	13C4-PFHpA	115%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	114%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.8

Client Sample ID:	044-SD-2-12		
Lab Sample ID:	JD74986-8	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1691.D	1	10/23/23 23:19	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.15	0.51	0.090	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.083	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.18	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	044-SD-2-12		
Lab Sample ID:	JD74986-8	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	73%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	110%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	116%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	044-R-0-2		
Lab Sample ID:	JD74986-9	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1695.D	1	10/24/23 09:43	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.27	0.64	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.32	0.048	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.32	0.079	ug/kg	
335-67-1	Perfluorooctanoic acid	0.16	0.32	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.32	0.079	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.32	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.32	0.095	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.32	0.079	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.079	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.45	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.095	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.079	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	044-R-0-2		
Lab Sample ID:	JD74986-9	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.45	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.64	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.64	0.095	ug/kg	
151772-58-6	NFDHA	ND	0.64	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.64	0.048	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.9	0.99	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.9	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	73%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	044-R-2-12		
Lab Sample ID:	JD74986-10	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1696.D	1	10/24/23 09:58	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.18	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.14	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.22	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.26	0.065	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	044-R-2-12		
Lab Sample ID:	JD74986-10	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	30%		5-130%
	13C5-PFPeA	95%		40-130%
	13C5-PFHxA	112%		40-130%
	13C4-PFHpA	114%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	113%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	133% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	088B-SD-0-2		
Lab Sample ID:	JD74986-11	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1709.D	1	10/24/23 13:16	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	0.12	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.070	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.19	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	088B-SD-0-2		
Lab Sample ID:	JD74986-11	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	109%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	116%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	088B-SD-2-12		
Lab Sample ID:	JD74986-12	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1802.D	1	10/25/23 14:21	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.066	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.066	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.093	ug/kg	UJ
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	UJ
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.27	0.066	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.27	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	088B-SD-2-12		
Lab Sample ID:	JD74986-12	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	UJ
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	UJ
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	45%		5-130%
	13C5-PFPeA	49%		40-130%
	13C5-PFHxA	53%		40-130%
	13C4-PFHpA	54%		40-130%
	13C8-PFOA	51%		40-130%
	13C9-PFNA	51%		40-130%
	13C6-PFDA	48%		40-130%
	13C7-PFUnDA	51%		30-130%
	13C2-PFDoDA	46%		10-130%
	13C2-PFTeDA	43%		10-130%
	13C3-PFBS	46%		40-135%
	13C3-PFHxS	45%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	088D-R-0-2		
Lab Sample ID:	JD74986-13	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1714.D	1	10/24/23 14:33	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.15	0.60	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.30	0.045	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.11	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.30	0.075	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	088D-R-0-2		
Lab Sample ID:	JD74986-13	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	110%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	088D-R-2-12		
Lab Sample ID:	JD74986-14	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1715.D	1	10/24/23 14:48	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.090	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.18	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	088D-R-2-12		
Lab Sample ID:	JD74986-14	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.077	ug/kg	UJ
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	090-SD-0-2		
Lab Sample ID:	JD74986-15	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1716.D	1	10/24/23 15:03	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.094	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	0.14	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.27	0.067	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	090-SD-0-2		
Lab Sample ID:	JD74986-15	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	118%		40-135%
	13C3-PFHxS	117%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	090-SD-2-12		
Lab Sample ID:	JD74986-16	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1717.D	1	10/24/23 15:18	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.34	0.49	0.086	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.10	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.27	0.25	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.063	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	090-SD-2-12		
Lab Sample ID:	JD74986-16	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	116%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.1.7

Client Sample ID:	090-R-0-2		
Lab Sample ID:	JD74986-17	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1718.D	1	10/24/23 15:33	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.11	0.61	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.30	0.046	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.30	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.26	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.25	0.30	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.30	0.091	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.30	0.076	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	090-R-0-2		
Lab Sample ID:	JD74986-17	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.18

Client Sample ID:	FD-10162023		
Lab Sample ID:	JD74986-18	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1719.D	1	10/24/23 15:49	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.19	1.2	0.17	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.11	0.60	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.30	0.045	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.082	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.29	0.30	0.075	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.41	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10162023		
Lab Sample ID:	JD74986-18	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	57%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	090-R-2-12		
Lab Sample ID:	JD74986-19	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1720.D	1	10/24/23 16:04	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.24	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	0.19	0.24	0.098	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.18	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	0.17	0.98	0.12	ug/kg	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	090-R-2-12		
Lab Sample ID:	JD74986-19	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.098	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	R
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	R
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	9% [a]		40-130%
	13C5-PFHxA	59%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.20

Client Sample ID:	079-NS-0-2		
Lab Sample ID:	JD74986-20	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1721.D	1	10/24/23 16:19	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.27	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.27	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.10	0.27	0.096	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.10	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.27	0.069	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	079-NS-0-2		
Lab Sample ID:	JD74986-20	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	49%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	119%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	079-NS-2-12		
Lab Sample ID:	JD74986-21	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1725.D	1	10/24/23 17:20	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.068	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.099	0.25	0.099	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	079-NS-2-12		
Lab Sample ID:	JD74986-21	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	37%		5-130%
	13C5-PFPeA	97%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	107%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	119%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	121%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	079-SD-0-2		
Lab Sample ID:	JD74986-22	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1726.D	1	10/24/23 17:35	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.67	0.12	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.17	0.34	0.050	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.34	0.084	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.40	0.34	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.24	0.34	0.084	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.14	0.34	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.34	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.34	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.8	0.34	0.084	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.084	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.084	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	079-SD-0-2		
Lab Sample ID:	JD74986-22	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.13	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.050	ug/kg	UJ
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.4	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.4	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	47%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	114%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	85%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	079-SD-2-12		
Lab Sample ID:	JD74986-23	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1727.D	1	10/24/23 17:50	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.072	ug/kg	
335-67-1	Perfluorooctanoic acid	0.29	0.29	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.95	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	079-SD-2-12		
Lab Sample ID:	JD74986-23	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	UJ
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	10% [a]		40-130%
	13C5-PFHxA	66%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	116%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	107%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	079-R-0-2		
Lab Sample ID:	JD74986-24	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1728.D	1	10/24/23 18:06	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.24	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	0.042	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.093	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.18	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	079-R-0-2		
Lab Sample ID:	JD74986-24	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		5-130%
	13C5-PFPeA	95%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.25

Client Sample ID:	079-R-2-12		
Lab Sample ID:	JD74986-25	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1729.D	1	10/24/23 18:21	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.065	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.11	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.25	0.063	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	079-R-2-12		
Lab Sample ID:	JD74986-25	**Date Sampled:**	10/16/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	116%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.26

Client Sample ID:	RB-10162023		
Lab Sample ID:	JD74986-26	**Date Sampled:**	10/16/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1825.D	1	10/25/23 20:54	PC	10/24/23 09:21	OP49970	T1Q58
Run #2							

	Initial Volume	Final Volume
Run #1	511 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0078	0.00091	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0039	0.00071	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00049	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00073	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00039	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00061	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00054	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00075	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00077	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00074	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00065	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.00099	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00096	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00042	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00039	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0078	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0078	0.00089	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0078	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00068	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00063	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00052	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10162023		
Lab Sample ID:	JD74986-26	**Date Sampled:**	10/16/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00050	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00089	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0078	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0078	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0039	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0039	0.00055	ug/l	
151772-58-6	NFDHA	ND	0.0039	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0078	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0078	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0039	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0098	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.049	0.0070	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.049	0.0060	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		5-130%
	13C5-PFPeA	105%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.27

Client Sample ID:	095-SD-0-2		
Lab Sample ID:	JD74986-27	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1730.D	1	10/24/23 18:36	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.17	0.68	0.12	ug/kg	J J
307-24-4	Perfluorohexanoic acid	ND	0.34	0.051	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.34	0.085	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.34	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.34	0.085	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.34	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.34	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.34	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.11	0.34	0.085	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.085	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.085	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	095-SD-0-2		
Lab Sample ID:	JD74986-27	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.20	ug/kg	
377-73-1	PFMPA	ND	0.68	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.68	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.68	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.68	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	31% [a]		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	121%		30-130%
	13C2-PFDoDA	112%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	095-SD-2-12		
Lab Sample ID:	JD74986-28	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1731.D	1	10/24/23 18:52	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.24	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.092	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	095-SD-2-12		
Lab Sample ID:	JD74986-28	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	UJ
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	R
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	R
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	9% [a]		40-130%
	13C5-PFHxA	57%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	116%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.29

Client Sample ID:	095-R-0-2		
Lab Sample ID:	JD74986-29	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1732.D	1	10/24/23 19:07	PC	10/23/23 10:23	OP49924	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.17	0.64	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.15	0.32	0.048	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.32	0.080	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.32	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.32	0.080	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.13	0.32	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.26	0.32	0.097	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.34	0.32	0.080	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.080	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.45	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.097	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.080	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	095-R-0-2		
Lab Sample ID:	JD74986-29	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.45	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.64	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.64	0.097	ug/kg	
151772-58-6	NFDHA	ND	0.64	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.42	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.64	0.048	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.0	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.0	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID: 095-R-2-12
Lab Sample ID: JD74986-30
Matrix: SO - Soil
Method: EPA DRAFT 1633 EPA 1633 DRAFT
Project: NYSDEC WAA44 Rural Background PFAs Project, NY

Date Sampled: 10/17/23
Date Received: 10/18/23
Percent Solids: 66.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1697.D	1	10/24/23 10:14	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.63	1.2	0.17	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.23	0.60	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.27	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.25	0.30	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.49	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.18	0.30	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.14	0.30	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.13	0.30	0.091	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.47	0.30	0.076	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.30

Client Sample ID:	095-R-2-12		
Lab Sample ID:	JD74986-30	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.091	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	33%		5-130%
	13C5-PFPeA	103%		40-130%
	13C5-PFHxA	114%		40-130%
	13C4-PFHpA	124%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	129%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	118%		40-135%
	13C3-PFHxS	119%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID: 097A-SD-0-2
Lab Sample ID: JD74986-31 **Date Sampled:** 10/17/23
Matrix: SO - Soil **Date Received:** 10/18/23
Method: EPA DRAFT 1633 EPA 1633 DRAFT **Percent Solids:** 58.8
Project: NYSDEC WAA44 Rural Background PFAs Project, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1698.D	1	10/24/23 10:29	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.68	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.20	0.34	0.051	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.34	0.085	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.19	0.34	0.14	ug/kg	J
375-95-1	Perfluorononanoic acid	0.094	0.34	0.085	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.34	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.34	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.34	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.34	0.085	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.085	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.085	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	097A-SD-0-2		
Lab Sample ID:	JD74986-31	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.20	ug/kg	
377-73-1	PFMPA	ND	0.68	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.68	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.68	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.68	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	86%		40-130%
	13C5-PFHxA	111%		40-130%
	13C4-PFHpA	115%		40-130%
	13C8-PFOA	109%		40-130%
	13C9-PFNA	113%		40-130%
	13C6-PFDA	133% [a]		40-130%
	13C7-PFUnDA	129%		30-130%
	13C2-PFDoDA	124%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	097A-SD-2-12		
Lab Sample ID:	JD74986-32	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1699.D	1	10/24/23 10:44	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.22	0.62	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.16	0.31	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.31	0.077	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.19	0.31	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.18	0.31	0.077	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.31	0.093	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.31	0.077	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.077	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.093	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.077	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	097A-SD-2-12		
Lab Sample ID:	JD74986-32	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.19	ug/kg	
377-73-1	PFMPA	ND	0.62	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.62	0.093	ug/kg	
151772-58-6	NFDHA	ND	0.62	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.62	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.7	0.96	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.7	0.97	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		5-130%
	13C5-PFPeA	82%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	117%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	128%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	124%		10-130%
	13C2-PFTeDA	103%		10-130%
	13C3-PFBS	87%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	097A-R-0-2		
Lab Sample ID:	JD74986-33	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1700.D	1	10/24/23 10:59	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.16	0.70	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.35	0.052	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.14	0.35	0.087	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.22	0.35	0.14	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.35	0.087	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.19	0.35	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.19	0.35	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.35	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.35	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.35	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.35	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.35	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.35	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.35	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.39	0.35	0.087	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.35	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.35	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.35	0.087	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.49	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.35	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.35	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.35	0.087	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	097A-R-0-2		
Lab Sample ID:	JD74986-33	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.35	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.35	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.5	0.49	ug/kg	
1691-99-2	EtFOSE	ND	3.5	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.70	0.052	ug/kg	UJ
863090-89-5	PFMBA	ND	0.70	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.70	0.23	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.45	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.70	0.052	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.42	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.7	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.7	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	72%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	116%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	116%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	123%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID: 097A-R-2-12
Lab Sample ID: JD74986-34
Matrix: SO - Soil
Method: EPA DRAFT 1633 EPA 1633 DRAFT
Project: NYSDEC WAA44 Rural Background PFAs Project, NY

Date Sampled: 10/17/23
Date Received: 10/18/23
Percent Solids: 68.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1701.D	1	10/24/23 11:15	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.072	ug/kg	
335-67-1	Perfluorooctanoic acid	0.14	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.29	0.072	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.29	0.086	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	097A-R-2-12		
Lab Sample ID:	JD74986-34	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	43%		5-130%
	13C5-PFPeA	93%		40-130%
	13C5-PFHxA	115%		40-130%
	13C4-PFHpA	124%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	125%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	127%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	120%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	098-SD-0-2		
Lab Sample ID:	JD74986-35	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1702.D	1	10/24/23 11:30	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.27	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.18	0.54	0.095	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.38	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.20	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	098-SD-0-2		
Lab Sample ID:	JD74986-35	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	61%		5-130%
	13C5-PFPeA	91%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	110%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.36

Client Sample ID:	098-SD-2-12		
Lab Sample ID:	JD74986-36	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1703.D	1	10/24/23 11:45	PC	10/23/23 13:45	OP49935	T1Q57
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.15	0.97	0.13	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.16	0.49	0.085	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.095	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.091	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.24	0.097	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	098-SD-2-12		
Lab Sample ID:	JD74986-36	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	98%		5-130%
	13C5-PFPeA	100%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	88%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID: 098-R-0-2
Lab Sample ID: JD74986-37 **Date Sampled:** 10/17/23
Matrix: SO - Soil **Date Received:** 10/18/23
Method: EPA DRAFT 1633 EPA 1633 DRAFT **Percent Solids:** 73.8
Project: NYSDEC WAA44 Rural Background PFAs Project, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1933.D	1	10/27/23 00:21	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.53	0.093	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.13	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.27	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.44	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.19	0.27	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.30	0.27	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.27	0.080	ug/kg	J J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.0	0.27	0.066	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	098-R-0-2		
Lab Sample ID:	JD74986-37	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID: 098-R-2-12
Lab Sample ID: JD74986-38
Matrix: SO - Soil
Method: EPA DRAFT 1633 EPA 1633 DRAFT
Project: NYSDEC WAA44 Rural Background PFAs Project, NY

Date Sampled: 10/17/23
Date Received: 10/18/23
Percent Solids: 79.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1934.D	1	10/27/23 00:36	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.19	0.50	0.088	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.16	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.29	0.25	0.063	ug/kg	
335-76-2	Perfluorodecanoic acid	0.22	0.25	0.088	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.11	0.25	0.075	ug/kg	J J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	098-R-2-12		
Lab Sample ID:	JD74986-38	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	118%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	117%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	108%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	087E-NS-0-2		
Lab Sample ID:	JD74986-39	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1935.D	1	10/27/23 00:51	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.12	0.55	0.096	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.18	0.28	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.19	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.096	0.28	0.083	ug/kg	J J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.28	0.069	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.096	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: 087E-NS-0-2
Lab Sample ID: JD74986-39 **Date Sampled:** 10/17/23
Matrix: SO - Soil **Date Received:** 10/18/23
Method: EPA DRAFT 1633 EPA 1633 DRAFT **Percent Solids:** 72.7
Project: NYSDEC WAA44 Rural Background PFAs Project, NY

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	59%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	119%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.40

Client Sample ID:	087E-NS-2-12		
Lab Sample ID:	JD74986-40	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1936.D	1	10/27/23 01:07	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.096	0.46	0.081	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.092	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.073	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.31	0.23	0.093	ug/kg	
375-95-1	Perfluorononanoic acid	0.22	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	087E-NS-2-12		
Lab Sample ID:	JD74986-40	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10172023		
Lab Sample ID:	JD74986-41	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1937.D	1	10/27/23 01:22	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.10	0.51	0.089	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.14	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.096	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.22	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.092	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.090	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	UJ
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10172023		
Lab Sample ID:	JD74986-41	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.42

Client Sample ID:	087E-SD-0-2		
Lab Sample ID:	JD74986-42	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1938.D	1	10/27/23 01:37	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.098	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.070	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.28	0.070	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.084	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.081	0.28	0.070	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	087E-SD-0-2		
Lab Sample ID:	JD74986-42	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	UJ
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	72%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	087E-SD-2-12		
Lab Sample ID:	JD74986-43	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1939.D	1	10/27/23 01:52	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.081	ug/kg	
307-24-4	Perfluorohexanoic acid	0.052	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.069	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.23	0.093	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.23	0.058	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	087E-SD-2-12		
Lab Sample ID:	JD74986-43	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	110%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	112%		40-135%
	13C3-PFHxS	120%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.44

Client Sample ID:	087E-R-0-2		
Lab Sample ID:	JD74986-44	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1940.D	1	10/27/23 02:08	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg		R
2706-90-3	Perfluoropentanoic acid	0.33	0.66	0.11	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	ND	0.33	0.049	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.20	0.33	0.082	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.63	0.33	0.13	ug/kg		
375-95-1	Perfluorononanoic acid	0.49	0.33	0.082	ug/kg		
335-76-2	Perfluorodecanoic acid	0.19	0.33	0.11	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.26	0.33	0.099	ug/kg	J	J
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.16	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.11	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.16	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.16	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.73	0.33	0.082	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.082	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.46	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.33	0.11	ug/kg	UJ	
31506-32-8	MeFOSA	ND	0.33	0.099	ug/kg		
4151-50-2	EtFOSA	ND	0.33	0.082	ug/kg		

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	087E-R-0-2		
Lab Sample ID:	JD74986-44	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.46	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.66	0.049	ug/kg	UJ
863090-89-5	PFMBA	ND	0.66	0.099	ug/kg	UJ
151772-58-6	NFDHA	ND	0.66	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.66	0.049	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.2	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.2	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.45

Client Sample ID:	087E-R-2-12		
Lab Sample ID:	JD74986-45	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1941.D	1	10/27/23 02:23	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.13	0.49	0.086	ug/kg	J J
307-24-4	Perfluorohexanoic acid	ND	0.24	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.37	0.24	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.085	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.24	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.091	0.24	0.086	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	0.36	0.98	0.34	ug/kg	J
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.086	ug/kg	UJ
31506-32-8	MeFOSA	0.078	0.24	0.073	ug/kg	J
4151-50-2	EtFOSA	0.097	0.24	0.061	ug/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	087E-R-2-12		
Lab Sample ID:	JD74986-45	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	0.16	0.98	0.15	ug/kg	J
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	0.072	0.49	0.037	ug/kg	J
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	0.80	6.1	0.76	ug/kg	J
812-70-4	7:3 Fluorotelomer carboxylate	0.93	6.1	0.77	ug/kg	J

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	73%		40-130%
	13C4-PFHpA	84%		40-130%
	13C8-PFOA	75%		40-130%
	13C9-PFNA	75%		40-130%
	13C6-PFDA	64%		40-130%
	13C7-PFUnDA	72%		30-130%
	13C2-PFDoDA	69%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	61%		40-135%
	13C3-PFHxS	68%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.46

Client Sample ID:	100A-SD-0-2		
Lab Sample ID:	JD74986-46	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1942.D	1	10/27/23 02:38	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.071	ug/kg	
335-67-1	Perfluorooctanoic acid	0.14	0.29	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.29	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.29	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	100A-SD-0-2		
Lab Sample ID:	JD74986-46	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	UJ
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.47

Client Sample ID:	100A-SD-2-12		
Lab Sample ID:	JD74986-47	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1946.D	1	10/27/23 03:39	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.094	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	UJ
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	0.17	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.078	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.72	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.27	0.067	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.47

Client Sample ID:	100A-SD-2-12		
Lab Sample ID:	JD74986-47	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	UJ
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	R
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	R
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	5% [a]		40-130%
	13C5-PFHxA	34% [a]		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	56%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	100A-R-0-2		
Lab Sample ID:	JD74986-48	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1947.D	1	10/27/23 03:55	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.30	0.045	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.30	0.075	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.16	0.30	0.075	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.090	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	100A-R-0-2		
Lab Sample ID:	JD74986-48	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	UJ
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	48%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

4.49

Client Sample ID:	100A-R-2-12		
Lab Sample ID:	JD74986-49	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1948.D	1	10/27/23 04:10	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.099	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.056	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.070	ug/kg	
335-67-1	Perfluorooctanoic acid	0.13	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.10	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.099	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.28	0.070	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	100A-R-2-12		
Lab Sample ID:	JD74986-49	**Date Sampled:**	10/17/23
Matrix:	SO - Soil	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.085	ug/kg	UJ
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	48%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	84%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 5/27/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10172023		
Lab Sample ID:	JD74986-50	**Date Sampled:**	10/17/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1826.D	1	10/25/23 21:09	PC	10/24/23 09:21	OP49970	T1Q58
Run #2							

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0086	0.0010	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0043	0.00078	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0022	0.00031	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0022	0.00054	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0022	0.00081	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0022	0.00043	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0022	0.00067	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0022	0.00059	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0022	0.00083	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0022	0.00085	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0022	0.00082	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0022	0.00071	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0022	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0022	0.0012	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0022	0.0011	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0022	0.00046	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0022	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0022	0.0012	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0022	0.00043	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0086	0.0024	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0086	0.00098	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0086	0.0016	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0022	0.00074	ug/l	
31506-32-8	MeFOSA	ND	0.0022	0.00069	ug/l	
4151-50-2	EtFOSA	ND	0.0022	0.00057	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.50

Client Sample ID:	RB-10172023		
Lab Sample ID:	JD74986-50	**Date Sampled:**	10/17/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0022	0.00055	ug/l	
2991-50-6	EtFOSAA	ND	0.0022	0.00098	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.022	0.0030	ug/l	
1691-99-2	EtFOSE	ND	0.022	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0086	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0086	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0043	0.00032	ug/l	
863090-89-5	PFMBA	ND	0.0043	0.00060	ug/l	
151772-58-6	NFDHA	ND	0.0043	0.0014	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0086	0.0026	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0086	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0043	0.00029	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.011	0.0026	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.054	0.0077	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.054	0.0066	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	100%		5-130%
	13C5-PFPeA	101%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	63%		10-130%
	13C3-PFBS	117%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

AECOM

VALIDATION REPORT – JD75085 Correction/Replacement

Project Name: NYSDEC WA#44.1 Rural Background Study for PFAS in Soil

AECOM Project #60679961

The detected result for PFPeA was qualified 'UJ' on the Form I for sample JD75085-9 (field sample ID 080-NS-0-2) by 3rd party validator – Validata Chemical Services Inc. (Validata). The validation text also has a 'UJ' listed. This was an error. The blanks associated with this sample did not show any detections for this compound. The correct qualification should be 'J' due to the low % recovery of the extracted internal standard (EIS) as indicated in the text of the validation report. The 'UJ' qualifier has been crossed out and a 'J' qualifier applied to the Form I in the validation report and the text corrected in the validation report. The changes are noted in red and initialed/dated.

No other changes have been made to the validation report.

Prepared By: Ann Marie Kropovitch, Chemist **Date: 1/16/2025**

Reviewed By: Peter R. Fairbanks, Senior Chemist **Date: 1/16/2025**

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Robert Thielke
SDG NUMBER:	JD75085
SAMPLING DATE(S):	October 18, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD75085-1	094-SD-0-2-ACTD-JD75085SO	X
JD75085-2	094-SD-2-12-ACTD-JD75085SO	X
JD75085-3	094-R-0-2-ACTD-JD75085SO	X
JD75085-4	094-R-2-12-ACTD-JD75085SO	X
JD75085-5	081C-SD-0-2-ACTD-JD75085SO	X
JD75085-6	081C-SD-2-12-ACTD-JD75085SO	X
JD75085-7	081C-R-0-2-ACTD-JD75085SO	X
JD75085-8	081C-R-2-12-ACTD-JD75085SO	X
JD75085-9	080-NS-0-2-ACTD-JD75085SO	X
JD75085-10	080-NS-2-12-ACTD-JD75085SO	X
JD75085-11	FD-10182023-ACTD-JD75085SO	X
JD75085-12	080-SD-0-2-ACTD-JD75085SO	X
JD75085-13	080-SD-2-12-ACTD-JD75085SO	X
JD75085-14	080-R-0-2-ACTD-JD75085SO	X
JD75085-15	080-R-2-12-ACTD-JD75085SO	X
JD75085-16	083B-SD-0-2-ACTD-JD75085SO	X
JD75085-17 FD	083B-SD-2-12-ACTD-JD75085SO	X
JD75085-18 FD	083B-R-0-2-ACTD-JD75085SO	X

LAB ID	CLIENT ID	PFAS
JD75085-19	083B-R-2-12-ACTD-JD75085SO	X
JD75085-20	089C-SD-0-2-ACTD-JD75085SO	X
JD75085-21	089C-SD-2-12-ACTD-JD75085SO	X
JD75085-22	089C-R-0-2-ACTD-JD75085SO	X
JD75085-23	089C-R-2-12-ACTD-JD75085SO	X
JD75085-24	RB-10182023-ACTD-JD75085AQ	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD75085

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75085-6	081C-SD-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	R
JD75085-9	080-NS-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks RB-10182023 was identified in this SDG. All Equipment Blank results were undetected.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD75085-15/080-R-2-12-ACTD-JD75085SO. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD75085-15	080-R-2-12-ACTD-JD75085SO	Recovery < lower control limit of 70%	3:3FTCA	UJ

VII.) Laboratory Control Samples (LCS):

LCS OP49991-LLBS reported Perfluorododecanoic acid, EtFOSA, and EtFOSE at < the lower control limit of 70%. The associated results in sample JD75085-24 were qualified as estimated (J/UJ).

LCS OP49971-LLBS reported Perfluorobutanoic acid Perfluoropentanesulfonic acid, Perfluorooctanesulfonic acid , PFOSA, and MeFOSAA at < the lower control limit of 70%. The associated results in samples JD75085-1, JD75085-2, JD75085-3, JD75085-4, JD75085-5, JD75085-6, JD75085-7, JD75085-8, JD75085-9, JD75085-10, JD75085-11, JD75085-12, JD75085-13, JD75085-14, JD75085-15, JD75085-16, JD75085-17, and JD75085-18 were qualified as estimated (J/UJ).

LCS OP49995-LLBS reported Perfluoroundecanoic acid, PFOSA, PFMBA, and 3:3 FTCA at < the lower control limit of 70%. The associated results in samples JD75085-19, JD75085-20, JD75085-21, JD75085-22, and JD75085-23 were qualified as estimated (J/UJ).

LCS OP49971-BS reported PFMPA and 3:3 FTCA at < the lower control limit of 70%. The associated samples JD75085-1, JD75085-2, JD75085-3, JD75085-4, JD75085-5, JD75085-6, JD75085-7, JD75085-8, JD75085-9, JD75085-10, JD75085-11, JD75085-12, JD75085-13, JD75085-14, JD75085-15, JD75085-16, JD75085-17, and JD75085-18 were qualified as estimated (J/UJ).

LCS OP49995-BS reported PFMPA and 3:3 FTCA at < the lower control limit of 70%. The associated samples JD75085-19, JD75085-20, JD75085-21, JD75085-22, and JD75085-23were qualified as estimated (J/UJ).

VIII.) Field Duplicates:

One set of field duplicate samples (080-NS-2-12-ACTD-JD75085SO/FD-10182023-ACTD-JD75085SO) were identified as part of this SDG. The 30% Relative Percent Difference criteria were met for all results that were greater than the reporting limit.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75085-1	094-SD-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	J
JD75085-2	094-SD-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-3	094-R-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-4	094-R-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-5	081C-SD-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-6	081C-SD-2-12-ACTD-JD75085SO	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R UJ UJ UJ UJ
JD75085-7	081C-R-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	J
JD75085-8	081C-R-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	J
JD75085-9	080-NS-0-2-ACTD-JD75085SO	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R ~~UJ~~ J UJ UJ UJ
JD75085-10	080-NS-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-11	FD-10182023-ACTD-JD75085SO	13C4PFBA	PFBA	UJ

J added AMK 1/15/25

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75085-12	080-SD-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-13	080-SD-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	J
JD75085-14	080-R-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	J
JD75085-15	080-R-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	J
JD75085-16	083B-SD-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-17	083B-SD-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-18	083B-R-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-19	083B-R-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-20	089C-SD-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-21	089C-SD-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-22	089C-R-0-2-ACTD-JD75085SO	13C4PFBA	PFBA	UJ
JD75085-23	089C-R-2-12-ACTD-JD75085SO	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	094-SD-0-2		
Lab Sample ID:	JD75085-1	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1903.D	1	10/26/23 16:43	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.36	1.2	0.17	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg		
307-24-4	Perfluorohexanoic acid	0.096	0.30	0.046	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.11	0.30	0.076	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.20	0.30	0.12	ug/kg	J	
375-95-1	Perfluorononanoic acid	0.12	0.30	0.076	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.30	0.11	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.12	0.30	0.091	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	UJ	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.39	0.30	0.076	ug/kg	J	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	UJ	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg		
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	094-SD-0-2		
Lab Sample ID:	JD75085-1	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	37%		5-130%
	13C5-PFPeA	93%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	123%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	094-SD-2-12		
Lab Sample ID:	JD75085-2	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1904.D	1	10/26/23 16:58	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.097	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.088	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.28	0.069	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	094-SD-2-12		
Lab Sample ID:	JD75085-2	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	30%		5-130%
	13C5-PFPeA	95%		40-130%
	13C5-PFHxA	111%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	114%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	118%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	094-R-0-2		
Lab Sample ID:	JD75085-3	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1905.D	1	10/26/23 17:13	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.34	0.68	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.36	0.34	0.051	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.36	0.34	0.085	ug/kg	
335-67-1	Perfluorooctanoic acid	0.69	0.34	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.36	0.34	0.085	ug/kg	
335-76-2	Perfluorodecanoic acid	0.22	0.34	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.35	0.34	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.34	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.73	0.34	0.085	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.085	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.085	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	094-R-0-2		
Lab Sample ID:	JD75085-3	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.20	ug/kg	
377-73-1	PFMPA	ND	0.68	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.68	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.68	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.68	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	117%		40-130%
	13C4-PFHpA	115%		40-130%
	13C8-PFOA	109%		40-130%
	13C9-PFNA	116%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	094-R-2-12		
Lab Sample ID:	JD75085-4	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1906.D	1	10/26/23 17:29	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.56	0.099	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.15	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.40	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.099	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.35	0.28	0.071	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	094-R-2-12		
Lab Sample ID:	JD75085-4	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	081C-SD-0-2		
Lab Sample ID:	JD75085-5	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1907.D	1	10/26/23 17:44	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.66	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.33	0.050	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.33	0.083	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.33	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.33	0.083	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.33	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.18	0.33	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.17	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.33	0.083	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.083	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.12	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.33	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.083	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	081C-SD-0-2		
Lab Sample ID:	JD75085-5	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.33	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.66	0.050	ug/kg	UJ
863090-89-5	PFMBA	ND	0.66	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.66	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.66	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.3	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.3	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	114%		40-130%
	13C4-PFHpA	115%		40-130%
	13C8-PFOA	115%		40-130%
	13C9-PFNA	124%		40-130%
	13C6-PFDA	127%		40-130%
	13C7-PFUnDA	125%		30-130%
	13C2-PFDoDA	127%		10-130%
	13C2-PFTeDA	104%		10-130%
	13C3-PFBS	115%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	081C-SD-2-12		
Lab Sample ID:	JD75085-6	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1908.D	1	10/26/23 17:59	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.15	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.29	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.29	0.086	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.37	0.29	0.072	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	081C-SD-2-12		
Lab Sample ID:	JD75085-6	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	48%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	113%		40-130%
	13C8-PFOA	111%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	114%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	110%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	124%		40-135%
	13C3-PFHxS	123%		40-130%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	081C-R-0-2		
Lab Sample ID:	JD75085-7	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1909.D	1	10/26/23 18:14	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	1.0	1.3	0.17	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.28	0.64	0.11	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.32	0.32	0.048	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.32	0.32	0.079	ug/kg		
335-67-1	Perfluorooctanoic acid	0.62	0.32	0.13	ug/kg		
375-95-1	Perfluorononanoic acid	0.42	0.32	0.079	ug/kg		
335-76-2	Perfluorodecanoic acid	0.28	0.32	0.11	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.26	0.32	0.095	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg		UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.17	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.88	0.32	0.079	ug/kg		J
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.17	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.079	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.32	0.11	ug/kg		UJ
31506-32-8	MeFOSA	ND	0.32	0.095	ug/kg		
4151-50-2	EtFOSA	ND	0.32	0.079	ug/kg		

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	081C-R-0-2		
Lab Sample ID:	JD75085-7	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.64	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.64	0.095	ug/kg	
151772-58-6	NFDHA	ND	0.64	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.64	0.048	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.9	0.99	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.9	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	73%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	65%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	081C-R-2-12		
Lab Sample ID:	JD75085-8	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1910.D	1	10/26/23 18:29	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.52	1.1	0.15	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.14	0.56	0.098	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.21	0.28	0.042	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.18	0.28	0.070	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.56	0.28	0.11	ug/kg		
375-95-1	Perfluorononanoic acid	0.19	0.28	0.070	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg		
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.084	ug/kg		
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg		UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.62	0.28	0.070	ug/kg		J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.28	0.098	ug/kg		UJ
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg		
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	081C-R-2-12		
Lab Sample ID:	JD75085-8	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	83%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	080-NS-0-2		
Lab Sample ID:	JD75085-9	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1911.D	1	10/26/23 18:45	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.16	0.61	0.11	ug/kg	J ~~UJ~~ J
307-24-4	Perfluorohexanoic acid	ND	0.31	0.046	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.31	0.076	ug/kg	
335-67-1	Perfluorooctanoic acid	0.13	0.31	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.16	0.31	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.31	0.092	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.31	0.076	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.076	ug/kg	

J added AMK 1/15/25

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	080-NS-0-2		
Lab Sample ID:	JD75085-9	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	49%		40-130%
	13C5-PFHxA	116%		40-130%
	13C4-PFHpA	112%		40-130%
	13C8-PFOA	113%		40-130%
	13C9-PFNA	119%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	116%		40-135%
	13C3-PFHxS	132% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	080-NS-2-12		
Lab Sample ID:	JD75085-10	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1915.D	1	10/26/23 19:46	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.091	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.15	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.25	0.063	ug/kg	UJ
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	080-NS-2-12		
Lab Sample ID:	JD75085-10	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	64%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	113%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	115%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10182023		
Lab Sample ID:	JD75085-11	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1916.D	1	10/26/23 20:01	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.23	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.079	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.23	0.092	ug/kg	
375-95-1	Perfluorononanoic acid	0.17	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.23	0.069	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.23	0.057	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10182023		
Lab Sample ID:	JD75085-11	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	080-SD-0-2		
Lab Sample ID:	JD75085-12	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1917.D	1	10/26/23 20:17	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.64	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.32	0.048	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.25	0.32	0.080	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.32	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.25	0.32	0.080	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.32	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.32	0.096	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.56	0.32	0.080	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.080	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.45	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.32	0.096	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.080	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	080-SD-0-2		
Lab Sample ID:	JD75085-12	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.45	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.64	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.64	0.096	ug/kg	
151772-58-6	NFDHA	ND	0.64	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.42	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.64	0.048	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.0	0.99	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.0	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	55%		40-130%
	13C5-PFHxA	86%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	86%		40-130%
	13C9-PFNA	87%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	080-SD-2-12		
Lab Sample ID:	JD75085-13	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1918.D	1	10/26/23 20:32	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.60	1.1	0.15	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.16	0.55	0.096	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.22	0.27	0.041	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.15	0.27	0.068	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.34	0.27	0.11	ug/kg		
375-95-1	Perfluorononanoic acid	0.13	0.27	0.068	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.096	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.085	0.27	0.082	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg		UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.27	0.068	ug/kg		J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.27	0.096	ug/kg		UJ
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg		
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	080-SD-2-12		
Lab Sample ID:	JD75085-13	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	85%		40-130%
	13C5-PFHxA	112%		40-130%
	13C4-PFHpA	112%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	120%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	127%		40-135%
	13C3-PFHxS	127%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	080-R-0-2		
Lab Sample ID:	JD75085-14	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1919.D	1	10/26/23 20:47	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	1.1	1.2	0.17	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	3.0	0.62	0.11	ug/kg		
307-24-4	Perfluorohexanoic acid	0.33	0.31	0.046	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.35	0.31	0.077	ug/kg		
335-67-1	Perfluorooctanoic acid	0.85	0.31	0.12	ug/kg		
375-95-1	Perfluorononanoic acid	0.56	0.31	0.077	ug/kg		
335-76-2	Perfluorodecanoic acid	0.35	0.31	0.11	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.34	0.31	0.092	ug/kg		
307-55-1	Perfluorododecanoic acid	0.12	0.31	0.12	ug/kg	J	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg		UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	1.4	0.31	0.077	ug/kg		J
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.077	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.31	0.11	ug/kg		UJ
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg		
4151-50-2	EtFOSA	ND	0.31	0.077	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	080-R-0-2		
Lab Sample ID:	JD75085-14	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.62	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.62	0.092	ug/kg	
151772-58-6	NFDHA	ND	0.62	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.62	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.7	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.7	0.97	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	54%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	121%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	080-R-2-12		
Lab Sample ID:	JD75085-15	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1920.D	1	10/26/23 21:02	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.46	1.0	0.14	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.12	0.52	0.090	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.23	0.26	0.039	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.14	0.26	0.065	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.54	0.26	0.10	ug/kg		
375-95-1	Perfluorononanoic acid	0.24	0.26	0.065	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.094	0.26	0.078	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg		UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.51	0.26	0.065	ug/kg		J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.26	0.090	ug/kg		UJ
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg		
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg		

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	080-R-2-12		
Lab Sample ID:	JD75085-15	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	27%		5-130%
	13C5-PFPeA	96%		40-130%
	13C5-PFHxA	111%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	114%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	083B-SD-0-2		
Lab Sample ID:	JD75085-16	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1921.D	1	10/26/23 21:17	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	0.061	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.074	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.10	0.25	0.099	ug/kg	J
375-95-1	Perfluorononanoic acid	0.099	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	083B-SD-0-2		
Lab Sample ID:	JD75085-16	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	21%		5-130%
	13C5-PFPeA	79%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	123%		40-130%
	13C6-PFDA	116%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	122%		40-135%
	13C3-PFHxS	119%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	083B-SD-2-12		
Lab Sample ID:	JD75085-17	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1922.D	1	10/26/23 21:33	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	0.074	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.075	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.12	0.25	0.099	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.25	0.062	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	083B-SD-2-12		
Lab Sample ID:	JD75085-17	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	73%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	124%		30-130%
	13C2-PFDoDA	115%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	113%		40-135%
	13C3-PFHxS	111%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	083B-R-0-2		
Lab Sample ID:	JD75085-18	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1923.D	1	10/26/23 21:48	PC	10/24/23 14:00	OP49971	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.70	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.35	0.052	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.16	0.35	0.087	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.35	0.14	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.35	0.087	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.35	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.35	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.35	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.35	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.35	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.35	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.35	0.17	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.35	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.35	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.35	0.35	0.087	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.35	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.35	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.35	0.087	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.49	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.35	0.12	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.35	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.35	0.087	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	083B-R-0-2		
Lab Sample ID:	JD75085-18	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.35	0.14	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.35	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.5	0.49	ug/kg	
1691-99-2	EtFOSE	ND	3.5	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.70	0.052	ug/kg	UJ
863090-89-5	PFMBA	ND	0.70	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.70	0.23	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.45	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.70	0.052	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.42	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.7	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.7	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	110%		40-130%
	13C4-PFHpA	113%		40-130%
	13C8-PFOA	118%		40-130%
	13C9-PFNA	113%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	083B-R-2-12		
Lab Sample ID:	JD75085-19	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1949.D	1	10/27/23 04:25	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.28	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.32	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.19	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.44	0.28	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.10	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	083B-R-2-12		
Lab Sample ID:	JD75085-19	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	UJ
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	089C-SD-0-2		
Lab Sample ID:	JD75085-20	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1950.D	1	10/27/23 04:40	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg		
2706-90-3	Perfluoropentanoic acid	ND	0.63	0.11	ug/kg		
307-24-4	Perfluorohexanoic acid	ND	0.31	0.047	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.11	0.31	0.079	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.20	0.31	0.13	ug/kg	J	
375-95-1	Perfluorononanoic acid	0.21	0.31	0.079	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.12	0.31	0.094	ug/kg	J	J
307-55-1	Perfluorododecanoic acid	ND	0.31	0.13	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.16	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.16	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.16	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.31	0.079	ug/kg	J	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.079	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	UJ	
31506-32-8	MeFOSA	ND	0.31	0.094	ug/kg		
4151-50-2	EtFOSA	ND	0.31	0.079	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	089C-SD-0-2		
Lab Sample ID:	JD75085-20	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.28	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.047	ug/kg	UJ
863090-89-5	PFMBA	ND	0.63	0.094	ug/kg	UJ
151772-58-6	NFDHA	ND	0.63	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.9	0.97	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.9	0.99	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	089C-SD-2-12		
Lab Sample ID:	JD75085-21	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1951.D	1	10/27/23 04:56	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.092	ug/kg	
307-24-4	Perfluorohexanoic acid	0.092	0.26	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.068	0.26	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.26	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.092	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.079	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.26	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.092	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.26	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.092	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	089C-SD-2-12		
Lab Sample ID:	JD75085-21	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.96	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.079	ug/kg	UJ
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	111%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	108%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	089C-R-0-2		
Lab Sample ID:	JD75085-22	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1952.D	1	10/27/23 05:11	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg		
2706-90-3	Perfluoropentanoic acid	0.23	0.51	0.088	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.21	0.25	0.038	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.31	0.25	0.063	ug/kg		
335-67-1	Perfluorooctanoic acid	0.97	0.25	0.10	ug/kg		
375-95-1	Perfluorononanoic acid	0.50	0.25	0.063	ug/kg		
335-76-2	Perfluorodecanoic acid	0.17	0.25	0.088	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.12	0.25	0.076	ug/kg	J	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	0.10	0.25	0.088	ug/kg	J	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	0.15	0.25	0.14	ug/kg	J	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.89	0.25	0.063	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	UJ	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg		
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	089C-R-0-2		
Lab Sample ID:	JD75085-22	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	59%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	110%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	089C-R-2-12		
Lab Sample ID:	JD75085-23	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1953.D	1	10/27/23 05:26	PC	10/25/23 14:00	OP49995	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	
2706-90-3	Perfluoropentanoic acid	0.22	0.59	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.18	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.30	0.074	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.18	0.30	0.074	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.089	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.30	0.074	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.074	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.30	0.089	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.074	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	089C-R-2-12		
Lab Sample ID:	JD75085-23	**Date Sampled:**	10/18/23
Matrix:	SO - Soil	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.59	0.089	ug/kg	UJ
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.4	0.92	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.4	0.93	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	54%		40-130%
	13C5-PFHxA	87%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/18/2024

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10182023		
Lab Sample ID:	JD75085-24	**Date Sampled:**	10/18/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1859.D	1	10/26/23 05:31	PC	10/24/23 02:32	OP49991	T1Q58
Run #2							

	Initial Volume	Final Volume
Run #1	493 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0081	0.00094	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0041	0.00074	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00051	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00076	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00041	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00063	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00056	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00078	ug/l	UJ
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00080	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00077	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00067	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00099	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00044	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0081	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0081	0.00092	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0081	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00070	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00065	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00054	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10182023		
Lab Sample ID:	JD75085-24	**Date Sampled:**	10/18/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00052	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00092	ug/l	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0081	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0081	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00057	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0081	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0081	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.051	0.0072	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.051	0.0063	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	101%		5-130%
	13C5-PFPeA	104%		40-130%
	13C5-PFHxA	109%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD75251
SAMPLING DATE(S):	October 19 and 20, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD75251-1	076-SD-0-2	X
JD75251-2	076-SD-2-12	X
JD75251-3	076-R-0-2	X
JD75251-4	076-R-2-12	X
JD75251-5	078-NS-0-2	X
JD75251-6	078-NS-2-12	X
JD75251-7	FD-10192023	X
JD75251-8	078-SD-0-2	X
JD75251-9	078-SD-2-12	X
JD75251-9MS	078-SD-2-12MS	X
JD75251-9MSD	078-SD-2-12MSD	X
JD75251-10	078-R-0-2	X
JD75251-11	078-R-2-12	X
JD75251-12	084-SD-0-2	X
JD75251-13	084-SD-2-12	X
JD75251-14	084-R-0-2	X
JD75251-15	084-R-2-12	X
JD75251-16	057-SD-0-2	X

LAB ID	CLIENT ID	PFAS
JD75251-17	057-SD-2-12	X
JD75251-18	057-R-0-2	X
JD75251-19	057-R-2-12	X
JD75251-20	RB-10192023	X
JD75251-21	086-SD-0-12	X
JD75251-22	086-SD-2-12	X
JD75251-23	086-R-0-2	X
JD75251-24	086-R-2-12	X
JD75251-25	077B-R-0-2	X
JD75251-26	FD-10202023	X
JD75251-27	077B-R-2-12	X
JD75251-27MS	077B-R-2-12MS	X
JD7525-27MSD	077B-R-2-12MSD	X
JD75251-28	077B-SD-0-2	X
JD75251-29	077B-SD-2-12	X
JD75251-30	077B-NS-0-2	X
JD75251-31	077B-NS-2-12	X
JD75251-32	069-SD-0-2	X
JD75251-33	069-SD-2-12	X
JD75251-34	069-R-0-2	X
JD75251-35	069-R-2-12	X
JD75251-36	RB-10202023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD74836

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75251-5	078-NS-0-2	13C4PFBA	PFBA	R
JD75251-18	057-R-0-2	13C4PFBA	PFBA	R
JD75251-21	086-SD-0-12	13C4PFBA	PFBA	R
JD75251-23	086-R-0-2	13C4PFBA	PFBA	R
JD75251-25	077B-R-0-2	13C4PFBA	PFBA	R
JD75251-26	FD-10202023	13C4PFBA	PFBA	R
JD75251-32	069-SD-0-2	13C4PFBA	PFBA	R
JD75251-34	069-R-0-2	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-1019202023 and RB-10202023 were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using samples JD75251-9/078-SD-2-12 and JD75251-27/077B-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD75251-9	078-SD-2-12	RPD > 30%	PFMPA PFMBA PFHxA PFNS PFDS 3:3FTCA	UJ UJ UJ UJ UJ UJ
		Recovery < lower control limit of 70%	PFMPA PFMBA	UJ UJ

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD75251-27	077B-R-2-12	Recovery < lower control limit of 70%	PFMPA PFMBA	UJ UJ

VII.) Laboratory Control Samples (LCS):

Low Level LCS (LLCS) criteria were not met for the lower control limit as follows:

LLCS	LAB ID	CLIENT ID	ANALYTE	QUALIFICATION
OP49993-LLCS	JD75251-1	076-SD-0-2	PFTrDA	UJ
	JD75251-2	076-SD-2-12		
	JD75251-3	076-R-0-2		
	JD75251-4	076-R-2-12		
	JD75251-5	078-NS-0-2		
	JD75251-6	078-NS-2-12		
	JD75251-7	FD-10192023		
	JD75251-8	078-SD-0-2		
	JD75251-9	078-SD-2-12		
	JD75251-10	078-R-0-2		
	JD75251-11	078-R-2-12		
	JD75251-12	084-SD-0-2		
OP5002-LLCS	JD75251-30	077B-NS-0-2	PFMPA 3:3FTCA	UJ
	JD75251-31	077B-NS-2-12		
	JD75251-32	069-SD-0-2		
	JD75251-33	069-SD-2-12		
	JD75251-34	069-R-0-2		
	JD75251-35	069-R-2-12		
OP5006-LLCS	JD75251-13	084-SD-2-12	MeFOSAA	UJ
	JD75251-14	084-R-0-2		
	JD75251-15	084-R-2-12		
	JD75251-16	057-SD-0-2		
	JD75251-17	057-SD-2-12		
	JD75251-18	057-R-0-2		
	JD75251-19	057-R-2-12		
OP5006-LLCS	JD75251-21	086-SD-0-12	MeFOSAA	UJ
	JD75251-22	086-SD-2-12		
	JD75251-23	086-R-0-2		
	JD75251-24	086-R-2-12		
	JD75251-25	077B-R-0-2		
	JD75251-26	FD-10202023		
	JD75251-27	077B-R-2-12		
	JD75251-28	077B-SD-0-2		
	JD75251-29	077B-SD-2-12		

For LLCS recoveries greater than the upper control limit, all associated sample results were non-detect.

No qualification was made.

The following LCS criteria did not meet lower control limits:

LCS	LAB ID	CLIENT ID	ANALYTE	QUALIFICATION
OP49993-LLCS	JD75251-1	076-SD-0-2	PFTrDA PFHxS 6:2FTS EtFOSE PFMPA PFMBA PFEESA 3:3FTCA 5:3FTCA 7:3FTCA	UJ 3:3FTCA J all others UJ
	JD75251-2	076-SD-2-12		
	JD75251-3	076-R-0-2		
	JD75251-4	076-R-2-12		
	JD75251-5	078-NS-0-2		
	JD75251-6	078-NS-2-12		
	JD75251-7	FD-10192023		
	JD75251-8	078-SD-0-2		
	JD75251-9	078-SD-2-12		
	JD75251-10	078-R-0-2		
	JD75251-11	078-R-2-12		
	JD75251-12	084-SD-0-2		
OP5006-LLCS	JD75251-13	084-SD-2-12	PFDoS PFMPA 3:3FTCA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75251-1	076-SD-0-2	13C4PFBA	PFBA	UJ
JD75251-2	076-SD-2-12	13C4PFBA	PFBA	J
JD75251-3	076-R-0-2	13C4PFBA 13C2-PFTeDA	PFBA PFTeDA PFTrDA	J UJ UJ
JD75251-4	076-R-2-12	13C4PFBA D9-EtFOSE	PFBA EtFOSE	UJ
JD75251-5	078-NS-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75251-6	078-NS-2-12	13C4PFBA	PFBA	UJ
JD75251-7	FD-10192023	13C4PFBA	PFBA	UJ
JD75251-8	078-SD-0-2	13C4PFBA	PFBA	J
JD75251-9	078-SD-2-12	13C4PFBA	PFBA	UJ
JD75251-10	078-R-0-2	13C4PFBA D9-EtFOSE	PFBA EtFOSE	J UJ
JD75251-11	078-R-2-12	13C4PFBA	PFBA	UJ
JD75251-12	084-SD-0-2	13C4PFBA	PFBA	UJ
JD75251-13	084-SD-2-12	13C4PFBA	PFBA	UJ
JD75251-14	084-R-0-2	13C4PFBA	PFBA	UJ
JD75251-15	084-R-2-12	13C4PFBA	PFBA	UJ
JD75251-16	057-SD-0-2	13C4PFBA	PFBA	UJ
JD75251-17	057-SD-2-12	13C4PFBA	PFBA	UJ
JD75251-19	057-R-2-12	13C4PFBA	PFBA	J
JD75251-22	086-SD-2-12	13C4PFBA	PFBA	UJ
JD75251-23	086-R-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD75251-25	077B-R-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD75251-26	FD-10202023	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD75251-27	077B-R-2-12	13C4PFBA	PFBA	UJ
JD75251-28	077B-SD-0-2	13C4-PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75251-29	077B-SD-2-12	13C4-PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75251-30	077B-NS-0-2	13C4PFBA	PFBA	UJ
JD75251-31	077B-NS-2-12	13C4PFBA	PFBA	UJ
JD75251-32	069-SD-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75251-33	069-SD-2-12	13C4PFBA	PFBA	UJ
JD75251-34	069-R-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75251-35	069-R-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	076-SD-0-2		
Lab Sample ID:	JD75251-1	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	49.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1880.D	1	10/26/23 10:51	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.6	0.22	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.79	0.14	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.40	0.059	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.40	0.099	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.40	0.16	ug/kg	J
375-95-1	Perfluorononanoic acid	0.27	0.40	0.099	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.40	0.14	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.40	0.12	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.40	0.16	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.40	0.18	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.40	0.20	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.40	0.14	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.40	0.20	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.40	0.22	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.40	0.20	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.40	0.099	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.40	0.28	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.40	0.22	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.40	0.099	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.6	0.55	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.6	0.20	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.6	0.38	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.40	0.14	ug/kg	
31506-32-8	MeFOSA	ND	0.40	0.12	ug/kg	
4151-50-2	EtFOSA	ND	0.40	0.099	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	076-SD-0-2		
Lab Sample ID:	JD75251-1	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	49.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.40	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	0.40	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	4.0	0.55	ug/kg	
1691-99-2	EtFOSE	ND	4.0	1.4	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.6	0.36	ug/kg	
919005-14-4	ADONA	ND	1.6	0.24	ug/kg	
377-73-1	PFMPA	ND	0.79	0.059	ug/kg	UJ
863090-89-5	PFMBA	ND	0.79	0.12	ug/kg	UJ
151772-58-6	NFDHA	ND	0.79	0.26	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.6	0.51	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.6	0.36	ug/kg	
113507-82-7	PFEESA	ND	0.79	0.059	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.0	0.48	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.9	1.2	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.9	1.2	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	28%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	076-SD-0-2		
Lab Sample ID:	JD75251-1	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	49.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	149%		40-170%
	d5-EtFOSAA	164% [a]		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	52%		10-130%
	13C2-4:2FTS	140%		40-200%
	13C2-6:2FTS	182%		40-200%
	13C2-8:2FTS	166%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	076-SD-2-12		
Lab Sample ID:	JD75251-2	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1884.D	1	10/26/23 11:53	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.35	1.3	0.18	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.64	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.14	0.32	0.048	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.32	0.080	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.32	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.20	0.32	0.080	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.32	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.32	0.096	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.18	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.37	0.32	0.080	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.080	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.45	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.096	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.080	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	076-SD-2-12		
Lab Sample ID:	JD75251-2	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.45	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.64	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.64	0.096	ug/kg	UJ
151772-58-6	NFDHA	ND	0.64	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.42	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.64	0.048	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.0	1.0	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.0	1.0	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	28%		5-130%
	13C5-PFPeA	65%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	076-SD-2-12		
Lab Sample ID:	JD75251-2	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	146%		40-170%
	d5-EtFOSAA	162% [a]		25-135%
	d7-MeFOSE	67%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	160%		40-200%
	13C2-6:2FTS	178%		40-200%
	13C2-8:2FTS	185%		40-300%
	13C3-HFPO-DA	83%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	076-R-0-2		
Lab Sample ID:	JD75251-3	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	31.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1885.D	1	10/26/23 12:08	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	3.7	2.5	0.34	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	1.8	1.2	0.22	ug/kg	
307-24-4	Perfluorohexanoic acid	1.6	0.62	0.093	ug/kg	
375-85-9	Perfluoroheptanoic acid	1.7	0.62	0.16	ug/kg	
335-67-1	Perfluorooctanoic acid	4.2	0.62	0.25	ug/kg	
375-95-1	Perfluorononanoic acid	2.6	0.62	0.16	ug/kg	
335-76-2	Perfluorodecanoic acid	2.6	0.62	0.22	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.83	0.62	0.19	ug/kg	
307-55-1	Perfluorododecanoic acid	0.36	0.62	0.25	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.62	0.28	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.62	0.31	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.25	0.62	0.22	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.62	0.31	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.62	0.34	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.62	0.31	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	6.0	0.62	0.16	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.62	0.43	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.62	0.34	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.62	0.16	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.5	0.87	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.5	0.31	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.5	0.59	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.62	0.22	ug/kg	
31506-32-8	MeFOSA	ND	0.62	0.19	ug/kg	
4151-50-2	EtFOSA	ND	0.62	0.16	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	076-R-0-2		
Lab Sample ID:	JD75251-3	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	31.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.62	0.25	ug/kg	
2991-50-6	EtFOSAA	ND	0.62	0.40	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	6.2	0.87	ug/kg	
1691-99-2	EtFOSE	ND	6.2	2.3	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	2.5	0.56	ug/kg	
919005-14-4	ADONA	ND	2.5	0.37	ug/kg	
377-73-1	PFMPA	ND	1.2	0.093	ug/kg	UJ
863090-89-5	PFMBA	ND	1.2	0.19	ug/kg	UJ
151772-58-6	NFDHA	ND	1.2	0.40	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.5	0.81	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.5	0.56	ug/kg	
113507-82-7	PFEESA	ND	1.2	0.093	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	3.1	0.74	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	16	1.9	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	16	2.0	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	76%		40-130%
	13C4-PFHpA	85%		40-130%
	13C8-PFOA	77%		40-130%
	13C9-PFNA	78%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	86%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	49%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	076-R-0-2		
Lab Sample ID:	JD75251-3	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	31.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	58%		10-130%
	d3-MeFOSAA	149%		40-170%
	d5-EtFOSAA	176% [a]		25-135%
	d7-MeFOSE	56%		10-130%
	d9-EtFOSE	43%		10-130%
	13C2-4:2FTS	167%		40-200%
	13C2-6:2FTS	223% [a]		40-200%
	13C2-8:2FTS	217%		40-300%
	13C3-HFPO-DA	53%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	076-R-2-12		
Lab Sample ID:	JD75251-4	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1886.D	1	10/26/23 12:23	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.15	0.63	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.35	0.32	0.048	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.55	0.32	0.079	ug/kg	
335-67-1	Perfluorooctanoic acid	1.3	0.32	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.37	0.32	0.079	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.32	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.32	0.095	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.17	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.59	0.32	0.079	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.079	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.095	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.079	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	076-R-2-12		
Lab Sample ID:	JD75251-4	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.63	0.095	ug/kg	UJ
151772-58-6	NFDHA	ND	0.63	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.048	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.9	0.98	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.9	1.0	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	64%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	076-R-2-12		
Lab Sample ID:	JD75251-4	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	123%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	55%		10-130%
	d3-MeFOSAA	179% [a]		40-170%
	d5-EtFOSAA	200% [a]		25-135%
	d7-MeFOSE	59%		10-130%
	d9-EtFOSE	47%		10-130%
	13C2-4:2FTS	192%		40-200%
	13C2-6:2FTS	246% [a]		40-200%
	13C2-8:2FTS	244%		40-300%
	13C3-HFPO-DA	60%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	078-NS-0-2		
Lab Sample ID:	JD75251-5	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1887.D	1	10/26/23 12:39	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.071	ug/kg	
335-67-1	Perfluorooctanoic acid	0.18	0.29	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.29	0.071	ug/kg	
335-76-2	Perfluorodecanoic acid	0.11	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.29	0.071	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-NS-0-2		
Lab Sample ID:	JD75251-5	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	UJ
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	33% [a]		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	114%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	102%		10-130%
	13C3-PFBS	123%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-NS-0-2		
Lab Sample ID:	JD75251-5	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	126%		40-130%
	13C8-FOSA	120%		40-130%
	d3-MeFOSA	89%		10-130%
	d5-EtFOSA	87%		10-130%
	d3-MeFOSAA	155%		40-170%
	d5-EtFOSAA	170% [a]		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	68%		10-130%
	13C2-4:2FTS	175%		40-200%
	13C2-6:2FTS	180%		40-200%
	13C2-8:2FTS	190%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	078-NS-2-12		
Lab Sample ID:	JD75251-6	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1888.D	1	10/26/23 12:54	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.11	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.10	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.090	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.27	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-NS-2-12		
Lab Sample ID:	JD75251-6	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS							
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg		
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg		
PERFLUOROOCTANE SULFONAMIDO ETHANOLS							
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg		
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	UJ	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS							
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg		
919005-14-4	ADONA	ND	1.0	0.16	ug/kg		
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ	
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	UJ	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg		
PER and POLYFLUOROETHER SULFONIC ACIDS							
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg		
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg		
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	UJ	
FLUOROTELOMER CARBOXYLIC ACIDS							
356-02-5	3:3 Fluorotelomer carboxylate	0.43	1.3	0.31	ug/kg	J	J
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg		UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg		UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	55%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-NS-2-12		
Lab Sample ID:	JD75251-6	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	138%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	187%		40-200%
	13C2-6:2FTS	190%		40-200%
	13C2-8:2FTS	159%		40-300%
	13C3-HFPO-DA	80%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10192023		
Lab Sample ID:	JD75251-7	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1889.D	1	10/26/23 13:09	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.12	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.072	ug/kg	
335-67-1	Perfluorooctanoic acid	0.20	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.21	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.15	0.29	0.072	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10192023		
Lab Sample ID:	JD75251-7	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.086	ug/kg	UJ
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	123%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	113%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10192023		
Lab Sample ID:	JD75251-7	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	132% [a]		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	88%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	151%		40-170%
	d5-EtFOSAA	157% [a]		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	63%		10-130%
	13C2-4:2FTS	198%		40-200%
	13C2-6:2FTS	161%		40-200%
	13C2-8:2FTS	159%		40-300%
	13C3-HFPO-DA	81%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	078-SD-0-2		
Lab Sample ID:	JD75251-8	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1890.D	1	10/26/23 13:24	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.42	1.5	0.20	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.74	0.13	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.37	0.056	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.15	0.37	0.093	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.37	0.15	ug/kg	J
375-95-1	Perfluorononanoic acid	0.22	0.37	0.093	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.37	0.13	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.18	0.37	0.11	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.37	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.37	0.17	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.37	0.19	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.37	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.37	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.37	0.20	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.37	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.37	0.093	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.37	0.26	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.37	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.37	0.093	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.52	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.19	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.35	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.37	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.37	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.37	0.093	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-SD-0-2		
Lab Sample ID:	JD75251-8	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.37	0.15	ug/kg	
2991-50-6	EtFOSAA	ND	0.37	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.7	0.52	ug/kg	
1691-99-2	EtFOSE	ND	3.7	1.4	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.33	ug/kg	
919005-14-4	ADONA	ND	1.5	0.22	ug/kg	
377-73-1	PFMPA	ND	0.74	0.056	ug/kg	UJ
863090-89-5	PFMBA	ND	0.74	0.11	ug/kg	UJ
151772-58-6	NFDHA	ND	0.74	0.24	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.48	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.33	ug/kg	
113507-82-7	PFEESA	ND	0.74	0.056	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.44	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.3	1.1	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.3	1.2	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	33%		5-130%
	13C5-PFPeA	64%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-SD-0-2		
Lab Sample ID:	JD75251-8	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	107%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	142%		40-170%
	d5-EtFOSAA	165% [a]		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	141%		40-200%
	13C2-6:2FTS	181%		40-200%
	13C2-8:2FTS	187%		40-300%
	13C3-HFPO-DA	77%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	078-SD-2-12		
Lab Sample ID:	JD75251-9	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1891.D	1	10/26/23 13:40	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.10	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.081	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.099	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.087	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	UJ
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-SD-2-12		
Lab Sample ID:	JD75251-9	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	UJ
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	25%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	113%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-SD-2-12		
Lab Sample ID:	JD75251-9	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	144%		40-170%
	d5-EtFOSAA	165% [a]		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	63%		10-130%
	13C2-4:2FTS	145%		40-200%
	13C2-6:2FTS	171%		40-200%
	13C2-8:2FTS	174%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	078-R-0-2		
Lab Sample ID:	JD75251-10	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1892.D	1	10/26/23 13:55	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.80	1.4	0.19	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.53	0.69	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.30	0.34	0.052	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.41	0.34	0.086	ug/kg	
335-67-1	Perfluorooctanoic acid	0.88	0.34	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.55	0.34	0.086	ug/kg	
335-76-2	Perfluorodecanoic acid	0.35	0.34	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.50	0.34	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	0.20	0.34	0.14	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.16	0.34	0.15	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.4	0.34	0.086	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.086	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.086	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-R-0-2		
Lab Sample ID:	JD75251-10	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.3	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.69	0.052	ug/kg	UJ
863090-89-5	PFMBA	ND	0.69	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.69	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.45	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.69	0.052	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.6	1.1	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.6	1.1	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-R-0-2		
Lab Sample ID:	JD75251-10	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	64%		10-130%
	d5-EtFOSA	58%		10-130%
	d3-MeFOSAA	169%		40-170%
	d5-EtFOSAA	190% [a]		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	49%		10-130%
	13C2-4:2FTS	180%		40-200%
	13C2-6:2FTS	254% [a]		40-200%
	13C2-8:2FTS	239%		40-300%
	13C3-HFPO-DA	63%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	078-R-2-12		
Lab Sample ID:	JD75251-11	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1893.D	1	10/26/23 14:10	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	0.13	0.28	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.072	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.32	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.099	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.083	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-R-2-12		
Lab Sample ID:	JD75251-11	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	UJ
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.85	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	25%		5-130%
	13C5-PFPeA	74%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	078-R-2-12		
Lab Sample ID:	JD75251-11	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	113%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	146%		40-170%
	d5-EtFOSAA	162% [a]		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	150%		40-200%
	13C2-6:2FTS	195%		40-200%
	13C2-8:2FTS	179%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	084-SD-0-2		
Lab Sample ID:	JD75251-12	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1897.D	1	10/26/23 15:11	PC	10/25/23 10:04	OP49993	T1Q58
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.51	0.089	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.16	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.10	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	084-SD-0-2		
Lab Sample ID:	JD75251-12	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	084-SD-0-2		
Lab Sample ID:	JD75251-12	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	138%		40-170%
	d5-EtFOSAA	169% [a]		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	59%		10-130%
	13C2-4:2FTS	153%		40-200%
	13C2-6:2FTS	203% [a]		40-200%
	13C2-8:2FTS	180%		40-300%
	13C3-HFPO-DA	74%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	084-SD-2-12		
Lab Sample ID:	JD75251-13	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4456.D	1	10/28/23 08:29	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	084-SD-2-12		
Lab Sample ID:	JD75251-13	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	29%		5-130%
	13C5-PFPeA	54%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	084-SD-2-12		
Lab Sample ID:	JD75251-13	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	92%		40-170%
	d5-EtFOSAA	93%		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	68%		40-200%
	13C2-6:2FTS	84%		40-200%
	13C2-8:2FTS	96%		40-300%
	13C3-HFPO-DA	89%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	084-R-0-2		
Lab Sample ID:	JD75251-14	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4460.D	1	10/28/23 09:30	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.19	ug/kg	
2706-90-3	Perfluoropentanoic acid	0.27	0.67	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.19	0.34	0.051	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.40	0.34	0.084	ug/kg	
335-67-1	Perfluorooctanoic acid	0.51	0.34	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.36	0.34	0.084	ug/kg	
335-76-2	Perfluorodecanoic acid	0.18	0.34	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.23	0.34	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.34	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.88	0.34	0.084	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.084	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.084	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	084-R-0-2		
Lab Sample ID:	JD75251-14	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.13	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.4	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.4	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	78%		40-130%
	13C4-PFHpA	77%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	82%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	80%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	084-R-0-2		
Lab Sample ID:	JD75251-14	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	62%		10-130%
	d3-MeFOSAA	91%		40-170%
	d5-EtFOSAA	105%		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	106%		40-200%
	13C2-6:2FTS	101%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	77%		40-130%

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ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	084-R-2-12		
Lab Sample ID:	JD75251-15	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4461.D	1	10/28/23 09:46	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.091	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.11	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.26	0.065	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	084-R-2-12		
Lab Sample ID:	JD75251-15	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	26%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	85%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	81%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	084-R-2-12		
Lab Sample ID:	JD75251-15	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	83%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	92%		40-170%
	d5-EtFOSAA	93%		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	105%		40-200%
	13C2-6:2FTS	88%		40-200%
	13C2-8:2FTS	99%		40-300%
	13C3-HFPO-DA	89%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	057-SD-0-2		
Lab Sample ID:	JD75251-16	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4462.D	1	10/28/23 10:01	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.23	0.31	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.31	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.31	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.31	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.31	0.092	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.31	0.076	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.076	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	057-SD-0-2		
Lab Sample ID:	JD75251-16	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	81%		40-130%
	13C4-PFHpA	85%		40-130%
	13C8-PFOA	82%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	87%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	057-SD-0-2		
Lab Sample ID:	JD75251-16	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	75%		40-130%
	d3-MeFOSA	59%		10-130%
	d5-EtFOSA	61%		10-130%
	d3-MeFOSAA	86%		40-170%
	d5-EtFOSAA	90%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	80%		40-200%
	13C2-6:2FTS	95%		40-200%
	13C2-8:2FTS	89%		40-300%
	13C3-HFPO-DA	82%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	057-SD-2-12		
Lab Sample ID:	JD75251-17	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4463.D	1	10/28/23 10:16	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.50	0.088	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.24	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.063	ug/kg	
335-67-1	Perfluorooctanoic acid	0.26	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.078	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	057-SD-2-12		
Lab Sample ID:	JD75251-17	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	85%		40-130%
	13C4-PFHpA	85%		40-130%
	13C8-PFOA	84%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	057-SD-2-12		
Lab Sample ID:	JD75251-17	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	65%		10-130%
	d5-EtFOSA	64%		10-130%
	d3-MeFOSAA	91%		40-170%
	d5-EtFOSAA	102%		25-135%
	d7-MeFOSE	67%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	87%		40-200%
	13C2-6:2FTS	87%		40-200%
	13C2-8:2FTS	86%		40-300%
	13C3-HFPO-DA	88%		40-130%

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	057-R-0-2		
Lab Sample ID:	JD75251-18	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4464.D	1	10/28/23 10:31	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.20	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.18	0.71	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.13	0.35	0.053	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.27	0.35	0.089	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.35	0.14	ug/kg	J
375-95-1	Perfluorononanoic acid	0.24	0.35	0.089	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.15	0.35	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.27	0.35	0.11	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.35	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.35	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.35	0.18	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.35	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.35	0.18	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.35	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.35	0.18	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.69	0.35	0.089	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.35	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.35	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.35	0.089	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.50	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.18	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.34	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.35	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.35	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.35	0.089	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	057-R-0-2		
Lab Sample ID:	JD75251-18	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.35	0.14	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.35	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.5	0.50	ug/kg	
1691-99-2	EtFOSE	ND	3.5	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.32	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.71	0.053	ug/kg	UJ
863090-89-5	PFMBA	ND	0.71	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.71	0.23	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.46	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.32	ug/kg	
113507-82-7	PFEESA	ND	0.71	0.053	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.8	0.43	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.9	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.9	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	86%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	83%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	057-R-0-2		
Lab Sample ID:	JD75251-18	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	91%		40-130%
	d3-MeFOSA	61%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	101%		40-170%
	d5-EtFOSAA	106%		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	87%		40-200%
	13C2-6:2FTS	94%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	89%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	057-R-2-12		
Lab Sample ID:	JD75251-19	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4465.D	1	10/28/23 10:47	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.65	1.1	0.15	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.16	0.54	0.095	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.13	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.23	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.43	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.24	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.13	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	057-R-2-12		
Lab Sample ID:	JD75251-19	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	43%		5-130%
	13C5-PFPeA	79%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	88%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	86%		30-130%
	13C2-PFDoDA	76%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	82%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	057-R-2-12		
Lab Sample ID:	JD75251-19	**Date Sampled:**	10/19/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	74%		40-130%
	13C8-FOSA	80%		40-130%
	d3-MeFOSA	53%		10-130%
	d5-EtFOSA	61%		10-130%
	d3-MeFOSAA	87%		40-170%
	d5-EtFOSAA	89%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	71%		40-200%
	13C2-6:2FTS	89%		40-200%
	13C2-8:2FTS	100%		40-300%
	13C3-HFPO-DA	95%		40-130%

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	RB-10192023		
Lab Sample ID:	JD75251-20	**Date Sampled:**	10/19/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1969.D	1	10/27/23 09:30	PC	10/25/23 14:00	OP50012	T1Q58
Run #2							

	Initial Volume	Final Volume
Run #1	527 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0076	0.00088	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0038	0.00069	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00047	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00071	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00038	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00059	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00052	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00073	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00075	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00072	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00063	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00096	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00093	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00041	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0076	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0076	0.00086	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0076	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00065	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00061	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00050	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10192023		
Lab Sample ID:	JD75251-20	**Date Sampled:**	10/19/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00048	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00086	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0076	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0076	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00028	ug/l	UJ
863090-89-5	PFMBA	ND	0.0038	0.00053	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0076	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0076	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0095	0.0023	ug/l	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.047	0.0068	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.047	0.0059	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	103%		5-130%
	13C5-PFPeA	100%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	120%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	112%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	112%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10192023		
Lab Sample ID:	JD75251-20	**Date Sampled:**	10/19/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	132%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	75%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	161%		40-200%
	13C2-6:2FTS	109%		40-200%
	13C2-8:2FTS	140%		40-300%
	13C3-HFPO-DA	85%		40-130%

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ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	086-SD-0-12		
Lab Sample ID:	JD75251-21	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4467.D	1	10/28/23 11:02	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.65	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.33	0.049	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.18	0.33	0.081	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.33	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.36	0.33	0.081	ug/kg	
335-76-2	Perfluorodecanoic acid	0.14	0.33	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.26	0.33	0.098	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.33	0.081	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.081	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.46	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.098	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.081	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	086-SD-0-12		
Lab Sample ID:	JD75251-21	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.33	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.46	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.65	0.049	ug/kg	UJ
863090-89-5	PFMBA	ND	0.65	0.098	ug/kg	
151772-58-6	NFDHA	ND	0.65	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.42	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.65	0.049	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.1	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.1	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	50%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	88%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	121%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	086-SD-0-12		
Lab Sample ID:	JD75251-21	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	61.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	96%		40-170%
	d5-EtFOSAA	92%		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	97%		40-200%
	13C2-8:2FTS	84%		40-300%
	13C3-HFPO-DA	96%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	086-SD-2-12		
Lab Sample ID:	JD75251-22	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4468.D	1	10/28/23 11:17	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.082	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.058	ug/kg	
335-67-1	Perfluorooctanoic acid	0.21	0.23	0.093	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.096	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	086-SD-2-12		
Lab Sample ID:	JD75251-22	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	42%		40-130%
	13C5-PFHxA	82%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	086-SD-2-12		
Lab Sample ID:	JD75251-22	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	93%		40-170%
	d5-EtFOSAA	93%		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	90%		40-200%
	13C2-6:2FTS	75%		40-200%
	13C2-8:2FTS	83%		40-300%
	13C3-HFPO-DA	95%		40-130%

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	086-R-0-2		
Lab Sample ID:	JD75251-23	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4469.D	1	10/28/23 11:32	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.24	0.56	0.099	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.20	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.29	0.28	0.070	ug/kg	
335-67-1	Perfluorooctanoic acid	0.19	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.49	0.28	0.070	ug/kg	
335-76-2	Perfluorodecanoic acid	0.55	0.28	0.099	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.96	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	0.28	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	0.25	0.28	0.13	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	0.15	0.28	0.14	ug/kg	J
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.5	0.28	0.070	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	086-R-0-2		
Lab Sample ID:	JD75251-23	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.085	ug/kg	UJ
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	31% [a]		40-130%
	13C5-PFHxA	59%		40-130%
	13C4-PFHpA	59%		40-130%
	13C8-PFOA	58%		40-130%
	13C9-PFNA	52%		40-130%
	13C6-PFDA	52%		40-130%
	13C7-PFUnDA	57%		30-130%
	13C2-PFDoDA	53%		10-130%
	13C2-PFTeDA	40%		10-130%
	13C3-PFBS	59%		40-135%
	13C3-PFHxS	71%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	086-R-0-2		
Lab Sample ID:	JD75251-23	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	52%		40-130%
	13C8-FOSA	58%		40-130%
	d3-MeFOSA	36%		10-130%
	d5-EtFOSA	35%		10-130%
	d3-MeFOSAA	57%		40-170%
	d5-EtFOSAA	67%		25-135%
	d7-MeFOSE	45%		10-130%
	d9-EtFOSE	40%		10-130%
	13C2-4:2FTS	69%		40-200%
	13C2-6:2FTS	72%		40-200%
	13C2-8:2FTS	79%		40-300%
	13C3-HFPO-DA	57%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	086-R-2-12		
Lab Sample ID:	JD75251-24	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4473.D	1	10/28/23 12:34	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.73	1.0	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.098	0.51	0.089	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.15	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.45	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.16	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.090	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	086-R-2-12		
Lab Sample ID:	JD75251-24	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	57%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	086-R-2-12		
Lab Sample ID:	JD75251-24	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	112%		40-170%
	d5-EtFOSAA	106%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	105%		40-200%
	13C2-6:2FTS	90%		40-200%
	13C2-8:2FTS	79%		40-300%
	13C3-HFPO-DA	97%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	077B-R-0-2		
Lab Sample ID:	JD75251-25	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	51.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4474.D	1	10/28/23 12:49	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	4.1	1.5	0.21	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.54	0.77	0.13	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.32	0.38	0.057	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.41	0.38	0.096	ug/kg	
335-67-1	Perfluorooctanoic acid	0.56	0.38	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	0.55	0.38	0.096	ug/kg	
335-76-2	Perfluorodecanoic acid	0.25	0.38	0.13	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.35	0.38	0.11	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.38	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.38	0.17	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.38	0.19	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.38	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.38	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.38	0.21	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.38	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.95	0.38	0.096	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.38	0.27	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.38	0.21	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	0.10	0.38	0.096	ug/kg	J J
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.54	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.19	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.36	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.38	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.38	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.38	0.096	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-R-0-2		
Lab Sample ID:	JD75251-25	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	51.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.38	0.15	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.38	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.8	0.54	ug/kg	
1691-99-2	EtFOSE	ND	3.8	1.4	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.34	ug/kg	
919005-14-4	ADONA	ND	1.5	0.23	ug/kg	
377-73-1	PFMPA	ND	0.77	0.057	ug/kg	UJ
863090-89-5	PFMBA	ND	0.77	0.11	ug/kg	UJ
151772-58-6	NFDHA	ND	0.77	0.25	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.50	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.34	ug/kg	
113507-82-7	PFEESA	ND	0.77	0.057	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.46	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.6	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.6	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	80%		40-130%
	13C4-PFHpA	81%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	87%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-R-0-2		
Lab Sample ID:	JD75251-25	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	51.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	79%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	55%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	127%		40-170%
	d5-EtFOSAA	116%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	95%		40-200%
	13C2-6:2FTS	116%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	74%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10202023		
Lab Sample ID:	JD75251-26	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	54.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4475.D	1	10/28/23 13:04	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.5	0.20	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.61	0.74	0.13	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.25	0.37	0.056	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.38	0.37	0.093	ug/kg	
335-67-1	Perfluorooctanoic acid	0.68	0.37	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	0.43	0.37	0.093	ug/kg	
335-76-2	Perfluorodecanoic acid	0.26	0.37	0.13	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.41	0.37	0.11	ug/kg	
307-55-1	Perfluorododecanoic acid	0.19	0.37	0.15	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.37	0.17	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.37	0.19	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.37	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.37	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.37	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.37	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.37	0.093	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.37	0.26	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.37	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.37	0.093	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.52	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.19	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.35	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.37	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.37	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.37	0.093	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10202023		
Lab Sample ID:	JD75251-26	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	54.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.37	0.15	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.37	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.7	0.52	ug/kg	
1691-99-2	EtFOSE	ND	3.7	1.4	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.33	ug/kg	
919005-14-4	ADONA	ND	1.5	0.22	ug/kg	
377-73-1	PFMPA	ND	0.74	0.056	ug/kg	UJ
863090-89-5	PFMBA	ND	0.74	0.11	ug/kg	UJ
151772-58-6	NFDHA	ND	0.74	0.24	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.48	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.33	ug/kg	
113507-82-7	PFEESA	ND	0.74	0.056	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.44	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.3	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.3	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	43%		40-130%
	13C5-PFHxA	85%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	83%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	121%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10202023		
Lab Sample ID:	JD75251-26	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	54.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	59%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	116%		25-135%
	d7-MeFOSE	66%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	125%		40-200%
	13C2-6:2FTS	132%		40-200%
	13C2-8:2FTS	144%		40-300%
	13C3-HFPO-DA	75%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	077B-R-2-12		
Lab Sample ID:	JD75251-27	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4476.D	1	10/28/23 13:20	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	0.16	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.14	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.27	0.25	0.099	ug/kg	
375-95-1	Perfluorononanoic acid	0.084	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-R-2-12		
Lab Sample ID:	JD75251-27	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	39%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-R-2-12		
Lab Sample ID:	JD75251-27	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	107%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	64%		10-130%
	d3-MeFOSAA	108%		40-170%
	d5-EtFOSAA	117%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	89%		40-200%
	13C2-6:2FTS	101%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	90%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	077B-SD-0-2		
Lab Sample ID:	JD75251-28	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4477.D	1	10/28/23 13:35	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.17	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.24	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.31	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.26	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.27	0.093	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.26	0.27	0.080	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.51	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-SD-0-2		
Lab Sample ID:	JD75251-28	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	UJ
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	49%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-SD-0-2		
Lab Sample ID:	JD75251-28	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	109%		40-170%
	d5-EtFOSAA	109%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	73%		10-130%
	13C2-4:2FTS	132%		40-200%
	13C2-6:2FTS	115%		40-200%
	13C2-8:2FTS	118%		40-300%
	13C3-HFPO-DA	86%		40-130%

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	077B-SD-2-12		
Lab Sample ID:	JD75251-29	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4478.D	1	10/28/23 13:50	PC	10/26/23 07:30	OP50006	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.090	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.24	0.097	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-SD-2-12		
Lab Sample ID:	JD75251-29	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	40%		40-130%
	13C5-PFHxA	84%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	86%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-SD-2-12		
Lab Sample ID:	JD75251-29	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	85%		40-130%
	13C8-FOSA	89%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	69%		10-130%
	d3-MeFOSAA	96%		40-170%
	d5-EtFOSAA	105%		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	89%		40-200%
	13C2-6:2FTS	86%		40-200%
	13C2-8:2FTS	86%		40-300%
	13C3-HFPO-DA	81%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	077B-NS-0-2		
Lab Sample ID:	JD75251-30	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4445.D	1	10/28/23 05:41	PC	10/26/23 11:00	OP50022	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.063	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.25	0.063	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.072	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-NS-0-2		
Lab Sample ID:	JD75251-30	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	115%		10-130%
	13C2-PFTeDA	103%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-NS-0-2		
Lab Sample ID:	JD75251-30	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	101%		40-170%
	d5-EtFOSAA	107%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	84%		40-200%
	13C2-6:2FTS	98%		40-200%
	13C2-8:2FTS	82%		40-300%
	13C3-HFPO-DA	104%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	077B-NS-2-12		
Lab Sample ID:	JD75251-31	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4446.D	1	10/28/23 05:57	PC	10/26/23 11:00	OP50022	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	0.23	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.092	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-NS-2-12		
Lab Sample ID:	JD75251-31	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	65%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	104%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	077B-NS-2-12		
Lab Sample ID:	JD75251-31	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	86%		10-130%
	d3-MeFOSAA	96%		40-170%
	d5-EtFOSAA	105%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	127%		40-200%
	13C2-6:2FTS	98%		40-200%
	13C2-8:2FTS	96%		40-300%
	13C3-HFPO-DA	102%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	069-SD-0-2		
Lab Sample ID:	JD75251-32	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4447.D	1	10/28/23 06:12	PC	10/26/23 11:00	OP50022	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.31	0.046	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.14	0.31	0.077	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.31	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.31	0.077	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.31	0.092	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.44	0.31	0.077	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.077	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.077	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	069-SD-0-2		
Lab Sample ID:	JD75251-32	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	UJ
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.7	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.7	0.97	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	13% [a]		40-130%
	13C5-PFHxA	77%		40-130%
	13C4-PFHpA	112%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	119%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	111%		10-130%
	13C3-PFBS	87%		40-135%
	13C3-PFHxS	107%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	069-SD-0-2		
Lab Sample ID:	JD75251-32	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%		40-130%
	13C8-FOSA	113%		40-130%
	d3-MeFOSA	97%		10-130%
	d5-EtFOSA	99%		10-130%
	d3-MeFOSAA	108%		40-170%
	d5-EtFOSAA	129%		25-135%
	d7-MeFOSE	99%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	62%		40-200%
	13C2-6:2FTS	99%		40-200%
	13C2-8:2FTS	124%		40-300%
	13C3-HFPO-DA	69%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	069-SD-2-12		
Lab Sample ID:	JD75251-33	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4448.D	1	10/28/23 06:27	PC	10/26/23 11:00	OP50022	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	0.091	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	069-SD-2-12		
Lab Sample ID:	JD75251-33	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	113%		40-130%
	13C7-PFUnDA	134% [a]		30-130%
	13C2-PFDoDA	135% [a]		10-130%
	13C2-PFTeDA	121%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	069-SD-2-12		
Lab Sample ID:	JD75251-33	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	87%		10-130%
	d3-MeFOSAA	152%		40-170%
	d5-EtFOSAA	144% [a]		25-135%
	d7-MeFOSE	87%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	119%		40-200%
	13C2-8:2FTS	116%		40-300%
	13C3-HFPO-DA	94%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	069-R-0-2		
Lab Sample ID:	JD75251-34	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4449.D	1	10/28/23 06:42	PC	10/26/23 11:00	OP50022	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.060	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.12	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.25	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.11	0.25	0.089	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.22	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.25	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	069-R-0-2		
Lab Sample ID:	JD75251-34	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	13% [a]		40-130%
	13C5-PFHxA	70%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	069-R-0-2		
Lab Sample ID:	JD75251-34	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	110%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	124%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	61%		40-200%
	13C2-6:2FTS	115%		40-200%
	13C2-8:2FTS	135%		40-300%
	13C3-HFPO-DA	66%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	069-R-2-12		
Lab Sample ID:	JD75251-35	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4450.D	1	10/28/23 06:57	PC	10/26/23 11:00	OP50022	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.081	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.069	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.47	0.23	0.092	ug/kg	
375-95-1	Perfluorononanoic acid	0.082	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.069	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	069-R-2-12		
Lab Sample ID:	JD75251-35	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	UJ
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	27%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	107%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	133% [a]		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	069-R-2-12		
Lab Sample ID:	JD75251-35	**Date Sampled:**	10/20/23
Matrix:	SO - Soil	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	123%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	88%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	106%		40-170%
	d5-EtFOSAA	117%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	125%		40-200%
	13C2-8:2FTS	118%		40-300%
	13C3-HFPO-DA	91%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10202023		
Lab Sample ID:	JD75251-36	**Date Sampled:**	10/20/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1970.D	1	10/27/23 09:46	PC	10/25/23 14:00	OP50012	T1Q58
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0077	0.00089	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0038	0.00070	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00048	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00072	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00038	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00060	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00073	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00063	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00097	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00094	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00041	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0077	0.00087	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00066	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00062	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10202023		
Lab Sample ID:	JD75251-36	**Date Sampled:**	10/20/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00087	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0096	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0068	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0059	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	101%		5-130%
	13C5-PFPeA	102%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	110%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10202023		
Lab Sample ID:	JD75251-36	**Date Sampled:**	10/20/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	62%		10-130%
	d5-EtFOSA	63%		10-130%
	d3-MeFOSAA	114%		40-170%
	d5-EtFOSAA	119%		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	65%		10-130%
	13C2-4:2FTS	191%		40-200%
	13C2-6:2FTS	147%		40-200%
	13C2-8:2FTS	188%		40-300%
	13C3-HFPO-DA	88%		40-130%

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA
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2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD75433
SAMPLING DATE(S):	October 23 and 24, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD75433-1	092A-SD-0-2	X
JD75433-2	092A-SD-2-12	X
JD75433-3	092A-R-0-2	X
JD75433-4	092A-R-2-12	X
JD75433-5	072-SD-0-2	X
JD75433-6	072-SD-2-12	X
JD75433-7	072-R-0-2	X
JD75433-8	072-R-2-12	X
JD75433-9	101-NS-0-2	X
JD75433-10	101-NS-2-12	X
JD75433-11	FD-10232023	X
JD75433-12	101-SD-0-2	X
JD75433-13	101-SD-2-12	X
JD75433-14	101-R-0-2	X
JD75433-15	101-R-2-12	X
JD75433-15MS	101-R-2-12MS	X
JD75433-15MSD	101-R-2-12MSD	X
JD75433-16	RB-10232023	X

LAB ID	CLIENT ID	PFAS
JD75433-17	055-SD-0-2	X
JD75433-18	055-SD-2-12	X
JD75433-19	055-R-0-2	X
JD75433-20	055-R-2-12	X
JD75433-21	063-SD-0-2	X
JD75433-22	063-SD-2-12	X
JD75433-23	063-R-0-2	X
JD75433-24	063-R-2-12	X
JD75433-25	073-SD-0-2	X
JD75433-26	073-SD-2-12	X
JD75433-27	073-R-0-2	X
JD75433-28	073-R-2-12	X
JD75433-29	RB-102402023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD7533

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75433-1	092A-SD-0-2	13C4PFBA	PFBA	R
JD75433-3	092A-R-0-2	13C4PFBA	PFBA	R
JD75433-4	092A-R-2-12	13C4PFBA	PFBA	R
JD75433-9	101-NS-0-2	13C4PFBA	PFBA	R
JD75433-17	055-SD-0-2	13C4PFBA	PFBA	R
JD75433-23	063-R-0-2	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-102302023 and RB-10242023 were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD75433-15/101-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD75433-15	101-R-2-12	Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ

VII.) Laboratory Control Samples (LCS):

All Low Level LCS Recovery criteria were met, with the following exceptions; PFBA, PFHxA, PFNS, EtFOSAA, NFDHA, PFEESA, ADONA and 13-Cl-PF3ONS all reported recoveries > the upper control limit. All associated sample results were non-detect. No qualification was necessary.

LCS OP50061-LBS met all recovery criteria with the following exceptions; PFPeS and 4:2-FTS reported recoveries > the upper control limit. All associated sample results were non-detect. No qualification was necessary.

LCS OP50062-met all recovery criteria. No qualification was necessary.

LCS OP50063-LBS reported PFMPA and 3:3FTCA < the 70% lower control limit. These analytes in samples 75433-15, 75433-16, 75433-17, 75433-18, 75433-19, 75433-20, 75433-21, 75433-22, 75433-23, 75433-24, 75433-25, 75433-26, 75433-27, 75433-28 were non-detects. These analytes are estimated and have been qualified "UJ".

VIII.) Field Duplicates:

One set of field duplicate samples (101-NS-2-12 / FD-10232023) was identified as part of this SDG. All Relative Percent Difference criteria were met. No qualification was needed.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD75433-1	092A-SD-0-2	13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD75433-2	092A-SD-2-12	13C4PFBA	PFBA	UJ
		13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD75433-3	092A-R-0-2	13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
		D5-EtFOSA	EtFOSA	UJ
		D9-EtFOSE	EtFOSE	UJ
		13C3-HFPO-DA	HFPO-DA	UJ
JD75433-4	092A-R-2-12	13C5-PFPeA	PFPeA	J
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
		D5-EtFOSA	EtFOSA	UJ
		D3-MeFOSA	MeFOSA	UJ
JD75433-5	072-SD-0-2	13C4PFBA	PFBA	UJ
JD75433-6	072-SD-2-12	13C4PFBA	PFBA	UJ
JD75433-7	072-R-0-2	13C4PFBA	PFBA	UJ
JD75433-8	072-R-2-12	13C4PFBA	PFBA	UJ
		D5-EtFOSA	EtFOSA	UJ
JD75433-9	101-NS-0-2	13C5-PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75433-10	101-NS-2-12	13C4PFBA D5-EtFOSA D9-EtFOSE	PFBA EtFOSA EtFOSE	UJ UJ UJ
JD75433-11	FD-10232023	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD75433-12	101-SD-0-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD75433-13	101-SD-2-12	D3-MeFOSA D5-EtFOSA D9-EtFOSE 13C2-6:2FTS	MeFOSA EtFOSA EtFOSE 6:2FTS	UJ UJ UJ UJ
JD75433-14	101-R-0-2	13C4PFBA	PFBA	UJ
JD75433-15	101-R-2-12	13C4PFBA	PFBA	UJ
JD75433-17	055-SD-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD75433-18	055-SD-2-12	13C4PFBA	PFBA	UJ
JD75433-19	055-R-0-2	13C4PFBA	PFBA	UJ
JD75433-20	055-R-2-12	13C4PFBA	PFBA	UJ
JD75433-21	063-SD-0-2	13C4PFBA	PFBA	UJ
JD75433-22	063-SD-2-12	13C4PFBA	PFBA	UJ
JD75433-23	063-R-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD75433-24	063-R-2-12	13C4PFBA	PFBA	UJ
JD75433-25	073-SD-0-2	13C4PFBA	PFBA	UJ
JD75433-26	073-SD-2-12	13C4PFBA	PFBA	UJ
JD75433-27	073-R-0-2	13C4PFBA	PFBA	UJ
JD75433-28	073-R-2-12	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	092A-SD-0-2		
Lab Sample ID:	JD75433-1	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4410.D	1	10/27/23 20:49	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.26	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.14	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	092A-SD-0-2		
Lab Sample ID:	JD75433-1	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	37% [a]		40-130%
	13C5-PFHxA	74%		40-130%
	13C4-PFHpA	76%		40-130%
	13C8-PFOA	72%		40-130%
	13C9-PFNA	81%		40-130%
	13C6-PFDA	78%		40-130%
	13C7-PFUnDA	78%		30-130%
	13C2-PFDoDA	68%		10-130%
	13C2-PFTeDA	61%		10-130%
	13C3-PFBS	67%		40-135%
	13C3-PFHxS	77%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	092A-SD-0-2		
Lab Sample ID:	JD75433-1	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	79%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	48%		10-130%
	d5-EtFOSA	53%		10-130%
	d3-MeFOSAA	96%		40-170%
	d5-EtFOSAA	100%		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	59%		10-130%
	13C2-4:2FTS	61%		40-200%
	13C2-6:2FTS	87%		40-200%
	13C2-8:2FTS	110%		40-300%
	13C3-HFPO-DA	72%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	092A-SD-2-12		
Lab Sample ID:	JD75433-2	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4411.D	1	10/27/23 21:04	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.14	0.27	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.27	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.27	0.093	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.12	0.27	0.080	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.27	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	092A-SD-2-12		
Lab Sample ID:	JD75433-2	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	UJ
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	47%		40-130%
	13C5-PFHxA	78%		40-130%
	13C4-PFHpA	76%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	77%		40-130%
	13C6-PFDA	82%		40-130%
	13C7-PFUnDA	79%		30-130%
	13C2-PFDoDA	79%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	092A-SD-2-12		
Lab Sample ID:	JD75433-2	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	81%		40-130%
	d3-MeFOSA	52%		10-130%
	d5-EtFOSA	52%		10-130%
	d3-MeFOSAA	73%		40-170%
	d5-EtFOSAA	89%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	75%		40-200%
	13C2-6:2FTS	76%		40-200%
	13C2-8:2FTS	85%		40-300%
	13C3-HFPO-DA	74%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	092A-R-0-2		
Lab Sample ID:	JD75433-3	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4412.D	1	10/27/23 21:19	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.9	0.25	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.93	0.16	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.17	0.46	0.069	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.39	0.46	0.12	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.44	0.46	0.19	ug/kg	J
375-95-1	Perfluorononanoic acid	0.54	0.46	0.12	ug/kg	
335-76-2	Perfluorodecanoic acid	0.74	0.46	0.16	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.94	0.46	0.14	ug/kg	
307-55-1	Perfluorododecanoic acid	0.31	0.46	0.19	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.38	0.46	0.21	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.46	0.23	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.46	0.16	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.46	0.23	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.46	0.25	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.46	0.23	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.5	0.46	0.12	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.46	0.32	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.46	0.25	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.46	0.12	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.9	0.65	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.9	0.23	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.9	0.44	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.46	0.16	ug/kg	
31506-32-8	MeFOSA	ND	0.46	0.14	ug/kg	
4151-50-2	EtFOSA	ND	0.46	0.12	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	092A-R-0-2		
Lab Sample ID:	JD75433-3	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.46	0.19	ug/kg	
2991-50-6	EtFOSAA	ND	0.46	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	4.6	0.65	ug/kg	
1691-99-2	EtFOSE	ND	4.6	1.7	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.9	0.42	ug/kg	UJ
919005-14-4	ADONA	ND	1.9	0.28	ug/kg	
377-73-1	PFMPA	ND	0.93	0.069	ug/kg	UJ
863090-89-5	PFMBA	ND	0.93	0.14	ug/kg	UJ
151772-58-6	NFDHA	ND	0.93	0.30	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.9	0.60	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.9	0.42	ug/kg	
113507-82-7	PFEESA	ND	0.93	0.069	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.3	0.56	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	12	1.4	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	12	1.5	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	18% [a]		40-130%
	13C5-PFHxA	67%		40-130%
	13C4-PFHpA	77%		40-130%
	13C8-PFOA	74%		40-130%
	13C9-PFNA	75%		40-130%
	13C6-PFDA	83%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	62%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	092A-R-0-2		
Lab Sample ID:	JD75433-3	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	61%		40-130%
	13C8-FOSA	78%		40-130%
	d3-MeFOSA	52%		10-130%
	d5-EtFOSA	48%		10-130%
	d3-MeFOSAA	94%		40-170%
	d5-EtFOSAA	96%		25-135%
	d7-MeFOSE	56%		10-130%
	d9-EtFOSE	46%		10-130%
	13C2-4:2FTS	72%		40-200%
	13C2-6:2FTS	108%		40-200%
	13C2-8:2FTS	116%		40-300%
	13C3-HFPO-DA	47%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	092A-R-2-12		
Lab Sample ID:	JD75433-4	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4413.D	1	10/27/23 21:34	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.24	0.61	0.11	ug/kg	JJ
307-24-4	Perfluorohexanoic acid	0.23	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.34	0.30	0.076	ug/kg	
335-67-1	Perfluorooctanoic acid	0.91	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.26	0.30	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.20	0.30	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.12	0.30	0.091	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.66	0.30	0.076	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	092A-R-2-12		
Lab Sample ID:	JD75433-4	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	UJ
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	31% [a]		40-130%
	13C5-PFHxA	72%		40-130%
	13C4-PFHpA	80%		40-130%
	13C8-PFOA	74%		40-130%
	13C9-PFNA	80%		40-130%
	13C6-PFDA	71%		40-130%
	13C7-PFUnDA	76%		30-130%
	13C2-PFDoDA	67%		10-130%
	13C2-PFTeDA	57%		10-130%
	13C3-PFBS	74%		40-135%
	13C3-PFHxS	78%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	092A-R-2-12		
Lab Sample ID:	JD75433-4	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	76%		40-130%
	13C8-FOSA	83%		40-130%
	d3-MeFOSA	46%		10-130%
	d5-EtFOSA	48%		10-130%
	d3-MeFOSAA	93%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	110%		40-200%
	13C2-8:2FTS	89%		40-300%
	13C3-HFPO-DA	64%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
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Report of Analysis

Client Sample ID:	072-SD-0-2		
Lab Sample ID:	JD75433-5	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4414.D	1	10/27/23 21:49	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.12	0.56	0.097	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.16	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.14	0.28	0.070	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.18	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.28	0.070	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	072-SD-0-2		
Lab Sample ID:	JD75433-5	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	
863090-89-5	PFMBA	ND	0.56	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	76%		40-130%
	13C4-PFHpA	76%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	78%		40-130%
	13C7-PFUnDA	76%		30-130%
	13C2-PFDoDA	70%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	072-SD-0-2		
Lab Sample ID:	JD75433-5	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	83%		40-130%
	d3-MeFOSA	56%		10-130%
	d5-EtFOSA	48%		10-130%
	d3-MeFOSAA	77%		40-170%
	d5-EtFOSAA	83%		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	63%		10-130%
	13C2-4:2FTS	81%		40-200%
	13C2-6:2FTS	70%		40-200%
	13C2-8:2FTS	75%		40-300%
	13C3-HFPO-DA	80%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	072-SD-2-12		
Lab Sample ID:	JD75433-6	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4415.D	1	10/27/23 22:05	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.090	ug/kg	
307-24-4	Perfluorohexanoic acid	0.14	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.19	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	072-SD-2-12		
Lab Sample ID:	JD75433-6	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	82%		40-130%
	13C4-PFHpA	81%		40-130%
	13C8-PFOA	81%		40-130%
	13C9-PFNA	70%		40-130%
	13C6-PFDA	76%		40-130%
	13C7-PFUnDA	84%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	072-SD-2-12		
Lab Sample ID:	JD75433-6	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	76%		40-130%
	13C8-FOSA	71%		40-130%
	d3-MeFOSA	51%		10-130%
	d5-EtFOSA	56%		10-130%
	d3-MeFOSAA	73%		40-170%
	d5-EtFOSAA	77%		25-135%
	d7-MeFOSE	59%		10-130%
	d9-EtFOSE	62%		10-130%
	13C2-4:2FTS	85%		40-200%
	13C2-6:2FTS	73%		40-200%
	13C2-8:2FTS	84%		40-300%
	13C3-HFPO-DA	80%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	072-R-0-2		
Lab Sample ID:	JD75433-7	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4416.D	1	10/27/23 22:20	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.66	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.33	0.050	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.26	0.33	0.083	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.33	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.31	0.33	0.083	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.33	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.21	0.33	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.33	0.083	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.083	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.46	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.083	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	072-R-0-2		
Lab Sample ID:	JD75433-7	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.46	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.66	0.050	ug/kg	
863090-89-5	PFMBA	ND	0.66	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.66	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.66	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.3	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.3	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	79%		40-130%
	13C4-PFHpA	80%		40-130%
	13C8-PFOA	75%		40-130%
	13C9-PFNA	82%		40-130%
	13C6-PFDA	71%		40-130%
	13C7-PFUnDA	81%		30-130%
	13C2-PFDoDA	74%		10-130%
	13C2-PFTeDA	60%		10-130%
	13C3-PFBS	80%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	072-R-0-2		
Lab Sample ID:	JD75433-7	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	79%		40-130%
	d3-MeFOSA	53%		10-130%
	d5-EtFOSA	56%		10-130%
	d3-MeFOSAA	86%		40-170%
	d5-EtFOSAA	84%		25-135%
	d7-MeFOSE	60%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	73%		40-200%
	13C2-6:2FTS	77%		40-200%
	13C2-8:2FTS	97%		40-300%
	13C3-HFPO-DA	85%		40-130%

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	072-R-2-12		
Lab Sample ID:	JD75433-8	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4417.D	1	10/27/23 22:35	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.066	ug/kg	
335-67-1	Perfluorooctanoic acid	0.27	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.097	0.27	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.27	0.080	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.27	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.066	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	072-R-2-12		
Lab Sample ID:	JD75433-8	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	77%		40-130%
	13C4-PFHpA	71%		40-130%
	13C8-PFOA	85%		40-130%
	13C9-PFNA	87%		40-130%
	13C6-PFDA	82%		40-130%
	13C7-PFUnDA	79%		30-130%
	13C2-PFDoDA	76%		10-130%
	13C2-PFTeDA	67%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	68%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	072-R-2-12		
Lab Sample ID:	JD75433-8	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	73%		40-130%
	13C8-FOSA	76%		40-130%
	d3-MeFOSA	52%		10-130%
	d5-EtFOSA	48%		10-130%
	d3-MeFOSAA	78%		40-170%
	d5-EtFOSAA	72%		25-135%
	d7-MeFOSE	53%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	53%		40-200%
	13C2-6:2FTS	75%		40-200%
	13C2-8:2FTS	73%		40-300%
	13C3-HFPO-DA	77%		40-130%

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ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	101-NS-0-2		
Lab Sample ID:	JD75433-9	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4418.D	1	10/27/23 22:50	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.090	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.26	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.17	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.11	0.26	0.090	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.18	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.34	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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Report of Analysis

Client Sample ID:	101-NS-0-2		
Lab Sample ID:	JD75433-9	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	72%		40-130%
	13C4-PFHpA	79%		40-130%
	13C8-PFOA	75%		40-130%
	13C9-PFNA	73%		40-130%
	13C6-PFDA	74%		40-130%
	13C7-PFUnDA	78%		30-130%
	13C2-PFDoDA	77%		10-130%
	13C2-PFTeDA	60%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	62%		40-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-NS-0-2		
Lab Sample ID:	JD75433-9	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	71%		40-130%
	13C8-FOSA	75%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	56%		10-130%
	d3-MeFOSAA	81%		40-170%
	d5-EtFOSAA	81%		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	63%		40-200%
	13C2-6:2FTS	75%		40-200%
	13C2-8:2FTS	43%		40-300%
	13C3-HFPO-DA	78%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	101-NS-2-12		
Lab Sample ID:	JD75433-10	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4419.D	1	10/27/23 23:06	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.060	ug/kg	
335-67-1	Perfluorooctanoic acid	0.097	0.24	0.096	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.24	0.072	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.61	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-NS-2-12		
Lab Sample ID:	JD75433-10	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	72%		40-130%
	13C4-PFHpA	67%		40-130%
	13C8-PFOA	77%		40-130%
	13C9-PFNA	81%		40-130%
	13C6-PFDA	69%		40-130%
	13C7-PFUnDA	72%		30-130%
	13C2-PFDoDA	72%		10-130%
	13C2-PFTeDA	65%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	78%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-NS-2-12		
Lab Sample ID:	JD75433-10	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	55%		40-130%
	13C8-FOSA	66%		40-130%
	d3-MeFOSA	55%		10-130%
	d5-EtFOSA	47%		10-130%
	d3-MeFOSAA	72%		40-170%
	d5-EtFOSAA	80%		25-135%
	d7-MeFOSE	52%		10-130%
	d9-EtFOSE	47%		10-130%
	13C2-4:2FTS	58%		40-200%
	13C2-6:2FTS	68%		40-200%
	13C2-8:2FTS	61%		40-300%
	13C3-HFPO-DA	73%		40-130%

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10232023		
Lab Sample ID:	JD75433-11	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4423.D	1	10/28/23 00:06	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.083	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.24	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.059	ug/kg	
335-67-1	Perfluorooctanoic acid	0.16	0.24	0.094	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.24	0.071	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.24	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10232023		
Lab Sample ID:	JD75433-11	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	UJ
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	79%		40-130%
	13C4-PFHpA	74%		40-130%
	13C8-PFOA	79%		40-130%
	13C9-PFNA	76%		40-130%
	13C6-PFDA	72%		40-130%
	13C7-PFUnDA	66%		30-130%
	13C2-PFDoDA	77%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	66%		40-135%
	13C3-PFHxS	69%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10232023		
Lab Sample ID:	JD75433-11	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	68%		40-130%
	13C8-FOSA	73%		40-130%
	d3-MeFOSA	54%		10-130%
	d5-EtFOSA	51%		10-130%
	d3-MeFOSAA	70%		40-170%
	d5-EtFOSAA	79%		25-135%
	d7-MeFOSE	59%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	64%		40-200%
	13C2-6:2FTS	64%		40-200%
	13C2-8:2FTS	66%		40-300%
	13C3-HFPO-DA	77%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	101-SD-0-2		
Lab Sample ID:	JD75433-12	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4424.D	1	10/28/23 00:22	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.62	0.11	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.31	0.047	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.16	0.31	0.078	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.31	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.31	0.078	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.18	0.31	0.093	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.31	0.078	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.078	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.093	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.078	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-SD-0-2		
Lab Sample ID:	JD75433-12	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.19	ug/kg	
377-73-1	PFMPA	ND	0.62	0.047	ug/kg	UJ
863090-89-5	PFMBA	ND	0.62	0.093	ug/kg	UJ
151772-58-6	NFDHA	ND	0.62	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.62	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.8	0.96	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.8	0.98	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	48%		40-130%
	13C5-PFHxA	72%		40-130%
	13C4-PFHpA	67%		40-130%
	13C8-PFOA	73%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	70%		40-130%
	13C7-PFUnDA	67%		30-130%
	13C2-PFDoDA	60%		10-130%
	13C2-PFTeDA	53%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	78%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-SD-0-2		
Lab Sample ID:	JD75433-12	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	67%		40-130%
	13C8-FOSA	70%		40-130%
	d3-MeFOSA	57%		10-130%
	d5-EtFOSA	54%		10-130%
	d3-MeFOSAA	64%		40-170%
	d5-EtFOSAA	69%		25-135%
	d7-MeFOSE	57%		10-130%
	d9-EtFOSE	53%		10-130%
	13C2-4:2FTS	74%		40-200%
	13C2-6:2FTS	67%		40-200%
	13C2-8:2FTS	58%		40-300%
	13C3-HFPO-DA	70%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	101-SD-2-12		
Lab Sample ID:	JD75433-13	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4425.D	1	10/28/23 00:37	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.30	0.045	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.30	0.076	ug/kg	
335-67-1	Perfluorooctanoic acid	0.22	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.30	0.076	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.30	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.091	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.30	0.076	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-SD-2-12		
Lab Sample ID:	JD75433-13	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.045	ug/kg	
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	65%		5-130%
	13C5-PFPeA	62%		40-130%
	13C5-PFHxA	60%		40-130%
	13C4-PFHpA	65%		40-130%
	13C8-PFOA	63%		40-130%
	13C9-PFNA	61%		40-130%
	13C6-PFDA	63%		40-130%
	13C7-PFUnDA	68%		30-130%
	13C2-PFDoDA	60%		10-130%
	13C2-PFTeDA	54%		10-130%
	13C3-PFBS	64%		40-135%
	13C3-PFHxS	59%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-SD-2-12		
Lab Sample ID:	JD75433-13	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	69%		40-130%
	13C8-FOSA	64%		40-130%
	d3-MeFOSA	30%		10-130%
	d5-EtFOSA	36%		10-130%
	d3-MeFOSAA	68%		40-170%
	d5-EtFOSAA	68%		25-135%
	d7-MeFOSE	51%		10-130%
	d9-EtFOSE	49%		10-130%
	13C2-4:2FTS	58%		40-200%
	13C2-6:2FTS	49%		40-200%
	13C2-8:2FTS	53%		40-300%
	13C3-HFPO-DA	67%		40-130%

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ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	101-R-0-2		
Lab Sample ID:	JD75433-14	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4426.D	1	10/28/23 00:52	PC	10/27/23 09:58	OP50061	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-R-0-2		
Lab Sample ID:	JD75433-14	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	59%		40-130%
	13C5-PFHxA	72%		40-130%
	13C4-PFHpA	72%		40-130%
	13C8-PFOA	71%		40-130%
	13C9-PFNA	73%		40-130%
	13C6-PFDA	73%		40-130%
	13C7-PFUnDA	78%		30-130%
	13C2-PFDoDA	69%		10-130%
	13C2-PFTeDA	66%		10-130%
	13C3-PFBS	77%		40-135%
	13C3-PFHxS	71%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-R-0-2		
Lab Sample ID:	JD75433-14	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	78%		40-130%
	13C8-FOSA	79%		40-130%
	d3-MeFOSA	61%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	77%		40-170%
	d5-EtFOSAA	82%		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	63%		40-200%
	13C2-6:2FTS	75%		40-200%
	13C2-8:2FTS	71%		40-300%
	13C3-HFPO-DA	70%		40-130%

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ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	101-R-2-12		
Lab Sample ID:	JD75433-15	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4484.D	1	10/28/23 15:21	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.63	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.094	0.31	0.047	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.19	0.31	0.078	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.35	0.31	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.10	0.31	0.078	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.31	0.094	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.20	0.31	0.11	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.31	0.078	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.078	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.094	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.078	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-R-2-12		
Lab Sample ID:	JD75433-15	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.28	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.047	ug/kg	
863090-89-5	PFMBA	ND	0.63	0.094	ug/kg	
151772-58-6	NFDHA	ND	0.63	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.8	0.97	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.8	0.98	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	27%		5-130%
	13C5-PFPeA	93%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	95%		40-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	101-R-2-12		
Lab Sample ID:	JD75433-15	**Date Sampled:**	10/23/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	97%		40-170%
	d5-EtFOSAA	100%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	79%		40-200%
	13C2-6:2FTS	75%		40-200%
	13C2-8:2FTS	76%		40-300%
	13C3-HFPO-DA	100%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	RB-10232023		
Lab Sample ID:	JD75433-16	**Date Sampled:**	10/23/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1988.D	1	10/27/23 19:55	PC	10/27/23 14:14	OP50062	T1Q59
Run #2							

	Initial Volume	Final Volume
Run #1	537 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0074	0.00087	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0037	0.00068	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00047	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00070	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00037	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00058	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00051	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00072	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00074	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00071	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00061	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00094	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00091	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0013	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00037	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0074	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0074	0.00085	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0074	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00064	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00060	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00049	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10232023		
Lab Sample ID:	JD75433-16	**Date Sampled:**	10/23/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00047	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00085	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0074	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0074	0.0011	ug/l	
377-73-1	PFMPA	ND	0.0037	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0037	0.00052	ug/l	
151772-58-6	NFDHA	ND	0.0037	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0074	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0074	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0037	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0093	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.047	0.0066	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.047	0.0058	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	104%		5-130%
	13C5-PFPeA	110%		40-130%
	13C5-PFHxA	113%		40-130%
	13C4-PFHpA	113%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	118%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	121%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	112%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10232023		
Lab Sample ID:	JD75433-16	**Date Sampled:**	10/23/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	136%		40-170%
	d5-EtFOSAA	137% [a]		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	157%		40-200%
	13C2-6:2FTS	154%		40-200%
	13C2-8:2FTS	151%		40-300%
	13C3-HFPO-DA	87%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	055-SD-0-2		
Lab Sample ID:	JD75433-17	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4485.D	1	10/28/23 15:37	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.093	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.27	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	0.13	0.25	0.10	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.12	0.25	0.11	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.18	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	055-SD-0-2		
Lab Sample ID:	JD75433-17	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	UJ
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	35% [a]		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	126%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	055-SD-0-2		
Lab Sample ID:	JD75433-17	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	120%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	101%		40-200%
	13C2-6:2FTS	103%		40-200%
	13C2-8:2FTS	114%		40-300%
	13C3-HFPO-DA	87%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	055-SD-2-12		
Lab Sample ID:	JD75433-18	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4486.D	1	10/28/23 15:52	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.95	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.16	0.48	0.083	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.27	0.24	0.059	ug/kg	
335-67-1	Perfluorooctanoic acid	0.95	0.24	0.095	ug/kg	
375-95-1	Perfluorononanoic acid	0.16	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.081	0.24	0.071	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.095	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.12	0.24	0.083	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.69	0.24	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.95	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.95	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.95	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	055-SD-2-12		
Lab Sample ID:	JD75433-18	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.095	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.95	0.21	ug/kg	
919005-14-4	ADONA	ND	0.95	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	
863090-89-5	PFMBA	ND	0.48	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.95	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.95	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	22%		5-130%
	13C5-PFPeA	81%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	055-SD-2-12		
Lab Sample ID:	JD75433-18	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	88%		10-130%
	d5-EtFOSA	93%		10-130%
	d3-MeFOSAA	114%		40-170%
	d5-EtFOSAA	129%		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	128%		40-200%
	13C2-8:2FTS	118%		40-300%
	13C3-HFPO-DA	104%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	055-R-0-2		
Lab Sample ID:	JD75433-19	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4487.D	1	10/28/23 16:07	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.46	0.61	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.34	0.31	0.046	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.51	0.31	0.077	ug/kg	
335-67-1	Perfluorooctanoic acid	1.4	0.31	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.49	0.31	0.077	ug/kg	
335-76-2	Perfluorodecanoic acid	0.24	0.31	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.37	0.31	0.092	ug/kg	
307-55-1	Perfluorododecanoic acid	0.16	0.31	0.12	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.16	0.31	0.14	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.17	0.31	0.11	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.0	0.31	0.077	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.077	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.077	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	055-R-0-2		
Lab Sample ID:	JD75433-19	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.7	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.7	0.97	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	62%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	108%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	055-R-0-2		
Lab Sample ID:	JD75433-19	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	110%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	116%		40-170%
	d5-EtFOSAA	130%		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	118%		40-200%
	13C2-8:2FTS	149%		40-300%
	13C3-HFPO-DA	89%		40-130%

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	055-R-2-12		
Lab Sample ID:	JD75433-20	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4491.D	1	10/28/23 17:08	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.11	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.25	0.063	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.11	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	055-R-2-12		
Lab Sample ID:	JD75433-20	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	69%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	055-R-2-12		
Lab Sample ID:	JD75433-20	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	82%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	103%		40-170%
	d5-EtFOSAA	104%		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	101%		40-200%
	13C2-6:2FTS	108%		40-200%
	13C2-8:2FTS	100%		40-300%
	13C3-HFPO-DA	101%		40-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	063-SD-0-2		
Lab Sample ID:	JD75433-21	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4492.D	1	10/28/23 17:24	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.083	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.059	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.094	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.059	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.10	0.24	0.059	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	063-SD-0-2		
Lab Sample ID:	JD75433-21	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	111%		40-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	063-SD-0-2		
Lab Sample ID:	JD75433-21	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	87%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	112%		40-170%
	d5-EtFOSAA	115%		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	98%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	100%		40-300%
	13C3-HFPO-DA	98%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	063-SD-2-12		
Lab Sample ID:	JD75433-22	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4493.D	1	10/28/23 17:39	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.16	0.49	0.086	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.24	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.26	0.25	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	0.75	0.25	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.20	0.25	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.18	0.25	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.17	0.25	0.074	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.25	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	063-SD-2-12		
Lab Sample ID:	JD75433-22	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	65%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	063-SD-2-12		
Lab Sample ID:	JD75433-22	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	91%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	109%		40-170%
	d5-EtFOSAA	120%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	76%		10-130%
	13C2-4:2FTS	117%		40-200%
	13C2-6:2FTS	110%		40-200%
	13C2-8:2FTS	85%		40-300%
	13C3-HFPO-DA	100%		40-130%

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	063-R-0-2		
Lab Sample ID:	JD75433-23	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	37.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4494.D	1	10/28/23 17:54	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	2.1	0.28	ug/kg	R
2706-90-3	Perfluoropentanoic acid	1.1	1.0	0.18	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.46	0.52	0.078	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.64	0.52	0.13	ug/kg	
335-67-1	Perfluorooctanoic acid	1.2	0.52	0.21	ug/kg	
375-95-1	Perfluorononanoic acid	0.92	0.52	0.13	ug/kg	
335-76-2	Perfluorodecanoic acid	0.82	0.52	0.18	ug/kg	
2058-94-8	Perfluoroundecanoic acid	1.4	0.52	0.16	ug/kg	
307-55-1	Perfluorododecanoic acid	0.59	0.52	0.21	ug/kg	
72629-94-8	Perfluorotridecanoic acid	0.73	0.52	0.23	ug/kg	
376-06-7	Perfluorotetradecanoic acid	0.27	0.52	0.26	ug/kg	J
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.52	0.18	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.52	0.26	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.52	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.52	0.26	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	3.0	0.52	0.13	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.52	0.36	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.52	0.28	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.52	0.13	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.1	0.72	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.1	0.26	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.1	0.49	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.52	0.18	ug/kg	
31506-32-8	MeFOSA	ND	0.52	0.16	ug/kg	
4151-50-2	EtFOSA	ND	0.52	0.13	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	063-R-0-2		
Lab Sample ID:	JD75433-23	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	37.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.52	0.21	ug/kg	
2991-50-6	EtFOSAA	ND	0.52	0.34	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	5.2	0.72	ug/kg	
1691-99-2	EtFOSE	ND	5.2	1.9	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	2.1	0.47	ug/kg	
919005-14-4	ADONA	ND	2.1	0.31	ug/kg	
377-73-1	PFMPA	ND	1.0	0.078	ug/kg	UJ
863090-89-5	PFMBA	ND	1.0	0.16	ug/kg	UJ
151772-58-6	NFDHA	ND	1.0	0.34	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.1	0.67	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.1	0.47	ug/kg	
113507-82-7	PFEESA	ND	1.0	0.078	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.6	0.62	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	13	1.6	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	13	1.6	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	23% [a]		40-130%
	13C5-PFHxA	73%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	82%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	75%		40-135%
	13C3-PFHxS	82%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	063-R-0-2		
Lab Sample ID:	JD75433-23	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	37.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	76%		40-130%
	13C8-FOSA	83%		40-130%
	d3-MeFOSA	60%		10-130%
	d5-EtFOSA	60%		10-130%
	d3-MeFOSAA	112%		40-170%
	d5-EtFOSAA	101%		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	53%		10-130%
	13C2-4:2FTS	77%		40-200%
	13C2-6:2FTS	127%		40-200%
	13C2-8:2FTS	141%		40-300%
	13C3-HFPO-DA	57%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	063-R-2-12		
Lab Sample ID:	JD75433-24	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4495.D	1	10/28/23 18:09	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.25	0.65	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.23	0.33	0.049	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.50	0.33	0.082	ug/kg	
335-67-1	Perfluorooctanoic acid	1.1	0.33	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.69	0.33	0.082	ug/kg	
335-76-2	Perfluorodecanoic acid	0.38	0.33	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.58	0.33	0.098	ug/kg	
307-55-1	Perfluorododecanoic acid	0.18	0.33	0.13	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.23	0.33	0.15	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.13	0.33	0.11	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	0.19	0.33	0.18	ug/kg	J
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.8	0.33	0.082	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.082	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.46	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.098	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.082	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	063-R-2-12		
Lab Sample ID:	JD75433-24	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.46	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.65	0.049	ug/kg	
863090-89-5	PFMBA	ND	0.65	0.098	ug/kg	
151772-58-6	NFDHA	ND	0.65	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.42	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.65	0.049	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.2	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.2	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	55%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	81%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	063-R-2-12		
Lab Sample ID:	JD75433-24	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	111%		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	128%		40-200%
	13C2-6:2FTS	137%		40-200%
	13C2-8:2FTS	137%		40-300%
	13C3-HFPO-DA	79%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	073-SD-0-2		
Lab Sample ID:	JD75433-25	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4496.D	1	10/28/23 18:25	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.51	0.090	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.27	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.22	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.27	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.45	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	0.22	0.26	0.10	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.16	0.26	0.12	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.63	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	073-SD-0-2		
Lab Sample ID:	JD75433-25	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	77%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	073-SD-0-2		
Lab Sample ID:	JD75433-25	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	89%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	95%		40-200%
	13C2-6:2FTS	102%		40-200%
	13C2-8:2FTS	86%		40-300%
	13C3-HFPO-DA	100%		40-130%

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	073-SD-2-12		
Lab Sample ID:	JD75433-26	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4497.D	1	10/28/23 18:40	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.49	0.085	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.14	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.23	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.72	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.33	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.092	0.24	0.085	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.43	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	073-SD-2-12		
Lab Sample ID:	JD75433-26	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	109%		40-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	073-SD-2-12		
Lab Sample ID:	JD75433-26	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	97%		40-170%
	d5-EtFOSAA	101%		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	98%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	91%		40-300%
	13C3-HFPO-DA	110%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	073-R-0-2		
Lab Sample ID:	JD75433-27	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4498.D	1	10/28/23 18:55	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.23	0.61	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.19	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.23	0.30	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.28	0.30	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.41	0.30	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.59	0.30	0.091	ug/kg	
307-55-1	Perfluorododecanoic acid	0.20	0.30	0.12	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.19	0.30	0.14	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.30	0.076	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	073-R-0-2		
Lab Sample ID:	JD75433-27	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.045	ug/kg	
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	62%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	073-R-0-2		
Lab Sample ID:	JD75433-27	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	90%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	115%		40-170%
	d5-EtFOSAA	126%		25-135%
	d7-MeFOSE	94%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	104%		40-200%
	13C2-6:2FTS	123%		40-200%
	13C2-8:2FTS	116%		40-300%
	13C3-HFPO-DA	95%		40-130%

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	073-R-2-12		
Lab Sample ID:	JD75433-28	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4499.D	1	10/28/23 19:10	PC	10/27/23 12:00	OP50063	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.20	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.25	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.35	0.26	0.065	ug/kg	
335-67-1	Perfluorooctanoic acid	1.7	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.27	0.26	0.065	ug/kg	
335-76-2	Perfluorodecanoic acid	0.16	0.26	0.091	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.10	0.26	0.078	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.58	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

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RL = Reporting Limit B = Indicates analyte found in associated method blank
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Report of Analysis

Client Sample ID:	073-R-2-12		
Lab Sample ID:	JD75433-28	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	65%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	073-R-2-12		
Lab Sample ID:	JD75433-28	**Date Sampled:**	10/24/23
Matrix:	SO - Soil	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	104%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	97%		40-200%
	13C2-6:2FTS	84%		40-200%
	13C2-8:2FTS	87%		40-300%
	13C3-HFPO-DA	106%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	RB-10242023		
Lab Sample ID:	JD75433-29	**Date Sampled:**	10/24/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q1989.D	1	10/27/23 20:10	PC	10/27/23 14:14	OP50062	T1Q59
Run #2							

	Initial Volume	Final Volume
Run #1	503 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00092	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00097	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00090	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10242023		
Lab Sample ID:	JD75433-29	**Date Sampled:**	10/24/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00090	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0099	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0061	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	112%		5-130%
	13C5-PFPeA	113%		40-130%
	13C5-PFHxA	119%		40-130%
	13C4-PFHpA	117%		40-130%
	13C8-PFOA	111%		40-130%
	13C9-PFNA	116%		40-130%
	13C6-PFDA	127%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10242023		
Lab Sample ID:	JD75433-29	**Date Sampled:**	10/24/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/25/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	127%		40-130%
	13C8-FOSA	121%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	150%		40-170%
	d5-EtFOSAA	138% [a]		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	131%		40-200%
	13C2-6:2FTS	148%		40-200%
	13C2-8:2FTS	178%		40-300%
	13C3-HFPO-DA	91%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 11/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

AECOM

VALIDATION REPORT – JD75523 Correction/Replacement

Project Name: NYSDEC WA#44.1 Rural Background Study for PFAS in Soil

AECOM Project #60679961

The text of the validation report by 3rd party validator – Validata Chemical Services Inc. (Validata) indicated certain compounds should be rejected. However, this was not done on the associated Form Is in the validation report. The Form Is noted below have been changed by AECOM.

The Form I for sample JD75523-5 (field sample ID 067-SD-0-2) had PFMPA, PFMBA, and 3:3FTCA incorrectly flagged with a 'UJ' by Validata. The 'UJ' qualifiers were crossed out and 'R' qualifiers applied to the Form I. The changes are noted in red and initialed/dated.

No other changes have been made to the validation report.

Prepared By: Ann Marie Kropovitch, Chemist **Date: 1/16/2025**

Reviewed By: Peter R. Fairbanks, Senior Chemist **Date: 1/16/2025**

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD75523
SAMPLING DATE(S):	October 25, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD75523-1	054A-SD-0-1	X
JD75523-2	054A-SD-2-12	X
JD75523-3	054A-R-0-2	X
JD75523-4	054A-R-2-12	X
JD75523-5	067-SD-0-2	X
JD75523-6	067-SD-2-12	X
JD75523-7	067-R-0-2	X
JD75523-8	067-R-2-12	X
JD75523-9	064-SD-0-2	X
JD75523-10	064-SD-2-12	X
JD75523-11	064-R-0-2	X
JD75523-12	FD-10252023	X
JD75523-13	064-R-2-12	X
JD75523-13MS	064-R-2-12MS	X
JD75523-13MSD	064-R-2-12MSD	X
JD75523-14	053B-NS-0-2	X
JD75523-15	053B-NS-2-12	X
JD75523-16	053B-SD-0-2	X

LAB ID	CLIENT ID	PFAS
JD75523-17	053B-SD-2-12	X
JD75523-18	053B-R-0-2	X
JD75523-19	053B-R-2-12	X
JD75523-20	RB-10252023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD75523

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75523-4	054A-R-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD75523-5	067-SD-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD75523-6	067-SD-2-12	13C4PFBA	PFBA	R
JD75523-7	067-R-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD75523-8	067-R-2-12	13C4PFBA	PFBA	R
JD75523-9	064-SD-0-2	13C4PFBA	PFBA	R
JD75523-10	064-SD-2-12	13C4PFBA	PFBA	R
JD75523-12	FD-10252023	13C4PFBA	PFBA	R
JD75523-14	053B-NS-0-2	13C4PFBA	PFBA	R
JD75523-15	053B-NS-2-12	13C4PFBA	PFBA	R
JD75523-16	053B-SD-0-2	13C4PFBA	PFBA	R

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75523-17	053B-SD-2-12	13C4PFBA	PFBA	R
JD75523-19	053B-R-2-12	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. All samples were extracted and analyzed within holding time criteria.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blank, RB-101252023 was free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD74836-15/046-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD75523-13	064-R-2-12	RPD > 30%	PFMPA 3:3FTCA ADONA PFMBA NFDHA 9Cl-PF3ONS 11Cl-PF3OUdS	UJ
		Recovery < lower control limit of 70%	MeFOSE PFMPA NFDHA 3:3FTCA	UJ

VII.) Laboratory Control Samples (LCS):

All Low Level LCS Recovery criteria were met. No qualification was necessary.

All LCS recovery criteria were met with the following exception: LCS OP50088, which is associated with sample JD75523-19 / RB 10252023, reported the RPD for 4:2 FTS outside the 30% criteria. This analyted in the sample is estimated and has been qualified "UJ".

VIII.) Field Duplicates:

One set of field duplicate samples (064-R-0-2 / FD-10252023) was identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was necessary.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75523-1	054A-SD-0-1	13C4PFBA	PFBA	UJ
JD75523-2	054A-SD-2-12	13C4PFBA	PFBA	UJ
JD75523-3	054A-R-0-2	13C4PFBA	PFBA	UJ
JD75523-4	054A-R-2-12	13C5PFHxA D3MeFOSA D5EtFOSA D9EtFOSE	PFHxA 5:3FTCA 7:3FTCA PFEESA NFDHA EtFOSA EtFOSE	UJ

		13C24:2FTS 13C3HFPO-DA	4:2FTS HFPO-DA	
LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD75523-5	067-SD-0-2	13C3HFPO-DA	HFPO-DA	UJ
JD75523-6	067-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75523-7	067-R-0-2	13C5PFHxA 13C3PFBS D9EtFOSE D5EtFOSA 13C24:2FTS 13C3HFPO-DA	PFHxA 5:3FTCA 7:3FTCA PFMPA PFMBA PFBS EtFOSE EtFOSA 4:2FTS HFPO-DA	UJ
JD75523-8	067-R-2-12	13C5PFPeA 13C3HFPO-DA	PFPeA 3:3FTCA PFMPA PFMBA HFPO-DA	UJ
JD75523-9	064-SD-0-2	13C5PFPeA D9EtFOSE 13C3HFPO-DA	PFPeA 3:3FTCA PFMPA PFMBA EtFOSE HFPO-DA	UJ
JD75523-10	064-SD-2-12	13C5PFPeA D9EtFOSE	PFPeA 3:3FTCA PFMPA PFMBA EtFOSE	UJ
JD75523-11	064-R-0-2	13C4PFBA D9EtFOSE	PFBA EtFOSE	J UJ
JD75523-12	FD-10252023	13C5PFPeA D9EtFOSE	PFPeA 3:3FTCA PFMPA PFMBA EtFOSE	UJ
JD75523-13	064-R-2-12	13C4PFBA	PFBA	J
JD75523-14	053B-NS-0-2	13C5PFPeA 13C3HFPO-DA	PFPeA 3:3FTCA PFMPA PFMBA HFPO-DA	UJ
JD75523-15	053B-NS-2-12	13C5PFPeA	PFPeA 3:3FTCA	UJ

		D9EtFOSE	PFMPA PFMBA EtFOSE	
LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD75523-16	053B-SD-0-2	13C5PFPeA 13C3HFPO-DA	PFPeA 3:3FTCA PFMPA PFMBA HFPO-DA	UJ
JD75523-17	053B-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75523-18	053B-R-0-2	13C4PFBA	PFBA	UJ
JD75523-19	053B-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	054A-SD-0-2		
Lab Sample ID:	JD75523-1	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2019.D	1	10/30/23 21:42	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.29	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.16	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.21	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.18	0.26	0.091	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.086	0.26	0.078	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	054A-SD-0-2		
Lab Sample ID:	JD75523-1	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	78%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	118%		40-130%
	13C7-PFUnDA	116%		30-130%
	13C2-PFDoDA	110%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	129%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	054A-SD-0-2		
Lab Sample ID:	JD75523-1	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	132% [a]		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	200% [a]		40-170%
	d5-EtFOSAA	188% [a]		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	212% [a]		40-200%
	13C2-6:2FTS	267% [a]		40-200%
	13C2-8:2FTS	255%		40-300%
	13C3-HFPO-DA	70%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	054A-SD-2-12		
Lab Sample ID:	JD75523-2	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2020.D	1	10/30/23 21:57	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.15	0.57	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.28	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.090	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.26	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.28	0.071	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.28	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.094	0.28	0.071	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	054A-SD-2-12		
Lab Sample ID:	JD75523-2	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	61%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	054A-SD-2-12		
Lab Sample ID:	JD75523-2	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	142%		40-170%
	d5-EtFOSAA	147% [a]		25-135%
	d7-MeFOSE	54%		10-130%
	d9-EtFOSE	49%		10-130%
	13C2-4:2FTS	127%		40-200%
	13C2-6:2FTS	156%		40-200%
	13C2-8:2FTS	158%		40-300%
	13C3-HFPO-DA	81%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	054A-R-0-2		
Lab Sample ID:	JD75523-3	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2021.D	1	10/30/23 22:12	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.19	0.55	0.096	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.15	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.67	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.32	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	0.21	0.27	0.096	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.11	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.62	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	054A-R-0-2		
Lab Sample ID:	JD75523-3	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	054A-R-0-2		
Lab Sample ID:	JD75523-3	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	114%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	153%		40-170%
	d5-EtFOSAA	176% [a]		25-135%
	d7-MeFOSE	66%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	174%		40-200%
	13C2-6:2FTS	186%		40-200%
	13C2-8:2FTS	225%		40-300%
	13C3-HFPO-DA	80%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	054A-R-2-12		
Lab Sample ID:	JD75523-4	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2022.D	1	10/30/23 22:27	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.079	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.19	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.25	0.063	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.088	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	054A-R-2-12		
Lab Sample ID:	JD75523-4	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	UJ
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	R
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	R
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	6% [a]		40-130%
	13C5-PFHxA	38% [a]		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	57%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	054A-R-2-12		
Lab Sample ID:	JD75523-4	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	22%		10-130%
	d5-EtFOSA	19%		10-130%
	d3-MeFOSAA	140%		40-170%
	d5-EtFOSAA	150% [a]		25-135%
	d7-MeFOSE	51%		10-130%
	d9-EtFOSE	45%		10-130%
	13C2-4:2FTS	43%		40-200%
	13C2-6:2FTS	153%		40-200%
	13C2-8:2FTS	145%		40-300%
	13C3-HFPO-DA	29% [a]		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	067-SD-0-2		
Lab Sample ID:	JD75523-5	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2023.D	1	10/30/23 22:43	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.070	0.25	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.12	0.25	0.098	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.25	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.23	0.25	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.11	0.25	0.074	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.080	0.25	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	067-SD-0-2		
Lab Sample ID:	JD75523-5	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q		
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS								
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg			
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg			
PERFLUOROOCTANE SULFONAMIDO ETHANOLS								
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg			
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg			
PER and POLYFLUOROETHER CARBOXYLIC ACIDS								
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg			
919005-14-4	ADONA	ND	0.98	0.15	ug/kg			
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	~~UJ~~	R	R added by AMK 1/15/25
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	~~UJ~~	R	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg			
PER and POLYFLUOROETHER SULFONIC ACIDS								
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg			
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg			
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg			
FLUOROTELOMER CARBOXYLIC ACIDS								
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	~~UJ~~	R	R added by AMK 1/15/25
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg			
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg			

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	8% [a]		40-130%
	13C5-PFHxA	54%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	113%		40-130%
	13C9-PFNA	83%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	067-SD-0-2		
Lab Sample ID:	JD75523-5	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	129%		40-170%
	d5-EtFOSAA	148% [a]		25-135%
	d7-MeFOSE	59%		10-130%
	d9-EtFOSE	53%		10-130%
	13C2-4:2FTS	76%		40-200%
	13C2-6:2FTS	160%		40-200%
	13C2-8:2FTS	194%		40-300%
	13C3-HFPO-DA	48%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	067-SD-2-12		
Lab Sample ID:	JD75523-6	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2024.D	1	10/30/23 22:58	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.082	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.16	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.20	0.23	0.093	ug/kg	J
375-95-1	Perfluorononanoic acid	0.10	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	067-SD-2-12		
Lab Sample ID:	JD75523-6	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	UJ
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	12% [a]		40-130%
	13C5-PFHxA	76%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	119%		30-130%
	13C2-PFDoDA	115%		10-130%
	13C2-PFTeDA	113%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	067-SD-2-12		
Lab Sample ID:	JD75523-6	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	81%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	88%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	146%		40-170%
	d5-EtFOSAA	164% [a]		25-135%
	d7-MeFOSE	60%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	82%		40-200%
	13C2-6:2FTS	166%		40-200%
	13C2-8:2FTS	180%		40-300%
	13C3-HFPO-DA	62%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	067-R-0-2		
Lab Sample ID:	JD75523-7	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2025.D	1	10/30/23 23:13	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.11	0.25	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.34	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.37	0.25	0.064	ug/kg	
335-76-2	Perfluorodecanoic acid	0.21	0.25	0.089	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.31	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	UJ
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.72	0.25	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.064	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	067-R-0-2		
Lab Sample ID:	JD75523-7	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	UJ
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	R
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	R
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	5% [a]		40-130%
	13C5-PFHxA	34% [a]		40-130%
	13C4-PFHpA	86%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	49%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	067-R-0-2		
Lab Sample ID:	JD75523-7	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	110%		40-130%
	d3-MeFOSA	86%		10-130%
	d5-EtFOSA	38%		10-130%
	d3-MeFOSAA	144%		40-170%
	d5-EtFOSAA	181% [a]		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	29%		10-130%
	13C2-4:2FTS	35% [a]		40-200%
	13C2-6:2FTS	261% [a]		40-200%
	13C2-8:2FTS	289%		40-300%
	13C3-HFPO-DA	20% [a]		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	067-R-2-12		
Lab Sample ID:	JD75523-8	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2026.D	1	10/30/23 23:28	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.16	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.25	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.70	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.22	0.25	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.094	0.25	0.089	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.091	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.44	0.25	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	067-R-2-12		
Lab Sample ID:	JD75523-8	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	UJ
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	10% [a]		40-130%
	13C5-PFHxA	58%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	128%		40-130%
	13C7-PFUnDA	119%		30-130%
	13C2-PFDoDA	120%		10-130%
	13C2-PFTeDA	110%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	067-R-2-12		
Lab Sample ID:	JD75523-8	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	114%		40-130%
	13C8-FOSA	120%		40-130%
	d3-MeFOSA	100%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	170%		40-170%
	d5-EtFOSAA	195% [a]		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	79%		40-200%
	13C2-6:2FTS	233% [a]		40-200%
	13C2-8:2FTS	261%		40-300%
	13C3-HFPO-DA	45%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	064-SD-0-2		
Lab Sample ID:	JD75523-9	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2030.D	1	10/31/23 00:29	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.26	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.066	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.26	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.26	0.093	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.19	0.26	0.079	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.26	0.066	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	064-SD-0-2		
Lab Sample ID:	JD75523-9	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.97	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	UJ
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.079	ug/kg	UJ
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	10% [a]		40-130%
	13C5-PFHxA	63%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	064-SD-0-2		
Lab Sample ID:	JD75523-9	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	92%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	141%		40-170%
	d5-EtFOSAA	156% [a]		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	47%		10-130%
	13C2-4:2FTS	73%		40-200%
	13C2-6:2FTS	164%		40-200%
	13C2-8:2FTS	193%		40-300%
	13C3-HFPO-DA	44%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	064-SD-2-12		
Lab Sample ID:	JD75523-10	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2031.D	1	10/31/23 00:44	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.081	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.058	ug/kg	
335-67-1	Perfluorooctanoic acid	0.17	0.23	0.093	ug/kg	J
375-95-1	Perfluorononanoic acid	0.10	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.11	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	064-SD-2-12		
Lab Sample ID:	JD75523-10	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.070	ug/kg	UJ
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	18% [a]		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	111%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	064-SD-2-12		
Lab Sample ID:	JD75523-10	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	134%		40-170%
	d5-EtFOSAA	138% [a]		25-135%
	d7-MeFOSE	56%		10-130%
	d9-EtFOSE	45%		10-130%
	13C2-4:2FTS	103%		40-200%
	13C2-6:2FTS	170%		40-200%
	13C2-8:2FTS	152%		40-300%
	13C3-HFPO-DA	69%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	064-R-0-2		
Lab Sample ID:	JD75523-11	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	40.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2032.D	1	10/31/23 01:00	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.81	2.0	0.28	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.53	1.0	0.18	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.48	0.50	0.075	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.47	0.50	0.13	ug/kg	J
335-67-1	Perfluorooctanoic acid	2.2	0.50	0.20	ug/kg	
375-95-1	Perfluorononanoic acid	0.85	0.50	0.13	ug/kg	
335-76-2	Perfluorodecanoic acid	0.63	0.50	0.18	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.85	0.50	0.15	ug/kg	
307-55-1	Perfluorododecanoic acid	0.32	0.50	0.20	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.32	0.50	0.23	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.50	0.25	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.50	0.18	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.50	0.25	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.50	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.50	0.25	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.4	0.50	0.13	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.50	0.35	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.50	0.28	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.50	0.13	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.0	0.70	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.0	0.25	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.0	0.48	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.50	0.18	ug/kg	
31506-32-8	MeFOSA	ND	0.50	0.15	ug/kg	
4151-50-2	EtFOSA	ND	0.50	0.13	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	064-R-0-2		
Lab Sample ID:	JD75523-11	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	40.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.50	0.20	ug/kg	
2991-50-6	EtFOSAA	ND	0.50	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	5.0	0.70	ug/kg	
1691-99-2	EtFOSE	ND	5.0	1.8	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	2.0	0.45	ug/kg	
919005-14-4	ADONA	ND	2.0	0.30	ug/kg	
377-73-1	PFMPA	ND	1.0	0.075	ug/kg	
863090-89-5	PFMBA	ND	1.0	0.15	ug/kg	
151772-58-6	NFDHA	ND	1.0	0.33	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.0	0.65	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.0	0.45	ug/kg	
113507-82-7	PFEESA	ND	1.0	0.075	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.5	0.60	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	13	1.6	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	13	1.6	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	87%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	86%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	66%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	75%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	064-R-0-2		
Lab Sample ID:	JD75523-11	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	40.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	110%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	57%		10-130%
	d3-MeFOSAA	176% [a]		40-170%
	d5-EtFOSAA	199% [a]		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	47%		10-130%
	13C2-4:2FTS	203% [a]		40-200%
	13C2-6:2FTS	228% [a]		40-200%
	13C2-8:2FTS	259%		40-300%
	13C3-HFPO-DA	65%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10252023		
Lab Sample ID:	JD75523-12	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2033.D	1	10/31/23 01:15	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.8	0.25	ug/kg	R
2706-90-3	Perfluoropentanoic acid	1.0	0.91	0.16	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.43	0.45	0.068	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.44	0.45	0.11	ug/kg	J
335-67-1	Perfluorooctanoic acid	1.8	0.45	0.18	ug/kg	
375-95-1	Perfluorononanoic acid	0.96	0.45	0.11	ug/kg	
335-76-2	Perfluorodecanoic acid	0.50	0.45	0.16	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.87	0.45	0.14	ug/kg	
307-55-1	Perfluorododecanoic acid	0.28	0.45	0.18	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.38	0.45	0.20	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	0.23	0.45	0.23	ug/kg	J
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.45	0.16	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.45	0.23	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.45	0.25	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.45	0.23	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.4	0.45	0.11	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.45	0.32	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.45	0.25	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.45	0.11	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.8	0.64	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.8	0.23	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.8	0.43	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.45	0.16	ug/kg	
31506-32-8	MeFOSA	ND	0.45	0.14	ug/kg	
4151-50-2	EtFOSA	ND	0.45	0.11	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10252023		
Lab Sample ID:	JD75523-12	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.45	0.18	ug/kg	
2991-50-6	EtFOSAA	ND	0.45	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	4.5	0.64	ug/kg	
1691-99-2	EtFOSE	ND	4.5	1.7	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.8	0.41	ug/kg	
919005-14-4	ADONA	ND	1.8	0.27	ug/kg	
377-73-1	PFMPA	ND	0.91	0.068	ug/kg	UJ
863090-89-5	PFMBA	ND	0.91	0.14	ug/kg	UJ
151772-58-6	NFDHA	ND	0.91	0.30	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.8	0.59	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.8	0.41	ug/kg	
113507-82-7	PFEESA	ND	0.91	0.068	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.3	0.55	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	11	1.4	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	11	1.4	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	43%		40-130%
	13C5-PFHxA	81%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	60%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10252023		
Lab Sample ID:	JD75523-12	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	60%		10-130%
	d3-MeFOSAA	153%		40-170%
	d5-EtFOSAA	181% [a]		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	42%		10-130%
	13C2-4:2FTS	194%		40-200%
	13C2-6:2FTS	224% [a]		40-200%
	13C2-8:2FTS	264%		40-300%
	13C3-HFPO-DA	59%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	064-R-2-12		
Lab Sample ID:	JD75523-13	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2034.D	1	10/31/23 01:30	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.53	1.2	0.16	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.41	0.58	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.39	0.29	0.044	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.31	0.29	0.073	ug/kg	
335-67-1	Perfluorooctanoic acid	1.5	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.45	0.29	0.073	ug/kg	
335-76-2	Perfluorodecanoic acid	0.20	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.22	0.29	0.088	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.0	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.088	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	064-R-2-12		
Lab Sample ID:	JD75523-13	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.58	0.044	ug/kg	
863090-89-5	PFMBA	ND	0.58	0.088	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	37%		5-130%
	13C5-PFPeA	81%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	064-R-2-12		
Lab Sample ID:	JD75523-13	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	54%		10-130%
	d3-MeFOSAA	163%		40-170%
	d5-EtFOSAA	176% [a]		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	52%		10-130%
	13C2-4:2FTS	233% [a]		40-200%
	13C2-6:2FTS	254% [a]		40-200%
	13C2-8:2FTS	258%		40-300%
	13C3-HFPO-DA	72%		40-130%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	053B-NS-0-2		
Lab Sample ID:	JD75523-14	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2035.D	1	10/31/23 01:45	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.89	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.078	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.22	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.056	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.089	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.22	0.056	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.078	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.21	0.22	0.067	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.22	0.089	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.078	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.22	0.056	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.056	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.89	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.89	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.89	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.078	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.067	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-NS-0-2		
Lab Sample ID:	JD75523-14	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.089	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.89	0.20	ug/kg	UJ
919005-14-4	ADONA	ND	0.89	0.13	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.067	ug/kg	UJ
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.89	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.89	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.69	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	10% [a]		40-130%
	13C5-PFHxA	57%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	110%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	80%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-NS-0-2		
Lab Sample ID:	JD75523-14	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	91%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	138%		40-170%
	d5-EtFOSAA	163% [a]		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	72%		40-200%
	13C2-6:2FTS	153%		40-200%
	13C2-8:2FTS	143%		40-300%
	13C3-HFPO-DA	42%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	053B-NS-2-12		
Lab Sample ID:	JD75523-15	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2036.D	1	10/31/23 02:01	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.85	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.42	0.074	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.21	0.032	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.053	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.21	0.085	ug/kg	
375-95-1	Perfluorononanoic acid	0.069	0.21	0.053	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.21	0.074	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.066	0.21	0.064	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.21	0.085	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.095	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.074	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.21	0.053	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.053	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.85	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.85	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.85	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.074	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.064	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.053	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-NS-2-12		
Lab Sample ID:	JD75523-15	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.085	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.77	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.85	0.19	ug/kg	
919005-14-4	ADONA	ND	0.85	0.13	ug/kg	
377-73-1	PFMPA	ND	0.42	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.42	0.064	ug/kg	UJ
151772-58-6	NFDHA	ND	0.42	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.85	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.85	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.42	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.25	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.3	0.66	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.3	0.67	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	12% [a]		40-130%
	13C5-PFHxA	70%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	68%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-NS-2-12		
Lab Sample ID:	JD75523-15	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	128%		40-170%
	d5-EtFOSAA	144% [a]		25-135%
	d7-MeFOSE	54%		10-130%
	d9-EtFOSE	44%		10-130%
	13C2-4:2FTS	70%		40-200%
	13C2-6:2FTS	127%		40-200%
	13C2-8:2FTS	119%		40-300%
	13C3-HFPO-DA	57%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	053B-SD-0-2		
Lab Sample ID:	JD75523-16	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2037.D	1	10/31/23 02:16	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.87	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.077	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.055	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.087	ug/kg	
375-95-1	Perfluorononanoic acid	0.064	0.22	0.055	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.087	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.098	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.077	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.078	0.22	0.055	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.87	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.87	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.87	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-SD-0-2		
Lab Sample ID:	JD75523-16	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.087	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.80	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.87	0.20	ug/kg	UJ
919005-14-4	ADONA	ND	0.87	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	UJ
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.87	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.87	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	11% [a]		40-130%
	13C5-PFHxA	65%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-SD-0-2		
Lab Sample ID:	JD75523-16	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	117%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	93%		10-130%
	d5-EtFOSA	90%		10-130%
	d3-MeFOSAA	140%		40-170%
	d5-EtFOSAA	153% [a]		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	57%		40-200%
	13C2-6:2FTS	175%		40-200%
	13C2-8:2FTS	126%		40-300%
	13C3-HFPO-DA	47%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	053B-SD-2-12		
Lab Sample ID:	JD75523-17	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2038.D	1	10/31/23 02:31	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.84	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.42	0.074	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.21	0.032	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.069	0.21	0.053	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.11	0.21	0.084	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.21	0.053	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.21	0.074	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.063	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.084	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.095	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.074	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.21	0.053	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.053	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.84	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.84	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.84	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.074	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.063	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.053	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-SD-2-12		
Lab Sample ID:	JD75523-17	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.084	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.77	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.84	0.19	ug/kg	
919005-14-4	ADONA	ND	0.84	0.13	ug/kg	
377-73-1	PFMPA	ND	0.42	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.42	0.063	ug/kg	UJ
151772-58-6	NFDHA	ND	0.42	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.84	0.27	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.84	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.42	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.25	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.3	0.65	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.3	0.66	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	12% [a]		40-130%
	13C5-PFHxA	66%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	68%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-SD-2-12		
Lab Sample ID:	JD75523-17	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	133%		40-170%
	d5-EtFOSAA	142% [a]		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	80%		40-200%
	13C2-6:2FTS	148%		40-200%
	13C2-8:2FTS	127%		40-300%
	13C3-HFPO-DA	52%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	053B-R-0-2		
Lab Sample ID:	JD75523-18	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2039.D	1	10/31/23 02:46	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.67	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.33	0.050	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.14	0.33	0.084	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.84	0.33	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.29	0.33	0.084	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.28	0.33	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.24	0.33	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	0.15	0.33	0.13	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.57	0.33	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.0	0.33	0.084	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.084	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.084	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-R-0-2		
Lab Sample ID:	JD75523-18	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.050	ug/kg	
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.4	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.4	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	22%		5-130%
	13C5-PFPeA	79%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	113%		40-135%
	13C3-PFHxS	123%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-R-0-2		
Lab Sample ID:	JD75523-18	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	120%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	174% [a]		40-170%
	d5-EtFOSAA	203% [a]		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	218% [a]		40-200%
	13C2-6:2FTS	238% [a]		40-200%
	13C2-8:2FTS	295%		40-300%
	13C3-HFPO-DA	76%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	053B-R-2-12		
Lab Sample ID:	JD75523-19	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2043.D	1	10/31/23 03:47	PC	10/30/23 11:09	OP50087	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.092	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.26	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.10	0.26	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.31	0.26	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.084	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.092	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.079	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.092	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.26	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.092	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-R-2-12		
Lab Sample ID:	JD75523-19	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.96	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.079	ug/kg	UJ
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	35% [a]		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	117%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	053B-R-2-12		
Lab Sample ID:	JD75523-19	**Date Sampled:**	10/25/23
Matrix:	SO - Soil	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	112%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	91%		10-130%
	d5-EtFOSA	89%		10-130%
	d3-MeFOSAA	145%		40-170%
	d5-EtFOSAA	159% [a]		25-135%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	155%		40-200%
	13C2-6:2FTS	173%		40-200%
	13C2-8:2FTS	164%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10252023		
Lab Sample ID:	JD75523-20	**Date Sampled:**	10/25/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4510.D	1	10/31/23 10:57	PC	10/27/23 16:13	OP50088	T2Q86
Run #2							

	Initial Volume	Final Volume
Run #1	542 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0074	0.00086	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0037	0.00067	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0018	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0018	0.00046	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0018	0.00069	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0018	0.00037	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0018	0.00057	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0018	0.00051	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0018	0.00071	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0018	0.00073	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0018	0.00070	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0018	0.00061	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0018	0.00093	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0018	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0018	0.00090	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0018	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0018	0.0013	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0018	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0018	0.00037	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0074	0.0021	ug/l	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0074	0.00084	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0074	0.0013	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0018	0.00064	ug/l	
31506-32-8	MeFOSA	ND	0.0018	0.00059	ug/l	
4151-50-2	EtFOSA	ND	0.0018	0.00049	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10252023		
Lab Sample ID:	JD75523-20	**Date Sampled:**	10/25/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0018	0.00047	ug/l	
2991-50-6	EtFOSAA	ND	0.0018	0.00084	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.018	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.018	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0074	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0074	0.0011	ug/l	
377-73-1	PFMPA	ND	0.0037	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0037	0.00052	ug/l	
151772-58-6	NFDHA	ND	0.0037	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0074	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0074	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0037	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0092	0.0022	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.046	0.0066	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.046	0.0057	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	93%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10252023		
Lab Sample ID:	JD75523-20	**Date Sampled:**	10/25/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	82%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	93%		40-170%
	d5-EtFOSAA	87%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	89%		10-130%
	13C2-4:2FTS	75%		40-200%
	13C2-6:2FTS	101%		40-200%
	13C2-8:2FTS	112%		40-300%
	13C3-HFPO-DA	112%		40-130%

CWL 12/14/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Robert Thielke
SDG NUMBER:	JD75674
SAMPLING DATE(S):	October 26-27, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD75674-1	052A-SD-0-2-ACTD-JD75674SO	X
JD75674-2	052A-SD-2-12-ACTD-JD75674SO	X
JD75674-3	052A-R-0-2-ACTD-JD75674SO	X
JD75674-4	052A-R-2-12-ACTD-JD75674SO	X
JD75674-5	066-SD-0-2-ACTD-JD75674SO	X
JD75674-6	066-SD-2-12-ACTD-JD75674SO	X
JD75674-7	066-R-0-2-ACTD-JD75674SO	X
JD75674-8	066-R-2-12-ACTD-JD75674SO	X
JD75674-9	RB-10262023-ACTD-JD75674AQ	X
JD75674-10	104B-SD-0-2-ACTD-JD75674SO	X
JD75674-11 FD	104B-SD-2-12-ACTD-JD75674SO	X
JD75674-11 MS	104B-SD-2-12-ACTD-JD75674SO	X
JD75674-11 MSD	104B-SD-2-12-ACTD-JD75674SO	X
JD75674-12 FD	FD-10272023-ACTD-JD75674SO	X
JD75674-13	104B-R-0-2-ACTD-JD75674SO	X
JD75674-14	104B-R-2-12-ACTD-JD75674SO	X
JD75674-14 MS	104B-R-2-12-ACTD-JD75674SO	X
JD75674-14 MSD	104B-R-2-12-ACTD-JD75674SO	X

LAB ID	CLIENT ID	PFAS
JD75674-15	123A-NS-0-2-ACTD-JD75674SO	X
JD75674-16	123A-NS-2-12-ACTD-JD75674SO	X
JD75674-17	123A-SD-0-2-ACTD-JD75674SO	X
JD75674-18	123A-SD-2-12-ACTD-JD75674SO	X
JD75674-19	123A-R-0-2-ACTD-JD75674SO	X
JD75674-20	123A-R-2-12-ACTD-JD75674SO	X
JD75674-21	113B-SD-0-2-ACTD-JD75674SO	X
JD75674-22	113B-SD-2-12-ACTD-JD75674SO	X
JD75674-23	113B-R-0-2-ACTD-JD75674SO	X
JD75674-24	113B-R-2-12-ACTD-JD75674SO	X
JD75674-25	RB-10272023-ACTD-JD75674AQ	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD75674

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75674-5	066-SD-0-2	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks RB-10262023 and RB-10272023 were identified in this SDG. All Equipment Blank results were undetected.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using samples JD75674-11/ 104B-SD-2-12-ACTD-JD75674SO and JD75674-14/104B-R-2-12-ACTD-JD75674SO. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD75647-11	104B-SD-2-12-ACTD-JD75674SO	Recovery < lower control limit of 70%	PFMBA 3:3FTCA	UJ UJ
JD75674-14	104B-R-2-12-ACTD-JD75674SO	Recovery < lower control limit of 70%	PFMBA 3:3FTCA	UJ UJ
		RPD outside control limit of 30%	Perfluoroheptanesulfonic acid	UJ

VII.) Laboratory Control Samples (LCS):

LCS OP50156-LLBS reported ADONA, NFDHA, 4:2 Fluorotelomer sulfonate, 6:2 Fluorotelomer sulfonate, and 8:2 Fluorotelomer sulfonate at > the upper control limit of 130%. The associated results were non-detected and no action was taken.

LCS OP50155-LLBS and OP50155-BS reported PFMPA and 3:3 FTCA at < the lower control limit of 70%. The associated results in samples JD75674-11, JD75674-12, JD75674-13, JD75674-15, JD75674-16, JD75674-17, JD75674-18, JD75674-19, JD75674-20, JD75674-21, JD75674-22, JD75674-23, JD75674-24 were qualified as estimated (J/UJ).

LCS OP50155-LLBS reported EtFOSAA at > the lower control limit of 130%. The associated results were non-detected and no action was taken.

LCS OP50154-LLBS reported PFMPA and 3:3 FTCA at < the lower control limit of 70%. The associated samples JD75674-1, JD75674-2, JD75674-3, JD75674-4, JD75674-5, JD75674-6, JD75674-7, JD75674-8, JD75674-10, and JD75674-14 were qualified as estimated (J/UJ).

LCS OP50155-LLBS reported PFMBA at > the lower control limit of 130%. The associated results were non-detected and no action was taken.

VIII.) Field Duplicates:

One set of field duplicate samples (104B-SD-2-12-ACTD-JD75674SO / FD-10272023) were identified as part of this SDG. The 30% Relative Percent Difference criteria were met for all results that were greater than the reporting limit.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD75674-1	052A-SD-0-2	13C4PFBA	PFBA	UJ
JD75674-2	052A-SD-2-12	13C4PFBA	PFBA	J
JD75674-3	052A-R-0-2	13C4PFBA	PFBA	UJ
JD75674-4	052A-R-2-12	13C4PFBA	PFBA	UJ
JD75674-5	066-SD-0-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R UJ UJ UJ UJ
JD75674-6	066-SD-2-12	13C4PFBA	PFBA	UJ
JD75674-7	066-R-0-2	13C4PFBA	PFBA	J
JD75674-8	066-R-2-12	13C4PFBA	PFBA	UJ
JD75674-10	104B-SD-0-2	13C4PFBA	PFBA	UJ
JD75674-11	104B-SD-2-12	13C4PFBA	PFBA	UJ
JD75674-12	FD-10272023	13C4PFBA	PFBA	UJ
JD75674-13	104B-R-0-2	13C4PFBA	PFBA	UJ
JD75674-14	104B-R-2-12	13C4PFBA	PFBA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75674-15	123A-NS-0-2	13C4PFBA	PFBA	UJ
JD75674-16	123A-NS-2-12	13C4PFBA	PFBA	UJ
JD75674-17	123A-SD-0-2	13C4PFBA	PFBA	UJ
JD75674-18	123A-SD-2-12	13C4PFBA	PFBA	UJ
JD75674-19	123A-R-0-2	13C4PFBA	PFBA	UJ
JD75674-20	123A-R-2-12	13C4PFBA	PFBA	UJ
JD75674-21	113B-SD-0-2	13C4PFBA	PFBA	UJ
JD75674-22	113B-SD-2-12	13C4PFBA	PFBA	UJ
JD75674-23	113B-R-0-2	13C4PFBA	PFBA	UJ
JD75674-24	113B-R-2-12	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	052A-SD-0-2		
Lab Sample ID:	JD75674-1	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2071.D	1	10/31/23 13:29	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.080	0.31	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.31	0.077	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.31	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.18	0.31	0.077	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.31	0.092	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.31	0.077	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.077	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.077	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	052A-SD-0-2		
Lab Sample ID:	JD75674-1	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.7	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.7	0.97	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	114%		40-130%
	13C7-PFUnDA	128%		30-130%
	13C2-PFDoDA	112%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	052A-SD-2-12		
Lab Sample ID:	JD75674-2	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2072.D	1	10/31/23 13:44	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.58	1.0	0.14	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.22	0.51	0.089	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.27	0.25	0.038	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.19	0.25	0.063	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.49	0.25	0.10	ug/kg		
375-95-1	Perfluorononanoic acid	0.12	0.25	0.063	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg		
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg		
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.25	0.063	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.25	0.089	ug/kg		
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg		
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	052A-SD-2-12		
Lab Sample ID:	JD75674-2	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	30%		5-130%
	13C5-PFPeA	77%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	64%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	052A-R-0-2		
Lab Sample ID:	JD75674-3	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2073.D	1	10/31/23 13:59	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.13	0.30	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.21	0.30	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.52	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.36	0.30	0.076	ug/kg	
335-76-2	Perfluorodecanoic acid	0.15	0.30	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.17	0.30	0.091	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.3	0.30	0.076	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	052A-R-0-2		
Lab Sample ID:	JD75674-3	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	22%		5-130%
	13C5-PFPeA	79%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	052A-R-2-12		
Lab Sample ID:	JD75674-4	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2074.D	1	10/31/23 14:14	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	0.083	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.064	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.28	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.45	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	052A-R-2-12		
Lab Sample ID:	JD75674-4	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	53%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	066-SD-0-2		
Lab Sample ID:	JD75674-5	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2096.D	1	11/02/23 11:12	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg		R
2706-90-3	Perfluoropentanoic acid	0.38	0.63	0.11	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	0.21	0.32	0.048	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.30	0.32	0.079	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.64	0.32	0.13	ug/kg		
375-95-1	Perfluorononanoic acid	0.41	0.32	0.079	ug/kg		
335-76-2	Perfluorodecanoic acid	0.26	0.32	0.11	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.29	0.32	0.095	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.17	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.89	0.32	0.079	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.17	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.079	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.32	0.11	ug/kg		
31506-32-8	MeFOSA	ND	0.32	0.095	ug/kg		
4151-50-2	EtFOSA	ND	0.32	0.079	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	066-SD-0-2		
Lab Sample ID:	JD75674-5	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.63	0.095	ug/kg	UJ
151772-58-6	NFDHA	ND	0.63	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.048	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.9	0.98	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.9	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	27% [a]		40-130%
	13C5-PFHxA	81%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	113%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

4.6

Client Sample ID:	066-SD-2-12		
Lab Sample ID:	JD75674-6	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2097.D	1	11/02/23 11:27	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.11	0.57	0.099	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.10	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.10	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.31	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.099	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.28	0.071	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	066-SD-2-12		
Lab Sample ID:	JD75674-6	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	066-R-0-2		
Lab Sample ID:	JD75674-7	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2080.D	1	10/31/23 15:46	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.78	1.1	0.16	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.32	0.57	0.099	ug/kg	J	
307-24-4	Perfluorohexanoic acid	0.27	0.28	0.042	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.29	0.28	0.071	ug/kg		
335-67-1	Perfluorooctanoic acid	0.77	0.28	0.11	ug/kg		
375-95-1	Perfluorononanoic acid	0.62	0.28	0.071	ug/kg		
335-76-2	Perfluorodecanoic acid	0.16	0.28	0.099	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.20	0.28	0.085	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.92	0.28	0.071	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.28	0.099	ug/kg		
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg		
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg		

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.7

Client Sample ID:	066-R-0-2		
Lab Sample ID:	JD75674-7	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	53%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	066-R-2-12		
Lab Sample ID:	JD75674-8	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2081.D	1	10/31/23 16:02	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	0.12	0.24	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.40	0.24	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.093	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	066-R-2-12		
Lab Sample ID:	JD75674-8	**Date Sampled:**	10/26/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	107%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10262023		
Lab Sample ID:	JD75674-9	**Date Sampled:**	10/26/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2061.D	1	10/31/23 10:56	PC	10/30/23 15:00	OP50156	T1Q60
Run #2							

	Initial Volume	Final Volume
Run #1	479 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0084	0.00097	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0042	0.00076	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0021	0.00052	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0021	0.00078	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0021	0.00042	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0021	0.00065	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0021	0.00057	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00080	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00082	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00079	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0021	0.00069	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0021	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0021	0.0012	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0021	0.00045	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00042	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0084	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0084	0.00095	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0084	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0021	0.00072	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00067	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00055	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10262023		
Lab Sample ID:	JD75674-9	**Date Sampled:**	10/26/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00053	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00095	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0084	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0084	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0042	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0042	0.00058	ug/l	
151772-58-6	NFDHA	ND	0.0042	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0084	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0084	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0042	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.052	0.0074	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.052	0.0065	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	103%		5-130%
	13C5-PFPeA	102%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	104B-SD-0-2		
Lab Sample ID:	JD75674-10	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2082.D	1	10/31/23 16:17	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.56	0.097	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.069	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.28	0.069	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.083	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.077	0.28	0.069	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	104B-SD-0-2		
Lab Sample ID:	JD75674-10	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	104B-SD-2-12		
Lab Sample ID:	JD75674-11	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4521.D	1	10/31/23 13:45	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.90	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.079	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.22	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.056	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.090	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.22	0.056	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.079	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.067	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.079	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.22	0.056	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.056	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.079	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.067	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	104B-SD-2-12		
Lab Sample ID:	JD75674-11	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.13	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.067	ug/kg	UJ
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	112%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10272023		
Lab Sample ID:	JD75674-12	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4522.D	1	10/31/23 15:50	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.88	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.077	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.055	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.088	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.22	0.055	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.088	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.099	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.077	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.22	0.055	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.88	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.88	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.88	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10272023		
Lab Sample ID:	JD75674-12	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.088	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.80	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.88	0.20	ug/kg	
919005-14-4	ADONA	ND	0.88	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.88	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.88	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	111%		40-130%
	13C8-PFOA	117%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	120%		40-130%
	13C7-PFUnDA	127%		30-130%
	13C2-PFDoDA	118%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	116%		40-135%
	13C3-PFHxS	125%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	104B-R-0-2		
Lab Sample ID:	JD75674-13	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	51.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4523.D	1	10/31/23 16:06	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.5	0.21	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.34	0.77	0.13	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.34	0.39	0.058	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.37	0.39	0.096	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.73	0.39	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	0.38	0.39	0.096	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.18	0.39	0.13	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.32	0.39	0.12	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.39	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.39	0.17	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.39	0.19	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.39	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.39	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.39	0.21	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.39	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.54	0.39	0.096	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.39	0.27	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.39	0.21	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.39	0.096	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.54	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.19	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.37	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.39	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.39	0.12	ug/kg	
4151-50-2	EtFOSA	ND	0.39	0.096	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	104B-R-0-2		
Lab Sample ID:	JD75674-13	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	51.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.39	0.15	ug/kg	
2991-50-6	EtFOSAA	ND	0.39	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.9	0.54	ug/kg	
1691-99-2	EtFOSE	ND	3.9	1.4	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.35	ug/kg	
919005-14-4	ADONA	ND	1.5	0.23	ug/kg	
377-73-1	PFMPA	ND	0.77	0.058	ug/kg	UJ
863090-89-5	PFMBA	ND	0.77	0.12	ug/kg	
151772-58-6	NFDHA	ND	0.77	0.25	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.50	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.35	ug/kg	
113507-82-7	PFEESA	ND	0.77	0.058	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.46	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.6	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.6	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	61%		40-130%
	13C5-PFHxA	80%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	76%		40-130%
	13C9-PFNA	73%		40-130%
	13C6-PFDA	82%		40-130%
	13C7-PFUnDA	77%		30-130%
	13C2-PFDoDA	80%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	75%		40-135%
	13C3-PFHxS	79%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	104B-R-2-12		
Lab Sample ID:	JD75674-14	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2083.D	1	10/31/23 16:32	PC	10/31/23 09:14	OP50154	T1Q60
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.16	0.57	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.20	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.45	0.29	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.086	0.29	0.086	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	104B-R-2-12		
Lab Sample ID:	JD75674-14	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	UJ
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	83%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	86%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	62%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	123A-NS-0-2		
Lab Sample ID:	JD75674-15	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4524.D	1	10/31/23 14:30	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.068	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	0.11	0.27	0.096	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.15	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	123A-NS-0-2		
Lab Sample ID:	JD75674-15	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	27%		5-130%
	13C5-PFPeA	101%		40-130%
	13C5-PFHxA	143% [a]		40-130%
	13C4-PFHpA	144% [a]		40-130%
	13C8-PFOA	129%		40-130%
	13C9-PFNA	146% [a]		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	133% [a]		30-130%
	13C2-PFDoDA	124%		10-130%
	13C2-PFTeDA	121%		10-130%
	13C3-PFBS	158% [a]		40-135%
	13C3-PFHxS	157% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

4.16

Client Sample ID:	123A-NS-2-12		
Lab Sample ID:	JD75674-16	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4528.D	1	10/31/23 15:32	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.86	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.43	0.075	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.21	0.032	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.054	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.21	0.086	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.21	0.054	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.21	0.075	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.064	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.086	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.097	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.075	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.21	0.054	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.054	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.86	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.86	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.86	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.075	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.064	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.054	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	123A-NS-2-12		
Lab Sample ID:	JD75674-16	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.086	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.78	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.86	0.19	ug/kg	
919005-14-4	ADONA	ND	0.86	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.43	0.064	ug/kg	
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.86	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.86	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.67	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	76%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	124%		30-130%
	13C2-PFDoDA	114%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	112%		40-135%
	13C3-PFHxS	119%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	123A-SD-0-2		
Lab Sample ID:	JD75674-17	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4529.D	1	10/31/23 16:21	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.30	0.045	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.30	0.075	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.30	0.075	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	123A-SD-0-2		
Lab Sample ID:	JD75674-17	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		5-130%
	13C5-PFPeA	74%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	110%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	112%		10-130%
	13C2-PFTeDA	103%		10-130%
	13C3-PFBS	116%		40-135%
	13C3-PFHxS	123%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

4.18

Client Sample ID:	123A-SD-2-12		
Lab Sample ID:	JD75674-18	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4530.D	1	10/31/23 16:36	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.075	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.24	0.096	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.060	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.24	0.060	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	123A-SD-2-12		
Lab Sample ID:	JD75674-18	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	34%		5-130%
	13C5-PFPeA	91%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	109%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	123A-R-0-2		
Lab Sample ID:	JD75674-19	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4531.D	1	10/31/23 16:51	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.098	ug/kg	
307-24-4	Perfluorohexanoic acid	0.13	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.28	0.070	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.13	0.28	0.098	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.21	0.28	0.084	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.28	0.070	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	123A-R-0-2		
Lab Sample ID:	JD75674-19	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	76%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	123A-R-2-12		
Lab Sample ID:	JD75674-20	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4532.D	1	10/31/23 17:06	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	0.085	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.22	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.10	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.13	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	123A-R-2-12		
Lab Sample ID:	JD75674-20	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	113B-SD-0-2		
Lab Sample ID:	JD75674-21	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4533.D	1	10/31/23 17:22	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.080	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.14	0.26	0.091	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.16	0.26	0.078	ug/kg	J
307-55-1	Perfluorododecanoic acid	0.16	0.26	0.10	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.26	0.065	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	113B-SD-0-2		
Lab Sample ID:	JD75674-21	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	26%		5-130%
	13C5-PFPeA	82%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

4.22

Client Sample ID:	113B-SD-2-12		
Lab Sample ID:	JD75674-22	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4537.D	1	10/31/23 18:23	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.15	0.48	0.085	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.14	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.19	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.30	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.10	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.24	0.072	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.24	0.060	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	113B-SD-2-12		
Lab Sample ID:	JD75674-22	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	76%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	85%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	113B-R-0-2		
Lab Sample ID:	JD75674-23	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4538.D	1	10/31/23 18:38	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.22	0.57	0.099	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.31	0.28	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.30	0.28	0.071	ug/kg	
335-67-1	Perfluorooctanoic acid	1.5	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.30	0.28	0.071	ug/kg	
335-76-2	Perfluorodecanoic acid	0.25	0.28	0.099	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.43	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	0.11	0.28	0.11	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.72	0.28	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	113B-R-0-2		
Lab Sample ID:	JD75674-23	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

4.24

Client Sample ID:	113B-R-2-12		
Lab Sample ID:	JD75674-24	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4539.D	1	10/31/23 18:54	PC	10/31/23 09:00	OP50155	T2Q86
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.20	0.51	0.090	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.34	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.47	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	4.7	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.18	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.27	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.20	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.48	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	113B-R-2-12		
Lab Sample ID:	JD75674-24	**Date Sampled:**	10/27/23
Matrix:	SO - Soil	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	81%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/19/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10272023		
Lab Sample ID:	JD75674-25	**Date Sampled:**	10/27/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2062.D	1	10/31/23 11:11	PC	10/30/23 15:00	OP50156	T1Q60
Run #2							

	Initial Volume	Final Volume
Run #1	532 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0075	0.00087	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0038	0.00069	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00047	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00070	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00038	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00058	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00052	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00072	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00074	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00071	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00062	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00095	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00092	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0075	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0075	0.00086	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0075	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00065	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00060	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00050	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10272023		
Lab Sample ID:	JD75674-25	**Date Sampled:**	10/27/23
Matrix:	AQ - Equipment Blank	**Date Received:**	10/28/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00048	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00086	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0075	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0075	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00053	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0075	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0075	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0094	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.047	0.0067	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.047	0.0058	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	97%		5-130%
	13C5-PFPeA	102%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	83%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Robert Thielke
SDG NUMBER:	JD75822
SAMPLING DATE(S):	October 30-31, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD75822-1	071-SD-0-2-ACTD-JD75822SO	X
JD75822-2	071-SD-2-12-ACTD-JD75822SO	X
JD75822-3	071-R-0-2-ACTD-JD75822SO	X
JD75822-4	071-R-2-12-ACTD-JD75822SO	X
JD75822-5	061-SD-0-2-ACTD-JD75822SO	X
JD75822-6	061-SD-2-12-ACTD-JD75822SO	X
JD75822-7	061-R-0-2-ACTD-JD75822SO	X
JD75822-8	061-R-2-12-ACTD-JD75822SO	X
JD75822-9	RB-10302023-ACTD-JD75822AQ	X
JD75822-10	059C-NS-0-2-ACTD-JD75822SO	X
JD75822-11	059C-NS-2-12-ACTD-JD75822SO	X
JD75822-12	FD-10312023-ACTD-JD75822SO	X
JD75822-13	059C-SD-0-2-ACTD-JD75822SO	X
JD75822-14	059C-SD-2-12-ACTD-JD75822SO	X
JD75822-15	059C-R-0-2-ACTD-JD75822SO	X
JD75822-16	059C-R-2-12-ACTD-JD75822SO	X
JD75822-16 MS	059C-R-2-12-ACTD-JD75822SO	X
JD75822-16 MSD	059C-R-2-12-ACTD-JD75822SO	X

LAB ID	CLIENT ID	PFAS
JD75822-17	062C-SD-0-2-ACTD-JD75822SO	X
JD75822-18	062C-SD-2-12-ACTD-JD75822SO	X
JD75822-19	062C-R-0-2-ACTD-JD75822SO	X
JD75822-20	062C-R-2-12-ACTD-JD75822SO	X
JD75822-21	074D-SD-0-2-ACTD-JD75822SO	X
JD75822-22	074D-SD-2-12-ACTD-JD75822SO	X
JD75822-23	074D-R-0-2-ACTD-JD75822SO	X
JD75822-24	074D-R-2-12-ACTD-JD75822SO	X
JD75822-25	068-SD-0-2-ACTD-JD75822SO	X
JD75822-25 MS	068-SD-0-2-ACTD-JD75822SO	X
JD75822-25 MSD	068-SD-0-2-ACTD-JD75822SO	X
JD75822-26	068-SD-2-12-ACTD-JD75822SO	X
JD75822-27	068-R-0-2-ACTD-JD75822SO	X
JD75822-28	068-R-2-12-ACTD-JD75822SO	X
JD75822-29	058-NS-0-2-ACTD-JD75822SO	X
JD75822-30	058-NS-2-12-ACTD-JD75822SO	X
JD75822-31	058-SD-0-2-ACTD-JD75822SO	X
JD75822-32	058-SD-2-12-ACTD-JD75822SO	X
JD75822-33	058-R-0-2-ACTD-JD75822SO	X
JD75822-34	058-R-2-12-ACTD-JD75822SO	X
JD75822-35	RB-10312023-ACTD-JD75822AQ	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD75822

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75822-16	059C-R-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	R
JD75822-31	058-SD-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks RB-10302023 and RB-10312023 were identified in this SDG. All Equipment Blank results were undetected.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using samples JD75822-16/ 059C-R-2-12-ACTD-JD75822SO and JD75822-25/ 068-SD-0-2-ACTD-JD75822SO. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD75647-16	104B-SD-2-12-ACTD-JD75822SO	Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ
		MSD RPD outside 30% control limit	Perfluorononanesulfonic acid	UJ
JD75822-25	068-SD-0-2-ACTD-JD75822SO	Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ

VII.) Laboratory Control Samples (LCS):

LCS OP50240-LLBS reported Perfluorodecanesulfonic acid and NFDHA at < the lower control limit of 70%. The associated results in samples JD75822-9 and JD75822-35 were qualified as estimated (UJ).

OP50240-BS Perfluorohexanesulfonic acid had an RPD outside the 30% control limit. The associated results in samples JD75822-9 and JD75822-35 were qualified as estimated (UJ).

LCS OP50154-LLBS and OP50213-BS reported PFMPA and 3:3 FTCA at < the lower control limit of 70%. The associated samples JD75822-19, JD75822-20, JD75822-21, JD75822-22, JD75822-23, JD75822-24, JD75822-25, JD75822-26, JD75822-27, JD75822-28, JD75822-29, JD75822-30, JD75822-31, JD75822-32, JD75822-33, JD75822-34 were qualified as estimated (J/UJ).

VIII.) Field Duplicates:

One set of field duplicate samples (059C-NS-2-12-ACTD-JD75822SO /FD-10312023) were identified as part of this SDG. The 30% Relative Percent Difference criteria were met for all results that were greater than the reporting limit.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75822-1	071-SD-0-2	13C4PFBA	PFBA	UJ
JD75822-2	071-SD-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-3	071-R-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-4	071-R-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-5	061-SD-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	J
JD75822-6	061-SD-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-7	061-R-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-8	061-R-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-10	059C-NS-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-11	059C-NS-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-12	FD-10312023-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-13	059C-SD-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-14	059C-SD-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-15	059C-R-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-16	059C-R-2-12-ACTD-JD75822SO	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R UJ UJ UJ UJ
JD75822-17	062C-SD-0-2-ACTD-JD75822SO	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA	UJ UJ UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
			PFMPA PFMBA	UJ UJ
JD75822-18	062C-SD-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-19	062C-R-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-20	062C-R-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-21	074D-SD-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-22	074D-SD-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-23	074D-R-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-24	074D-R-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-25	068-SD-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	J
JD75822-26	068-SD-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-27	068-R-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-28	068-R-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-29	058-NS-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-30	058-NS-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-31	058-SD-0-2-ACTD-JD75822SO	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R J UJ UJ UJ
JD75822-32	058-SD-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-33	058-R-0-2-ACTD-JD75822SO	13C4PFBA	PFBA	UJ
JD75822-34	058-R-2-12-ACTD-JD75822SO	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	071-SD-0-2		
Lab Sample ID:	JD75822-1	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4560.D	1	11/03/23 15:33	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	1.1	0.51	0.090	ug/kg	
307-24-4	Perfluorohexanoic acid	0.15	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.19	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	071-SD-0-2		
Lab Sample ID:	JD75822-1	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	50%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	071-SD-2-12		
Lab Sample ID:	JD75822-2	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4561.D	1	11/03/23 15:48	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.090	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.24	0.096	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.24	0.060	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.24	0.060	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	071-SD-2-12		
Lab Sample ID:	JD75822-2	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.21	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	54%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	117%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	071-R-0-2		
Lab Sample ID:	JD75822-3	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4562.D	1	11/03/23 16:03	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.17	0.49	0.085	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.12	0.24	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.21	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.45	0.24	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.095	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	071-R-0-2		
Lab Sample ID:	JD75822-3	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	54%		40-130%
	13C5-PFHxA	111%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	071-R-2-12		
Lab Sample ID:	JD75822-4	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4563.D	1	11/03/23 16:19	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.096	0.50	0.088	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.099	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.14	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.37	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.15	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	071-R-2-12		
Lab Sample ID:	JD75822-4	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	69%		40-130%
	13C5-PFHxA	113%		40-130%
	13C4-PFHpA	119%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	116%		40-130%
	13C6-PFDA	126%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	118%		10-130%
	13C2-PFTeDA	104%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	061-SD-0-2		
Lab Sample ID:	JD75822-5	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4564.D	1	11/03/23 16:34	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.6	1.2	0.16	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.15	0.58	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.19	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.19	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.33	0.29	0.072	ug/kg	
335-76-2	Perfluorodecanoic acid	0.19	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.27	0.29	0.087	ug/kg	J
307-55-1	Perfluorododecanoic acid	0.12	0.29	0.12	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.39	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	061-SD-0-2		
Lab Sample ID:	JD75822-5	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	69%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	118%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

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Report of Analysis

Client Sample ID:	061-SD-2-12		
Lab Sample ID:	JD75822-6	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4565.D	1	11/03/23 16:49	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.31	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.29	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.37	0.26	0.065	ug/kg	
335-67-1	Perfluorooctanoic acid	1.3	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.26	0.078	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.11	0.26	0.091	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	061-SD-2-12		
Lab Sample ID:	JD75822-6	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	114%		40-130%
	13C4-PFHpA	120%		40-130%
	13C8-PFOA	109%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

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Report of Analysis

4.7

Client Sample ID:	061-R-0-2		
Lab Sample ID:	JD75822-7	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4566.D	1	11/03/23 17:04	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.22	0.58	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.12	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.23	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.58	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.33	0.29	0.072	ug/kg	
335-76-2	Perfluorodecanoic acid	0.15	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.26	0.29	0.087	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.60	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	061-R-0-2		
Lab Sample ID:	JD75822-7	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	50%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	107%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	061-R-2-12		
Lab Sample ID:	JD75822-8	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4567.D	1	11/03/23 17:20	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.95	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.47	0.083	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.13	0.24	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.24	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.57	0.24	0.095	ug/kg	
375-95-1	Perfluorononanoic acid	0.18	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.13	0.24	0.083	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.11	0.24	0.071	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.095	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.24	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.95	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.95	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.95	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	061-R-2-12		
Lab Sample ID:	JD75822-8	**Date Sampled:**	10/30/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.095	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.95	0.21	ug/kg	
919005-14-4	ADONA	ND	0.95	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.95	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.95	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	107%		40-130%
	13C8-PFOA	115%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	102%		10-130%
	13C3-PFBS	118%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10302023		
Lab Sample ID:	JD75822-9	**Date Sampled:**	10/30/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4583.D	1	11/03/23 21:23	PC	11/02/23 15:00	OP50240	T2Q87
Run #2							

	Initial Volume	Final Volume
Run #1	522 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0077	0.00089	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0038	0.00070	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00048	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00072	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00038	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00059	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00073	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00063	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00097	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0011	ug/l	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00094	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00041	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	UJ
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0077	0.00087	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00066	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00061	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10302023		
Lab Sample ID:	JD75822-9	**Date Sampled:**	10/30/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00087	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0096	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0068	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0059	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	101%		5-130%
	13C5-PFPeA	100%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	117%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

4.10

Client Sample ID:	059C-NS-0-2		
Lab Sample ID:	JD75822-10	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4568.D	1	11/03/23 17:35	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.66	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.15	0.33	0.050	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.33	0.083	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.30	0.33	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.33	0.083	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.33	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.16	0.33	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.37	0.33	0.083	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.083	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.46	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.083	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	059C-NS-0-2		
Lab Sample ID:	JD75822-10	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.46	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.66	0.050	ug/kg	
863090-89-5	PFMBA	ND	0.66	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.66	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.66	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.3	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.3	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	118%		40-130%
	13C4-PFHpA	111%		40-130%
	13C8-PFOA	114%		40-130%
	13C9-PFNA	114%		40-130%
	13C6-PFDA	120%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	124%		40-135%
	13C3-PFHxS	127%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	059C-NS-2-12		
Lab Sample ID:	JD75822-11	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4569.D	1	11/03/23 17:50	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.17	0.52	0.090	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.51	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	059C-NS-2-12		
Lab Sample ID:	JD75822-11	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	111%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	114%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-10312023		
Lab Sample ID:	JD75822-12	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4572.D	1	11/03/23 18:36	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.9	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.48	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.26	0.078	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.26	0.065	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-10312023		
Lab Sample ID:	JD75822-12	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	109%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	110%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	118%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	125%		40-135%
	13C3-PFHxS	117%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	059C-SD-0-2		
Lab Sample ID:	JD75822-13	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4573.D	1	11/03/23 18:51	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.15	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.098	0.27	0.080	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	059C-SD-0-2		
Lab Sample ID:	JD75822-13	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	110%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	059C-SD-2-12		
Lab Sample ID:	JD75822-14	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4574.D	1	11/03/23 19:06	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.28	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.48	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	059C-SD-2-12		
Lab Sample ID:	JD75822-14	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	78%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	116%		40-130%
	13C8-PFOA	110%		40-130%
	13C9-PFNA	126%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	110%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

4.15

Client Sample ID:	059C-R-0-2		
Lab Sample ID:	JD75822-15	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4575.D	1	11/03/23 19:21	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.34	0.58	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.19	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.25	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.43	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.41	0.29	0.072	ug/kg	
335-76-2	Perfluorodecanoic acid	0.31	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.34	0.29	0.087	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.60	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	059C-R-0-2		
Lab Sample ID:	JD75822-15	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	111%		40-130%
	13C4-PFHpA	115%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	113%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	059C-R-2-12		
Lab Sample ID:	JD75822-16	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4576.D	1	11/03/23 19:37	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.19	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.21	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.75	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.37	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	0.12	0.27	0.094	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.20	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	059C-R-2-12		
Lab Sample ID:	JD75822-16	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	UJ
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	47%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	119%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	062C-SD-0-2		
Lab Sample ID:	JD75822-17	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4577.D	1	11/03/23 19:52	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.11	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.14	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.55	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.23	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.13	0.25	0.088	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.17	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	3.4	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	062C-SD-0-2		
Lab Sample ID:	JD75822-17	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	UJ
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	43%		40-130%
	13C5-PFHxA	86%		40-130%
	13C4-PFHpA	82%		40-130%
	13C8-PFOA	83%		40-130%
	13C9-PFNA	84%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	80%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	74%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

4.18

Client Sample ID:	062C-SD-2-12		
Lab Sample ID:	JD75822-18	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4578.D	1	11/03/23 20:07	PC	11/03/23 10:10	OP50212	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.12	0.51	0.089	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.11	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.52	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.17	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.13	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	3.2	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	062C-SD-2-12		
Lab Sample ID:	JD75822-18	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	114%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	062C-R-0-2		
Lab Sample ID:	JD75822-19	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4597.D	1	11/04/23 00:56	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.10	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.094	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.10	0.25	0.087	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.16	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	062C-R-0-2		
Lab Sample ID:	JD75822-19	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	50%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	112%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	062C-R-2-12		
Lab Sample ID:	JD75822-20	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4598.D	1	11/04/23 01:12	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	
307-24-4	Perfluorohexanoic acid	0.038	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.060	ug/kg	
335-67-1	Perfluorooctanoic acid	0.17	0.24	0.096	ug/kg	J
375-95-1	Perfluorononanoic acid	0.075	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.24	0.072	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	062C-R-2-12		
Lab Sample ID:	JD75822-20	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	75%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	074D-SD-0-2		
Lab Sample ID:	JD75822-21	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4599.D	1	11/04/23 01:27	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.55	0.096	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.18	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.40	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.29	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	0.15	0.27	0.096	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.25	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.45	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	074D-SD-0-2		
Lab Sample ID:	JD75822-21	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	73%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	115%		40-135%
	13C3-PFHxS	134% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	074D-SD-2-12		
Lab Sample ID:	JD75822-22	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4600.D	1	11/04/23 01:42	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.90	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.079	ug/kg	
307-24-4	Perfluorohexanoic acid	0.064	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.38	0.23	0.090	ug/kg	
375-95-1	Perfluorononanoic acid	0.090	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.079	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.097	0.23	0.068	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.23	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.079	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.23	0.057	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.079	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	074D-SD-2-12		
Lab Sample ID:	JD75822-22	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.14	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	074D-R-0-2		
Lab Sample ID:	JD75822-23	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4601.D	1	11/04/23 01:58	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.12	0.54	0.094	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.13	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.20	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.31	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.25	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.13	0.27	0.094	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.29	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.52	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	074D-R-0-2		
Lab Sample ID:	JD75822-23	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	114%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	88%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	074D-R-2-12		
Lab Sample ID:	JD75822-24	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4602.D	1	11/04/23 02:13	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.096	0.48	0.085	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.13	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.49	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.067	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	074D-R-2-12		
Lab Sample ID:	JD75822-24	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

4.25

Client Sample ID:	068-SD-0-2		
Lab Sample ID:	JD75822-25	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4605.D	1	11/04/23 02:59	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.0	1.1	0.15	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.14	0.55	0.097	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.093	0.28	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.21	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.15	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.22	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.16	0.28	0.097	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.25	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.48	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	068-SD-0-2		
Lab Sample ID:	JD75822-25	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	74%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	068-SD-2-12		
Lab Sample ID:	JD75822-26	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4606.D	1	11/04/23 03:14	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.11	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.11	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.096	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.097	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	068-SD-2-12		
Lab Sample ID:	JD75822-26	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	69%		40-130%
	13C5-PFHxA	114%		40-130%
	13C4-PFHpA	121%		40-130%
	13C8-PFOA	117%		40-130%
	13C9-PFNA	128%		40-130%
	13C6-PFDA	123%		40-130%
	13C7-PFUnDA	128%		30-130%
	13C2-PFDoDA	123%		10-130%
	13C2-PFTeDA	116%		10-130%
	13C3-PFBS	126%		40-135%
	13C3-PFHxS	122%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

4.27

Client Sample ID:	068-R-0-2		
Lab Sample ID:	JD75822-27	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4607.D	1	11/04/23 03:29	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.16	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.050	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.10	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.20	0.26	0.091	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.40	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	0.11	0.26	0.10	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.48	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	068-R-0-2		
Lab Sample ID:	JD75822-27	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	117%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	106%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

4.28

Client Sample ID:	068-R-2-12		
Lab Sample ID:	JD75822-28	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4608.D	1	11/04/23 03:45	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.51	0.090	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.11	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.35	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.25	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	068-R-2-12		
Lab Sample ID:	JD75822-28	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	82%		40-130%
	13C4-PFHpA	84%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	78%		40-130%
	13C6-PFDA	78%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	81%		40-135%
	13C3-PFHxS	77%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	058-NS-0-2		
Lab Sample ID:	JD75822-29	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4609.D	1	11/04/23 04:00	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	0.097	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.25	0.099	ug/kg	
375-95-1	Perfluorononanoic acid	0.21	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.25	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.20	0.25	0.074	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	058-NS-0-2		
Lab Sample ID:	JD75822-29	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	55%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID: 058-NS-2-12
Lab Sample ID: JD75822-30 **Date Sampled:** 10/31/23
Matrix: SO - Soil **Date Received:** 11/01/23
Method: EPA DRAFT 1633 EPA 1633 DRAFT **Percent Solids:** 82.7
Project: NYSDEC WAA44 Rural Background PFAs Project, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4610.D	1	11/04/23 04:15	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	0.088	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.39	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.18	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	058-NS-2-12		
Lab Sample ID:	JD75822-30	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	058-SD-0-2		
Lab Sample ID:	JD75822-31	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4611.D	1	11/04/23 04:30	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg		R
2706-90-3	Perfluoropentanoic acid	0.24	0.51	0.089	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	0.15	0.25	0.038	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.22	0.25	0.064	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.19	0.25	0.10	ug/kg	J	
375-95-1	Perfluorononanoic acid	0.28	0.25	0.064	ug/kg		
335-76-2	Perfluorodecanoic acid	0.12	0.25	0.089	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.17	0.25	0.076	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.25	0.064	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.064	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.25	0.089	ug/kg		
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg		
4151-50-2	EtFOSA	ND	0.25	0.064	ug/kg		

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	058-SD-0-2		
Lab Sample ID:	JD75822-31	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	19% [a]		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	114%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	112%		10-130%
	13C2-PFTeDA	104%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	058-SD-2-12		
Lab Sample ID:	JD75822-32	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4612.D	1	11/04/23 04:46	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.49	0.086	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.12	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.25	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.25	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.22	0.25	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.089	0.25	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.10	0.25	0.074	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.25	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	058-SD-2-12		
Lab Sample ID:	JD75822-32	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	124%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	058-R-0-2		
Lab Sample ID:	JD75822-33	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4613.D	1	11/04/23 05:01	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.6	1.0	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.10	0.50	0.088	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.12	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.14	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.36	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.26	0.25	0.063	ug/kg	
335-76-2	Perfluorodecanoic acid	0.17	0.25	0.088	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.20	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	0.11	0.25	0.10	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.55	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	058-R-0-2		
Lab Sample ID:	JD75822-33	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	52%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	117%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

4.34

Client Sample ID:	058-R-2-12		
Lab Sample ID:	JD75822-34	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4614.D	1	11/04/23 05:16	PC	11/03/23 10:15	OP50213	T2Q87
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.49	0.086	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.11	0.24	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.25	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	0.78	0.24	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.24	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.096	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	058-R-2-12		
Lab Sample ID:	JD75822-34	**Date Sampled:**	10/31/23
Matrix:	SO - Soil	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

RJT 6/21/24

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-10312023		
Lab Sample ID:	JD75822-35	**Date Sampled:**	10/31/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4584.D	1	11/03/23 21:38	PC	11/02/23 15:00	OP50240	T2Q87
Run #2							

	Initial Volume	Final Volume
Run #1	531 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0075	0.00088	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0038	0.00069	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00047	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00071	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00038	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00058	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00052	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00073	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00074	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00072	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00062	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00095	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0010	ug/l	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00092	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	UJ
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0075	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0075	0.00086	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0075	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00065	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00060	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00050	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-10312023		
Lab Sample ID:	JD75822-35	**Date Sampled:**	10/31/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00048	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00086	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0075	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0075	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00053	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0075	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0075	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0094	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.047	0.0067	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.047	0.0058	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	107%		5-130%
	13C5-PFPeA	100%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	124%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	113%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD~~74836~~ 75951
SAMPLING DATE(S):	October 13, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD75951-1	107-SD-0-2	X
JD75951-2	107-SD-2-12	X
JD75951-3	107-R-0-2	X
JD75951-4	FD-11012023-1	X
JD75951-5	107-R-2-12	X
JD75951-5MS	107-R-2-12MS	X
JD75951-5MSD	107-R-2-12MSD	X
JD75951-6	111-SD-0-2	X
JD75951-7	111-SD-2-12	X
JD75951-8	111-R-0-2	X
JD75951-9	111-R-2-12	X
JD75951-10	114C-SD-0-2	X
JD75951-11	114C-SD-2-12	X
JD75951-12	114C-R-0-2	X
JD75951-13	114C-R-2-12	X
JD75951-14	108-NS-0-2	X
JD75951-15	108-NS-2-12	X
JD75951-16	FD-11012023-2	X

LAB ID	CLIENT ID	PFAS
JD75951-17	108-SD-0-2	X
JD75951-18	108-SD-2-12	X
JD75951-18MS	108-SD-2-12MS	X
JD75951-18MSD	108-SD-2-12MSD	X
JD75951-19	108-R-0-2	X
JD75951-20	108-R-2-12	X
JD75951-20RE	108-R-2-12RE	X
JD75951-21	105A-SD-0-2	X
JD75951-21RE	105A-SD-0-2RE	X
JD75951-22	105A-SD-2-12	X
JD75951-22RE	105A-SD-2-12RE	X
JD75951-23	105A-R-0-2	X
JD75951-23RE	105A-R-0-2RE	X
JD75951-24	105A-R-2-12	X
JD75951-25	RB-11012023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD75951

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75951-6	111-SD-0-2	13C4PFBA	PFBA	R
JD75951-7	111-SD-2-12	13C4PFBA	PFBA	R
JD75951-8	111-R-0-2	13C4PFBA	PFBA	R
JD75951-17	108-SD-0-2	13C4PFBA	PFBA	R
JD75951-18	108-SD-2-12	13C4PFBA	PFBA	R
JD75951-19	108-R-0-2	13C4PFBA	PFBA	R
JD75951-20	108-R-2-12	ALL	ALL	R
JD75951-21	105A-SD-0-2	ALL	ALL	R
JD75951-22	105A-SD-2-12	ALL Except PFTeDA	ALL Except PRTeDA PFTrDA	R Except PFTeDA PFTrDA
JD75951-23	105A-R-0-2	ALL Except D9-EtFOSE	All Except EtFOSE	R Except EtFOSE
JD75951-24	105A-R-2-12	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blank, RB-11012023 was free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD74836-15/046-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD75951-5	107-R-2-12	RPD > 30%	9ClPF3ONS 911PF3OUdS 3:3FTCA	UJ
		Recovery < lower control limit of 70%	PFMPA	UJ
JD75951-18	108-SD-2-12	RPD > 30%	PFBA	Already R for EIS
		Recovery < lower control limit of 70%	PFMPA NFDHA 3:3FTCA	UJ

VII.) Laboratory Control Samples (LCS):

All Low Level LCS recovery criteria were met, with the following exceptions:

Batch	Analyte(s)	Lab ID	Client ID	Qualification
OP50293	PFMPA 3:3FTCA	JD75951-18 JD75951-19 JD75951-20 JD75951-21 JD75951-22 JD75951-23 JD75951-24	108-SD-2-12 108-R-0-2 108-R-2-12 105A-SD-0-2 105A-SD-2-12 105A-R-0-2 105A-R-2-12	UJ UJ R for EIS R for EIS R for EIS R for EIS R for EIS UJ
OP50295	PFDoS	JD75951-25	RB-11012023	UJ

All LCS recovery criteria were met, with the following exceptions:

Batch	Analyte(s)	Lab ID	Client ID	Qualification
OP50349	PFMPA 3:3FTCA	JD75951-1 JD75951-2 JD75951-3 JD75951-4 JD75951-5 JD75951-6 JD75951-7 JD75951-8 JD75951-9 JD75951-10 JD75951-11 JD75951-12 JD75951-13 JD75951-14 JD75951-15 JD75951-16 JD75951-17	107-SD-0-2 107-SD-2-12 107-R-0-2 FD-11012023-1 107-R-2-12 111-SD-0-2 111-SD-2-12 111-R-0-2 111-R-2-12 114C-SD-0-2 114C-SD-2-12 114C-R-0-2 114C-R-2-12 108-NS-0-2 108-NS-2-12 FD-11012023-2 108-SD-0-2	UJ

VIII.) Field Duplicates:

One set of field duplicate samples (046-R-0-2 / FD-10132023) was identified as part of this SDG. The 30% Relative Percent Difference criteria were met except for PFOS which was 45%. This analyte in both samples is considered estimated and has been qualified "J"/

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75951-1	107-SD-0-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ J UJ UJ UJ
JD75951-2	107-SD-2-12	13C4PFBA	PFBA	UJ
JD75951-3	107-R-0-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ J UJ UJ UJ
JD75951-4	FD-11012023-1	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	J J UJ UJ UJ
JD75951-5	107-R-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75951-6	111-SD-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75951-7	111-SD-2-12	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75951-8	111-R-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75951-9	111-R-2-12	13C4PFBA	PFBA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD75951-10	114C-SD-0-2	13C4PFBA	PFBA	J
JD75951-11	114C-SD-2-12	13C4PFBA	PFBA	UJ
JD75951-12	114C-R-0-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ J UJ UJ UJ
JD75951-13	114C-R-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD75951-14	108-NS-0-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD75951-15	108-NS-2-12	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD75951-16	FD-11012023-2	13C4PFBA 13C5-PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD75951-17	108-SD-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75951-18	108-SD-2-12	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ
JD75951-19	108-R-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD75951-22	105A-SD-2-12	13C2PFTeDA	PFTeDA PFTrDA	UJ
JD75951-23	105A-R-0-2	D9EtFOSE	EtFOSE	UJ
JD75951-24	105A-R-2-12	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and

required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	107-SD-0-2		
Lab Sample ID:	JD75951-1	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4669.D	1	11/07/23 14:12	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.27	0.67	0.12	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.15	0.33	0.050	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.28	0.33	0.084	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.33	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.19	0.33	0.084	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.14	0.33	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.25	0.33	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.33	0.084	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.084	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.084	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	107-SD-0-2		
Lab Sample ID:	JD75951-1	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.050	ug/kg	UJ
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.4	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.4	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	35% [a]		40-130%
	13C5-PFHxA	75%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	107-SD-0-2		
Lab Sample ID:	JD75951-1	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	93%		10-130%
	d3-MeFOSAA	98%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	89%		10-130%
	13C2-4:2FTS	61%		40-200%
	13C2-6:2FTS	114%		40-200%
	13C2-8:2FTS	113%		40-300%
	13C3-HFPO-DA	68%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/1/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	107-SD-2-12		
Lab Sample ID:	JD75951-2	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4670.D	1	11/07/23 14:27	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.23	0.61	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.19	0.30	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.25	0.30	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.30	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.30	0.091	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.30	0.076	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	107-SD-2-12		
Lab Sample ID:	JD75951-2	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	81%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	107-SD-2-12		
Lab Sample ID:	JD75951-2	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	92%		40-170%
	d5-EtFOSAA	103%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	83%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	124%		40-200%
	13C2-8:2FTS	100%		40-300%
	13C3-HFPO-DA	91%		40-130%

CWL 12/1/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	107-R-0-2		
Lab Sample ID:	JD75951-3	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4671.D	1	11/07/23 14:42	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	1.8	1.2	0.16	ug/kg		UJ
2706-90-3	Perfluoropentanoic acid	0.15	0.60	0.10	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	0.14	0.30	0.045	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.19	0.30	0.075	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.17	0.30	0.12	ug/kg	J	
375-95-1	Perfluorononanoic acid	0.14	0.30	0.075	ug/kg	J	
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg		
2058-94-8	Perfluoroundecanoic acid	0.22	0.30	0.090	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.39	0.30	0.075	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.30	0.10	ug/kg		
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg		
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	107-R-0-2		
Lab Sample ID:	JD75951-3	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	UJ
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	83%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	110%		40-135%
	13C3-PFHxS	131% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	107-R-0-2		
Lab Sample ID:	JD75951-3	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	94%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	91%		40-170%
	d5-EtFOSAA	101%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	79%		40-200%
	13C2-6:2FTS	137%		40-200%
	13C2-8:2FTS	113%		40-300%
	13C3-HFPO-DA	77%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/2/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11012023-1		
Lab Sample ID:	JD75951-4	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4672.D	1	11/07/23 14:58	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.86	1.2	0.16	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	0.22	0.59	0.10	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	0.15	0.30	0.044	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.23	0.30	0.074	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.18	0.30	0.12	ug/kg	J	
375-95-1	Perfluorononanoic acid	0.13	0.30	0.074	ug/kg	J	
335-76-2	Perfluorodecanoic acid	0.14	0.30	0.10	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.19	0.30	0.089	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.30	0.074	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.074	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.30	0.10	ug/kg		
31506-32-8	MeFOSA	ND	0.30	0.089	ug/kg		
4151-50-2	EtFOSA	ND	0.30	0.074	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11012023-1		
Lab Sample ID:	JD75951-4	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.044	ug/kg	UJ
863090-89-5	PFMBA	ND	0.59	0.089	ug/kg	UJ
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.4	0.92	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.4	0.93	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	30% [a]		40-130%
	13C5-PFHxA	69%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	76%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11012023-1		
Lab Sample ID:	JD75951-4	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	76%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	87%		40-170%
	d5-EtFOSAA	96%		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	62%		40-200%
	13C2-6:2FTS	83%		40-200%
	13C2-8:2FTS	97%		40-300%
	13C3-HFPO-DA	66%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/2/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	107-R-2-12		
Lab Sample ID:	JD75951-5	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4673.D	1	11/07/23 15:13	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.20	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.37	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.094	0.29	0.087	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.29	0.072	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	107-R-2-12		
Lab Sample ID:	JD75951-5	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	UJ
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	UJ
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	UJ
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	43%		40-130%
	13C5-PFHxA	81%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	81%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	107-R-2-12		
Lab Sample ID:	JD75951-5	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	91%		40-170%
	d5-EtFOSAA	94%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	73%		40-200%
	13C2-6:2FTS	84%		40-200%
	13C2-8:2FTS	83%		40-300%
	13C3-HFPO-DA	70%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	111-SD-0-2		
Lab Sample ID:	JD75951-6	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4674.D	1	11/07/23 15:28	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.075	0.28	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.16	0.28	0.085	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.35	0.28	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	111-SD-0-2		
Lab Sample ID:	JD75951-6	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	UJ
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	24% [a]		40-130%
	13C5-PFHxA	75%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	118%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	111-SD-0-2		
Lab Sample ID:	JD75951-6	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	106%		40-170%
	d5-EtFOSAA	115%		25-135%
	d7-MeFOSE	87%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	64%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	99%		40-300%
	13C3-HFPO-DA	70%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	111-SD-2-12		
Lab Sample ID:	JD75951-7	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4675.D	1	11/07/23 15:43	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.090	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	0.20	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	111-SD-2-12		
Lab Sample ID:	JD75951-7	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	UJ
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	17% [a]		40-130%
	13C5-PFHxA	60%		40-130%
	13C4-PFHpA	86%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	110%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	77%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	111-SD-2-12		
Lab Sample ID:	JD75951-7	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	89%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	88%		40-170%
	d5-EtFOSAA	98%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	46%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	95%		40-300%
	13C3-HFPO-DA	50%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/2/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	111-R-0-2		
Lab Sample ID:	JD75951-8	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4676.D	1	11/07/23 15:59	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.044	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.081	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	111-R-0-2		
Lab Sample ID:	JD75951-8	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	32% [a]		40-130%
	13C5-PFHxA	65%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	119%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	111-R-0-2		
Lab Sample ID:	JD75951-8	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	107%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	106%		40-170%
	d5-EtFOSAA	115%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	78%		10-130%
	13C2-4:2FTS	53%		40-200%
	13C2-6:2FTS	112%		40-200%
	13C2-8:2FTS	102%		40-300%
	13C3-HFPO-DA	56%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	111-R-2-12		
Lab Sample ID:	JD75951-9	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4677.D	1	11/07/23 16:14	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.092	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.18	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	111-R-2-12		
Lab Sample ID:	JD75951-9	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		5-130%
	13C5-PFPeA	64%		40-130%
	13C5-PFHxA	92%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	111-R-2-12		
Lab Sample ID:	JD75951-9	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	124%		40-130%
	13C8-FOSA	110%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	86%		10-130%
	d3-MeFOSAA	104%		40-170%
	d5-EtFOSAA	110%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	68%		40-200%
	13C2-6:2FTS	92%		40-200%
	13C2-8:2FTS	87%		40-300%
	13C3-HFPO-DA	80%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	114C-SD-0-2		
Lab Sample ID:	JD75951-10	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4678.D	1	11/07/23 16:29	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.64	1.3	0.18	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.64	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.32	0.048	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.32	0.080	ug/kg	
335-67-1	Perfluorooctanoic acid	0.22	0.32	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.32	0.080	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.32	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.32	0.096	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.32	0.080	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.080	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.45	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.096	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.080	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	114C-SD-0-2		
Lab Sample ID:	JD75951-10	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.45	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.64	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.64	0.096	ug/kg	
151772-58-6	NFDHA	ND	0.64	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.42	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.64	0.048	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.39	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.0	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.0	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	76%		40-130%
	13C4-PFHpA	83%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	88%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	71%		40-135%
	13C3-PFHxS	73%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	114C-SD-0-2		
Lab Sample ID:	JD75951-10	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	90%		40-170%
	d5-EtFOSAA	94%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	67%		40-200%
	13C2-6:2FTS	79%		40-200%
	13C2-8:2FTS	80%		40-300%
	13C3-HFPO-DA	69%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	114C-SD-2-12		
Lab Sample ID:	JD75951-11	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4681.D	1	11/07/23 17:15	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.068	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.29	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.29	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.085	0.29	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.29	0.071	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	114C-SD-2-12		
Lab Sample ID:	JD75951-11	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	21%		5-130%
	13C5-PFPeA	50%		40-130%
	13C5-PFHxA	81%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	82%		30-130%
	13C2-PFDoDA	80%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	70%		40-135%
	13C3-PFHxS	72%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	114C-SD-2-12		
Lab Sample ID:	JD75951-11	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	76%		40-130%
	13C8-FOSA	73%		40-130%
	d3-MeFOSA	59%		10-130%
	d5-EtFOSA	62%		10-130%
	d3-MeFOSAA	87%		40-170%
	d5-EtFOSAA	78%		25-135%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	59%		40-200%
	13C2-6:2FTS	76%		40-200%
	13C2-8:2FTS	82%		40-300%
	13C3-HFPO-DA	78%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	114C-R-0-2		
Lab Sample ID:	JD75951-12	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4682.D	1	11/07/23 17:30	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.20	0.58	0.10	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.22	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.29	0.29	0.072	ug/kg	
335-67-1	Perfluorooctanoic acid	0.94	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.25	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.29	0.087	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.46	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	114C-R-0-2		
Lab Sample ID:	JD75951-12	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	UJ
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	43%		40-130%
	13C5-PFHxA	71%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	81%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	114C-R-0-2		
Lab Sample ID:	JD75951-12	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	79%		40-170%
	d5-EtFOSAA	89%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	55%		40-200%
	13C2-6:2FTS	81%		40-200%
	13C2-8:2FTS	74%		40-300%
	13C3-HFPO-DA	64%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	114C-R-2-12		
Lab Sample ID:	JD75951-13	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4683.D	1	11/07/23 17:45	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.099	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.13	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.19	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.48	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.089	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.099	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.089	0.28	0.085	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.28	0.071	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	114C-R-2-12		
Lab Sample ID:	JD75951-13	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	UJ
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	30% [a]		40-130%
	13C5-PFHxA	49%		40-130%
	13C4-PFHpA	63%		40-130%
	13C8-PFOA	73%		40-130%
	13C9-PFNA	77%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	88%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	66%		40-135%
	13C3-PFHxS	74%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	114C-R-2-12		
Lab Sample ID:	JD75951-13	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	66%		40-130%
	13C8-FOSA	70%		40-130%
	d3-MeFOSA	57%		10-130%
	d5-EtFOSA	58%		10-130%
	d3-MeFOSAA	72%		40-170%
	d5-EtFOSAA	80%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	65%		40-200%
	13C2-6:2FTS	81%		40-200%
	13C2-8:2FTS	76%		40-300%
	13C3-HFPO-DA	48%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	108-NS-0-2		
Lab Sample ID:	JD75951-14	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4684.D	1	11/07/23 18:00	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.23	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.057	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.23	0.092	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.23	0.057	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.092	0.23	0.069	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-NS-0-2		
Lab Sample ID:	JD75951-14	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	UJ
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	75%		40-130%
	13C4-PFHpA	85%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	72%		40-135%
	13C3-PFHxS	83%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-NS-0-2		
Lab Sample ID:	JD75951-14	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	94%		40-170%
	d5-EtFOSAA	103%		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	78%		10-130%
	13C2-4:2FTS	76%		40-200%
	13C2-6:2FTS	86%		40-200%
	13C2-8:2FTS	88%		40-300%
	13C3-HFPO-DA	67%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	108-NS-2-12		
Lab Sample ID:	JD75951-15	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4685.D	1	11/07/23 18:16	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.88	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.077	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.055	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.088	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.22	0.055	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.092	0.22	0.066	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.22	0.088	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.099	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.077	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.056	0.22	0.055	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.88	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.88	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.88	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-NS-2-12		
Lab Sample ID:	JD75951-15	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.088	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.81	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.88	0.20	ug/kg	
919005-14-4	ADONA	ND	0.88	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	UJ
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.88	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.88	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.70	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	37% [a]		40-130%
	13C5-PFHxA	65%		40-130%
	13C4-PFHpA	74%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	65%		40-135%
	13C3-PFHxS	75%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-NS-2-12		
Lab Sample ID:	JD75951-15	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	82%		40-130%
	13C8-FOSA	76%		40-130%
	d3-MeFOSA	60%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	79%		40-170%
	d5-EtFOSAA	85%		25-135%
	d7-MeFOSE	67%		10-130%
	d9-EtFOSE	63%		10-130%
	13C2-4:2FTS	51%		40-200%
	13C2-6:2FTS	88%		40-200%
	13C2-8:2FTS	75%		40-300%
	13C3-HFPO-DA	57%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11012023-2		
Lab Sample ID:	JD75951-16	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4686.D	1	11/07/23 18:31	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.91	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.23	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.057	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.23	0.091	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.23	0.057	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.23	0.068	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11012023-2		
Lab Sample ID:	JD75951-16	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.21	ug/kg	
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.068	ug/kg	UJ
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	72%		40-130%
	13C4-PFHpA	82%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	74%		40-135%
	13C3-PFHxS	79%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11012023-2		
Lab Sample ID:	JD75951-16	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	95%		40-170%
	d5-EtFOSAA	104%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	58%		40-200%
	13C2-6:2FTS	72%		40-200%
	13C2-8:2FTS	95%		40-300%
	13C3-HFPO-DA	68%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	108-SD-0-2		
Lab Sample ID:	JD75951-17	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4687.D	1	11/07/23 18:46	PC	11/03/23 01:46	OP50249	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.3	0.98	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.064	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.19	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.28	0.25	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.17	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.25	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.21	0.25	0.074	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.75	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-SD-0-2		
Lab Sample ID:	JD75951-17	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	23% [a]		40-130%
	13C5-PFHxA	59%		40-130%
	13C4-PFHpA	83%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-SD-0-2		
Lab Sample ID:	JD75951-17	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	117%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	54%		40-200%
	13C2-6:2FTS	86%		40-200%
	13C2-8:2FTS	99%		40-300%
	13C3-HFPO-DA	52%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	108-SD-2-12		
Lab Sample ID:	JD75951-18	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4693.D	1	11/07/23 20:17	PC	11/07/23 08:47	OP50293	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.2	0.98	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.11	0.49	0.086	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.10	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.25	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.67	0.25	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.20	0.25	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.091	0.25	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.10	0.25	0.074	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.55	0.25	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-SD-2-12		
Lab Sample ID:	JD75951-18	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	26% [a]		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-SD-2-12		
Lab Sample ID:	JD75951-18	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	64%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	143% [b]		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	94%		40-200%
	13C2-6:2FTS	92%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	80%		40-130%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.
(b) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	108-R-0-2		
Lab Sample ID:	JD75951-19	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4694.D	1	11/07/23 20:33	PC	11/07/23 08:47	OP50293	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.16	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.34	0.29	0.072	ug/kg	
335-76-2	Perfluorodecanoic acid	0.22	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.35	0.29	0.087	ug/kg	
307-55-1	Perfluorododecanoic acid	0.17	0.29	0.12	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.15	0.29	0.13	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-R-0-2		
Lab Sample ID:	JD75951-19	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	UJ
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	20% [a]		40-130%
	13C5-PFHxA	85%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	115%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-R-0-2		
Lab Sample ID:	JD75951-19	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	87%		40-200%
	13C2-6:2FTS	140%		40-200%
	13C2-8:2FTS	138%		40-300%
	13C3-HFPO-DA	70%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	108-R-2-12		
Lab Sample ID:	JD75951-20	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4695.D	1	11/07/23 20:48	PC	11/07/23 08:47	OP50293	T2Q89
Run #2 [a]	1Q2178.D	10	11/08/23 21:50	PC	11/07/23 08:47	OP50293	T1Q61

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2	5.00 g	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.097	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.069	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.28	0.069	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.083	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	R

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-R-2-12		
Lab Sample ID:	JD75951-20	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	R
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	
863090-89-5	PFMBA	ND	0.56	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.88	ug/kg	R

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	1% [c]	1% [b]	5-130%
	13C5-PFPeA	0% [c]	0% [b]	40-130%
	13C5-PFHxA	1% [c]	2% [b]	40-130%
	13C4-PFHpA	1% [c]	1% [b]	40-130%
	13C8-PFOA	1% [c]	2% [b]	40-130%
	13C9-PFNA	2% [c]	0% [b]	40-130%
	13C6-PFDA	0% [c]	3% [b]	40-130%
	13C7-PFUnDA	2% [c]	1% [b]	30-130%
	13C2-PFDoDA	2% [c]	3% [b]	10-130%
	13C2-PFTeDA	0% [c]	8% [b]	10-130%
	13C3-PFBS	0% [c]	1% [b]	40-135%
	13C3-PFHxS	1% [c]	13% [b]	40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	108-R-2-12		
Lab Sample ID:	JD75951-20	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	0% c	6% b	40-130%
	13C8-FOSA	1% c	1% b	40-130%
	d3-MeFOSA	2% c	4% b	10-130%
	d5-EtFOSA	2% c	5% b	10-130%
	d3-MeFOSAA	1% c	1% b	40-170%
	d5-EtFOSAA	1% c	4% b	25-135%
	d7-MeFOSE	4% c	3% b	10-130%
	d9-EtFOSE	4% c	3% b	10-130%
	13C2-4:2FTS	1% c	0% b	40-200%
	13C2-6:2FTS	1% c	10% b	40-200%
	13C2-8:2FTS	2% c	11% b	40-300%
	13C3-HFPO-DA	1% c	1% b	40-130%

(a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis in diluted sample

CWL 12/2/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	105A-SD-0-2		
Lab Sample ID:	JD75951-21	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4698.D	1	11/07/23 21:34	PC	11/07/23 08:47	OP50293	T2Q89
Run #2 [a]	1Q2179.D	10	11/08/23 22:06	PC	11/07/23 08:47	OP50293	T1Q61

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2	5.00 g	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.066	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.066	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.27	0.066	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.066	ug/kg	R

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	105A-SD-0-2		
Lab Sample ID:	JD75951-21	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	R
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.84	ug/kg	R

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	1% [c]	0% [b]	5-130%
	13C5-PFPeA	0% [c]	0% [b]	40-130%
	13C5-PFHxA	1% [c]	1% [b]	40-130%
	13C4-PFHpA	1% [c]	1% [b]	40-130%
	13C8-PFOA	1% [c]	3% [b]	40-130%
	13C9-PFNA	1% [c]	1% [b]	40-130%
	13C6-PFDA	1% [c]	3% [b]	40-130%
	13C7-PFUnDA	2% [c]	1% [b]	30-130%
	13C2-PFDoDA	2% [c]	6% [b]	10-130%
	13C2-PFTeDA	8% [c]	18%	10-130%
	13C3-PFBS	3% [c]	2% [b]	40-135%
	13C3-PFHxS	1% [c]	8% [b]	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	105A-SD-0-2		
Lab Sample ID:	JD75951-21	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	2% c	5% b	40-130%
	13C8-FOSA	1% c	0% b	40-130%
	d3-MeFOSA	1% c	4% b	10-130%
	d5-EtFOSA	3% c	6% b	10-130%
	d3-MeFOSAA	1% c	1% b	40-170%
	d5-EtFOSAA	2% c	2% b	25-135%
	d7-MeFOSE	7% c	7% b	10-130%
	d9-EtFOSE	7% c	10%	10-130%
	13C2-4:2FTS	2% c	10% b	40-200%
	13C2-6:2FTS	3% c	3% b	40-200%
	13C2-8:2FTS	1% c	2% b	40-300%
	13C3-HFPO-DA	1% c	3% b	40-130%

(a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis in diluted sample

CWL 12/2/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	105A-SD-2-12		
Lab Sample ID:	JD75951-22	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4699.D	1	11/07/23 21:49	PC	11/07/23 08:47	OP50293	T2Q89
Run #2 [a]	1Q2180.D	10	11/08/23 22:21	PC	11/07/23 08:47	OP50293	T1Q61

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2	5.00 g	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	R
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	R
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	R

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	105A-SD-2-12		
Lab Sample ID:	JD75951-22	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	R
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	R

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	1% [c]	1% [b]	5-130%
	13C5-PFPeA	0% [c]	1% [b]	40-130%
	13C5-PFHxA	1% [c]	3% [b]	40-130%
	13C4-PFHpA	1% [c]	1% [b]	40-130%
	13C8-PFOA	2% [c]	5% [b]	40-130%
	13C9-PFNA	1% [c]	1% [b]	40-130%
	13C6-PFDA	2% [c]	1% [b]	40-130%
	13C7-PFUnDA	2% [c]	1% [b]	30-130%
	13C2-PFDoDA	4% [c]	1% [b]	10-130%
	13C2-PFTeDA	15%	19%	10-130%
	13C3-PFBS	2% [c]	3% [b]	40-135%
	13C3-PFHxS	1% [c]	8% [b]	40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	105A-SD-2-12		
Lab Sample ID:	JD75951-22	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	3% [c]	4% [b]	40-130%
	13C8-FOSA	1% [c]	1% [b]	40-130%
	d3-MeFOSA	3% [c]	1% [b]	10-130%
	d5-EtFOSA	3% [c]	0% [b]	10-130%
	d3-MeFOSAA	2% [c]	1% [b]	40-170%
	d5-EtFOSAA	2% [c]	5% [b]	25-135%
	d7-MeFOSE	13%	11%	10-130%
	d9-EtFOSE	15%	10%	10-130%
	13C2-4:2FTS	1% [c]	8% [b]	40-200%
	13C2-6:2FTS	1% [c]	12% [b]	40-200%
	13C2-8:2FTS	1% [c]	0% [b]	40-300%
	13C3-HFPO-DA	1% [c]	1% [b]	40-130%

(a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis in diluted sample

CWL 12/2/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	105A-R-0-2		
Lab Sample ID:	JD75951-23	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4700.D	1	11/07/23 22:04	PC	11/07/23 08:47	OP50293	T2Q89
Run #2 [a]	1Q2181.D	10	11/08/23 22:36	PC	11/07/23 08:47	OP50293	T1Q61

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2	5.00 g	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.068	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	R

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	105A-R-0-2		
Lab Sample ID:	JD75951-23	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	R
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	R
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	R
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	R

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	1% [c]	1% [b]	5-130%
	13C5-PFPeA	0% [c]	0% [b]	40-130%
	13C5-PFHxA	1% [c]	2% [b]	40-130%
	13C4-PFHpA	1% [c]	0% [b]	40-130%
	13C8-PFOA	2% [c]	1% [b]	40-130%
	13C9-PFNA	0% [c]	2% [b]	40-130%
	13C6-PFDA	1% [c]	2% [b]	40-130%
	13C7-PFUnDA	0% [c]	3% [b]	30-130%
	13C2-PFDoDA	1% [c]	2% [b]	10-130%
	13C2-PFTeDA	8% [c]	12%	10-130%
	13C3-PFBS	0% [c]	1% [b]	40-135%
	13C3-PFHxS	1% [c]	7% [b]	40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	105A-R-0-2		
Lab Sample ID:	JD75951-23	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	3% c	8% b	40-130%
	13C8-FOSA	1% c	2% b	40-130%
	d3-MeFOSA	2% c	3% b	10-130%
	d5-EtFOSA	3% c	4% b	10-130%
	d3-MeFOSAA	0% c	2% b	40-170%
	d5-EtFOSAA	1% c	0% b	25-135%
	d7-MeFOSE	9% c	6% b	10-130%
	d9-EtFOSE	10%	8% b	10-130%
	13C2-4:2FTS	0% c	7% b	40-200%
	13C2-6:2FTS	0% c	4% b	40-200%
	13C2-8:2FTS	0% c	7% b	40-300%
	13C3-HFPO-DA	1% c	2% b	40-130%

(a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis in diluted sample

CWL 12/2/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	105A-R-2-12		
Lab Sample ID:	JD75951-24	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4701.D	1	11/07/23 22:19	PC	11/07/23 08:47	OP50293	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.085	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.48	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	105A-R-2-12		
Lab Sample ID:	JD75951-24	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	25% [a]		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	82%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	105A-R-2-12		
Lab Sample ID:	JD75951-24	**Date Sampled:**	11/01/23
Matrix:	SO - Soil	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	89%		40-170%
	d5-EtFOSAA	97%		25-135%
	d7-MeFOSE	75%		10-130%
	d9-EtFOSE	76%		10-130%
	13C2-4:2FTS	70%		40-200%
	13C2-6:2FTS	91%		40-200%
	13C2-8:2FTS	83%		40-300%
	13C3-HFPO-DA	88%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/2/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11012023		
Lab Sample ID:	JD75951-25	**Date Sampled:**	11/01/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4634.D	1	11/06/23 19:17	PC	11/06/23 15:00	OP50295	T2Q88
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11012023		
Lab Sample ID:	JD75951-25	**Date Sampled:**	11/01/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	110%		5-130%
	13C5-PFPeA	106%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	115%		40-130%
	13C9-PFNA	110%		40-130%
	13C6-PFDA	118%		40-130%
	13C7-PFUnDA	117%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	117%		40-135%
	13C3-PFHxS	121%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11012023		
Lab Sample ID:	JD75951-25	**Date Sampled:**	11/01/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	90%		40-170%
	d5-EtFOSAA	97%		25-135%
	d7-MeFOSE	101%		10-130%
	d9-EtFOSE	97%		10-130%
	13C2-4:2FTS	139%		40-200%
	13C2-6:2FTS	114%		40-200%
	13C2-8:2FTS	132%		40-300%
	13C3-HFPO-DA	118%		40-130%

CWL 12/2/23

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD76131
SAMPLING DATE(S):	November 2 and 3, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD76131-1	125-SD-0-2	X
JD76131-2	125-SD-2-12	X
JD76131-3	125-R-0-2	X
JD76131-4	125-R-2-12	X
JD76131-5	117-SD-0-2	X
JD76131-6	117-SD-2-12	X
JD76131-7	117-R-0-2	X
JD76131-8	117-R-2-12	X
JD76131-9	116-NS-0-2	X
JD76131-10	116-NS-2-12	X
JD76131-11	116-SD-0-2	X
JD76131-12	116-SD-2-12	X
JD76131-13	116-R-0-2	X
JD76131-14	116-R-2-12	X
JD76131-15	119-SD-0-2	X
JD76131-16	119-SD-2-12	X
JD76131-17	FD-11022023	X
JD76131-18	119-R-0-2	X

LAB ID	CLIENT ID	PFAS
JD76131-19	119-R-2-12	X
JD76131-19MS	119-R-2-12MS	X
JD76131-19MSD	119-R-2-12MSD	X
JD76131-20	RB-11022023	X
JD76131-21	122A-SD-0-2	X
JD76131-22	122A-SD-2-12	X
JD76131-23	122A-R-0-2	X
JD76131-24	122A-R-2-12	X
JD76131-25	103C-SD-0-2	X
JD76131-26	103C-SD-2-12	X
JD76131-27	103C-R-0-2	X
JD76131-28	103C-R-2-12	X
JD76131-29	RB-110302023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD76131

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76131-1	125-SD-0-2	13C4PFBA	PFBA	R
JD76131-2	125-SD-2-12	13C4PFBA	PFBA	R
JD76131-3	125-R-0-2	13C4PFBA	PFBA	R
JD76131-4	125-R-2-12	13C4PFBA	PFBA	R
JD76131-5	117-SD-0-2	13C4PFBA	PFBA	R
JD76131-7	117-R-0-2	13C4PFBA	PFBA	R
JD76131-11	116-SD-0-2	13C4PFBA	PFBA	R
JD76131-13	116-R-0-2	13C4PFBA	PFBA	R
JD76131-15	119-SD-0-2	13C4PFBA	PFBA	R
JD76131-16	119-SD-2-12	13C4PFBA	PFBA	R
JD76131-17	FD-11022023	13C4PFBA	PFBA	R
JD76131-18	119-R-0-2	13C4PFBA	PFBA	R
JD76131-19	119-R-2-12	13C4PFBA	PFBA	R
JD76131-21	122A-SD-0-2	13C3PFHxS	PFHxS PFPeS	R R
JD76131-23	122A-R-0-2	13C4PFBA	PFBA	R
JD76131-27	103C-R-0-2	13C4PFBA	PFBA	R
JD76131-28	103C-R-2-12	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-11022023 and RB-11032023, were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD76131-19/119-R-2-12. All criteria were met, with the

following exceptions. Qualification is applied to the parent sample only.

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD76131-19	119-R-2-12	RPD > 30%	8:2FTS	UJ
		Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ

VII.) Laboratory Control Samples (LCS):

LCS, OP050383-LCS, met all criteria. No qualification was made based on this finding.

LCS, OP50295-LCS, met all criteria. No qualification was necessary.

The following LCS recoveries were outside the 70-130% limits. Qualification for recoveries < 70% are estimated "J/UJ". Samples JD76131-8, and JD76131-21 were associated with an LLCS and LCS with recoveries for PFBA > 130%. The positive results for this analyte in these samples have been qualified estimated "J". Other positive results for PFBA in samples associated with these LLCS and LCS samples were previously qualified "R" for low EIS recoveries.

LCS ID	Associated Samples	Analytes
OP50294-LLCS OP50294-LLCS	JD76131-6 JD76131-7 JD76131-8 JD76131-9 JD76131-10 JD76131-11 JD76131-12 JD76131-13 JD76131-14 JD76131-15 JD76131-16 JD76131-17 JD76131-18 JD76131-19 JD76131-21 JD76131-22 JD76131-23 JD76131-24 JD76131-25	PFMPA 3:3FTCA PFDoS NFDHA
OP50293-LLCS OP50293LCS	JD76131-1 JD76131-2 JD76131-3 JD76131-4 JD76131-5	PFMPA 3:3FTCA
OP50383-LLCS	JD76131-26 JD76131-27 JD76131-28	PFDoS EtFOSAA PFMPA 3:3FTCA

VIII.) Field Duplicates:

One set of field duplicate samples (119-SD-212 / FD-11022023) was identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76131-1	125-SD-0-2	13C5PFPeA	PFPeA	J
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD76131-2	125-SD-2-12	13C5PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD76131-3	125-R-0-2	13C5PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD76131-4	125-R-2-12	13C5PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD76131-5	117-SD-0-2	13C5PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD76131-6	117-SD-2-12	13C4PFBA	PFBA	UJ
JD76131-7	117-R-0-2	13C5PFPeA	PFPeA	J
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD76131-8	117-R-2-12	13C4PFBA	PFBA	J
		13C5PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
JD76131-9	116-NS-0-2	13C4PFBA	PFBA	UJ
JD76131-10	116-NS-2-12	13C4PFBA	PFBA	UJ
JD76131-11	116-SD-0-2	13C5PFPeA	PFPeA	J
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ

JD76131-13	116-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD76131-14	116-R-2-12	13C4PFBA 3C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD76131-15	119-SD-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD76131-16	119-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD76131-17	FD-11022023	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD76131-18	119-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD76131-19	119-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD76131-21	122A-SD-0-2	13C4PFBA 3C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	J J UJ UJ UJ
JD76131-22	122A-SD-2-12	13C4PFBA	PFBA	UJ
JD76131-23	122A-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD76131-24	122A-R-2-12	13C4PFBA	PFBA	UJ
JD76131-25	103C-SD-0-2	13C4PFBA 3C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD76131-26	103C-SD-2-12	13C4PFBA	PFBA	UJ
JD76131-27	103C-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76131-28	103C-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	125-SD-0-2		
Lab Sample ID:	JD76131-1	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4706.D	1	11/07/23 23:35	PC	11/07/23 08:47	OP50293	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.39	0.46	0.081	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.074	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.23	0.092	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.11	0.23	0.081	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.16	0.23	0.069	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	125-SD-0-2		
Lab Sample ID:	JD76131-1	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	UJ
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	16% [a]		40-130%
	13C5-PFHxA	77%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	125-SD-0-2		
Lab Sample ID:	JD76131-1	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	119%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	78%		10-130%
	13C2-4:2FTS	63%		40-200%
	13C2-6:2FTS	117%		40-200%
	13C2-8:2FTS	114%		40-300%
	13C3-HFPO-DA	70%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	125-SD-2-12		
Lab Sample ID:	JD76131-2	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4707.D	1	11/07/23 23:51	PC	11/07/23 08:47	OP50293	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.081	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.088	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.28	0.23	0.093	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.23	0.058	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.11	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	125-SD-2-12		
Lab Sample ID:	JD76131-2	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.070	ug/kg	UJ
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	25% [a]		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	78%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	125-SD-2-12		
Lab Sample ID:	JD76131-2	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	108%		40-170%
	d5-EtFOSAA	115%		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	88%		40-200%
	13C2-6:2FTS	115%		40-200%
	13C2-8:2FTS	111%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	125-R-0-2		
Lab Sample ID:	JD76131-3	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4710.D	1	11/08/23 00:36	PC	11/07/23 08:47	OP50293	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.090	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.085	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.57	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.35	0.26	0.064	ug/kg	
335-76-2	Perfluorodecanoic acid	0.10	0.26	0.090	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.12	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	125-R-0-2		
Lab Sample ID:	JD76131-3	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	22% [a]		40-130%
	13C5-PFHxA	74%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	78%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	125-R-0-2		
Lab Sample ID:	JD76131-3	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	59%		10-130%
	d5-EtFOSA	57%		10-130%
	d3-MeFOSAA	91%		40-170%
	d5-EtFOSAA	103%		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	74%		40-200%
	13C2-6:2FTS	113%		40-200%
	13C2-8:2FTS	105%		40-300%
	13C3-HFPO-DA	60%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	125-R-2-12		
Lab Sample ID:	JD76131-4	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4711.D	1	11/08/23 00:51	PC	11/07/23 08:47	OP50293	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	2.1	0.97	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.066	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	125-R-2-12		
Lab Sample ID:	JD76131-4	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	UJ
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	21% [a]		40-130%
	13C5-PFHxA	83%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	125-R-2-12		
Lab Sample ID:	JD76131-4	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	88%		40-170%
	d5-EtFOSAA	99%		25-135%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	62%		10-130%
	13C2-4:2FTS	86%		40-200%
	13C2-6:2FTS	111%		40-200%
	13C2-8:2FTS	101%		40-300%
	13C3-HFPO-DA	74%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	117-SD-0-2		
Lab Sample ID:	JD76131-5	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4712.D	1	11/08/23 01:07	PC	11/07/23 08:47	OP50293	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	2.9	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.11	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.082	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	117-SD-0-2		
Lab Sample ID:	JD76131-5	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	UJ
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	20% [a]		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	117-SD-0-2		
Lab Sample ID:	JD76131-5	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	105%		40-170%
	d5-EtFOSAA	118%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	83%		10-130%
	13C2-4:2FTS	84%		40-200%
	13C2-6:2FTS	96%		40-200%
	13C2-8:2FTS	122%		40-300%
	13C3-HFPO-DA	80%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	117-SD-2-12		
Lab Sample ID:	JD76131-6	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4718.D	1	11/08/23 02:38	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.091	ug/kg	
307-24-4	Perfluorohexanoic acid	0.063	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.26	0.065	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	117-SD-2-12		
Lab Sample ID:	JD76131-6	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	110%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	117-SD-2-12		
Lab Sample ID:	JD76131-6	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	86%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	123%		25-135%
	d7-MeFOSE	95%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	81%		40-200%
	13C2-6:2FTS	93%		40-200%
	13C2-8:2FTS	107%		40-300%
	13C3-HFPO-DA	97%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	117-R-0-2		
Lab Sample ID:	JD76131-7	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4719.D	1	11/08/23 02:54	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.63	0.68	0.12	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.17	0.34	0.051	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.26	0.34	0.085	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.74	0.34	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.46	0.34	0.085	ug/kg	
335-76-2	Perfluorodecanoic acid	0.21	0.34	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.25	0.34	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.34	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.71	0.34	0.085	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.085	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.085	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	117-R-0-2		
Lab Sample ID:	JD76131-7	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.20	ug/kg	
377-73-1	PFMPA	ND	0.68	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.68	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.68	0.22	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.68	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	14% [a]		40-130%
	13C5-PFHxA	71%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	80%		40-135%
	13C3-PFHxS	116%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	117-R-0-2		
Lab Sample ID:	JD76131-7	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	105%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	58%		40-200%
	13C2-6:2FTS	100%		40-200%
	13C2-8:2FTS	115%		40-300%
	13C3-HFPO-DA	59%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	117-R-2-12		
Lab Sample ID:	JD76131-8	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4720.D	1	11/08/23 03:09	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	3.2	1.2	0.17	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.21	0.31	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.31	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.53	0.31	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.092	0.31	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.31	0.092	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.34	0.31	0.076	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.076	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	117-R-2-12		
Lab Sample ID:	JD76131-8	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	UJ
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	38% [a]		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	117-R-2-12		
Lab Sample ID:	JD76131-8	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%		40-130%
	13C8-FOSA	117%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	131%		25-135%
	d7-MeFOSE	95%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	96%		40-200%
	13C2-8:2FTS	80%		40-300%
	13C3-HFPO-DA	87%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	116-NS-0-2		
Lab Sample ID:	JD76131-9	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4721.D	1	11/08/23 03:24	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.85	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.42	0.074	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.21	0.032	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.053	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.21	0.085	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.21	0.053	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.21	0.074	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.063	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.085	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.095	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.074	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.21	0.053	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.053	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.85	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.85	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.85	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.074	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.063	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.053	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-NS-0-2		
Lab Sample ID:	JD76131-9	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.085	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.77	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.85	0.19	ug/kg	
919005-14-4	ADONA	ND	0.85	0.13	ug/kg	
377-73-1	PFMPA	ND	0.42	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.42	0.063	ug/kg	
151772-58-6	NFDHA	ND	0.42	0.14	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.85	0.27	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.85	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.42	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.25	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.3	0.66	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.3	0.67	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	61%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-NS-0-2		
Lab Sample ID:	JD76131-9	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	92.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%		40-130%
	13C8-FOSA	88%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	82%		40-170%
	d5-EtFOSAA	86%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	71%		40-200%
	13C2-6:2FTS	88%		40-200%
	13C2-8:2FTS	98%		40-300%
	13C3-HFPO-DA	90%		40-130%

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	116-NS-2-12		
Lab Sample ID:	JD76131-10	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4722.D	1	11/08/23 03:39	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.84	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.42	0.074	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.21	0.032	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.053	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.21	0.084	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.21	0.053	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.21	0.074	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.063	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.084	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.095	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.074	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.21	0.053	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.053	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.84	0.29	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.84	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.84	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.074	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.063	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.053	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-NS-2-12		
Lab Sample ID:	JD76131-10	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.084	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.29	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.77	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.84	0.19	ug/kg	
919005-14-4	ADONA	ND	0.84	0.13	ug/kg	
377-73-1	PFMPA	ND	0.42	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.42	0.063	ug/kg	
151772-58-6	NFDHA	ND	0.42	0.14	ug/kg	Uj
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.84	0.27	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.84	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.42	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.25	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.3	0.65	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.3	0.66	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	114%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	127%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	101%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-NS-2-12		
Lab Sample ID:	JD76131-10	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	95%		40-170%
	d5-EtFOSAA	102%		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	112%		40-200%
	13C2-6:2FTS	109%		40-200%
	13C2-8:2FTS	134%		40-300%
	13C3-HFPO-DA	102%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	116-SD-0-2		
Lab Sample ID:	JD76131-11	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4723.D	1	11/08/23 03:54	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.34	0.51	0.090	ug/kg	J J
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.26	0.064	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-SD-0-2		
Lab Sample ID:	JD76131-11	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	23% [a]		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-SD-0-2		
Lab Sample ID:	JD76131-11	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	114%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	108%		40-170%
	d5-EtFOSAA	118%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	93%		40-200%
	13C2-6:2FTS	137%		40-200%
	13C2-8:2FTS	103%		40-300%
	13C3-HFPO-DA	85%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	116-SD-2-12		
Lab Sample ID:	JD76131-12	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4724.D	1	11/08/23 04:10	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.082	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.099	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-SD-2-12		
Lab Sample ID:	JD76131-12	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	Uj
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	64%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-SD-2-12		
Lab Sample ID:	JD76131-12	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	139% [a]		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	87%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	107%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	116-R-0-2		
Lab Sample ID:	JD76131-13	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4727.D	1	11/08/23 04:56	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.30	0.045	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.21	0.30	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.51	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.42	0.30	0.076	ug/kg	
335-76-2	Perfluorodecanoic acid	0.30	0.30	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.21	0.30	0.091	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.88	0.30	0.076	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-R-0-2		
Lab Sample ID:	JD76131-13	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	UJ
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	26% [a]		40-130%
	13C5-PFHxA	73%		40-130%
	13C4-PFHpA	83%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	88%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	77%		10-130%
	13C2-PFTeDA	72%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-R-0-2		
Lab Sample ID:	JD76131-13	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	110%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	114%		40-170%
	d5-EtFOSAA	126%		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	116%		40-200%
	13C2-8:2FTS	111%		40-300%
	13C3-HFPO-DA	64%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	116-R-2-12		
Lab Sample ID:	JD76131-14	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4728.D	1	11/08/23 05:11	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.23	0.27	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.66	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.24	0.27	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.11	0.27	0.096	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.084	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.45	0.27	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.069	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-R-2-12		
Lab Sample ID:	JD76131-14	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	UJ
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	116-R-2-12		
Lab Sample ID:	JD76131-14	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	115%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	120%		40-170%
	d5-EtFOSAA	141% [a]		25-135%
	d7-MeFOSE	92%		10-130%
	d9-EtFOSE	86%		10-130%
	13C2-4:2FTS	120%		40-200%
	13C2-6:2FTS	127%		40-200%
	13C2-8:2FTS	141%		40-300%
	13C3-HFPO-DA	87%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	119-SD-0-2		
Lab Sample ID:	JD76131-15	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4729.D	1	11/08/23 05:26	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.098	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.091	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.20	0.28	0.070	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.73	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.27	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.13	0.28	0.098	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.18	0.28	0.084	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.46	0.28	0.070	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	119-SD-0-2		
Lab Sample ID:	JD76131-15	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	UJ
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	119-SD-0-2		
Lab Sample ID:	JD76131-15	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	90%		10-130%
	d5-EtFOSA	93%		10-130%
	d3-MeFOSAA	102%		40-170%
	d5-EtFOSAA	110%		25-135%
	d7-MeFOSE	96%		10-130%
	d9-EtFOSE	94%		10-130%
	13C2-4:2FTS	83%		40-200%
	13C2-6:2FTS	106%		40-200%
	13C2-8:2FTS	90%		40-300%
	13C3-HFPO-DA	91%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	119-SD-2-12		
Lab Sample ID:	JD76131-16	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4730.D	1	11/08/23 05:42	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.095	0.51	0.089	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.13	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.19	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.64	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.081	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.080	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	119-SD-2-12		
Lab Sample ID:	JD76131-16	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	2.7	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	110%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	119-SD-2-12		
Lab Sample ID:	JD76131-16	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	112%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	98%		10-130%
	d3-MeFOSAA	137%		40-170%
	d5-EtFOSAA	118%		25-135%
	d7-MeFOSE	93%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	88%		40-200%
	13C2-6:2FTS	111%		40-200%
	13C2-8:2FTS	93%		40-300%
	13C3-HFPO-DA	92%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11022023		
Lab Sample ID:	JD76131-17	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4731.D	1	11/08/23 05:57	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	6.8	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.088	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.10	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.19	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.52	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.088	0.25	0.076	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.097	0.25	0.088	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11022023		
Lab Sample ID:	JD76131-17	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	43%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	110%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11022023		
Lab Sample ID:	JD76131-17	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	112%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	95%		10-130%
	d5-EtFOSA	99%		10-130%
	d3-MeFOSAA	125%		40-170%
	d5-EtFOSAA	111%		25-135%
	d7-MeFOSE	97%		10-130%
	d9-EtFOSE	93%		10-130%
	13C2-4:2FTS	111%		40-200%
	13C2-6:2FTS	113%		40-200%
	13C2-8:2FTS	80%		40-300%
	13C3-HFPO-DA	105%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	119-R-0-2		
Lab Sample ID:	JD76131-18	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4732.D	1	11/08/23 06:12	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.63	0.11	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.25	0.32	0.048	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.37	0.32	0.079	ug/kg	
335-67-1	Perfluorooctanoic acid	1.3	0.32	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.47	0.32	0.079	ug/kg	
335-76-2	Perfluorodecanoic acid	0.15	0.32	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.25	0.32	0.095	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.79	0.32	0.079	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.079	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.095	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.079	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	119-R-0-2		
Lab Sample ID:	JD76131-18	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.29	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.048	ug/kg	UJ
863090-89-5	PFMBA	ND	0.63	0.095	ug/kg	UJ
151772-58-6	NFDHA	ND	0.63	0.21	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.29	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.048	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.9	0.98	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.9	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	35% [a]		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	119-R-0-2		
Lab Sample ID:	JD76131-18	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	109%		40-170%
	d5-EtFOSAA	122%		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	82%		40-200%
	13C2-6:2FTS	92%		40-200%
	13C2-8:2FTS	116%		40-300%
	13C3-HFPO-DA	95%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	119-R-2-12		
Lab Sample ID:	JD76131-19	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4733.D	1	11/08/23 06:27	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.20	0.56	0.098	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.15	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.23	0.28	0.070	ug/kg	J
335-67-1	Perfluorooctanoic acid	1.0	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.27	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.18	0.28	0.084	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.54	0.28	0.070	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	119-R-2-12		
Lab Sample ID:	JD76131-19	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	UJ
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	38% [a]		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	119-R-2-12		
Lab Sample ID:	JD76131-19	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	88%		40-170%
	d5-EtFOSAA	92%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	80%		40-200%
	13C2-6:2FTS	80%		40-200%
	13C2-8:2FTS	82%		40-300%
	13C3-HFPO-DA	94%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11022023		
Lab Sample ID:	JD76131-20	**Date Sampled:**	11/02/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4652.D	1	11/06/23 23:51	PC	11/06/23 15:00	OP50295	T2Q88
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11022023		
Lab Sample ID:	JD76131-20	**Date Sampled:**	11/02/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	105%		5-130%
	13C5-PFPeA	100%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	107%		40-130%
	13C8-PFOA	112%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	122%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	107%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11022023		
Lab Sample ID:	JD76131-20	**Date Sampled:**	11/02/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	94%		40-170%
	d5-EtFOSAA	94%		25-135%
	d7-MeFOSE	99%		10-130%
	d9-EtFOSE	96%		10-130%
	13C2-4:2FTS	121%		40-200%
	13C2-6:2FTS	92%		40-200%
	13C2-8:2FTS	101%		40-300%
	13C3-HFPO-DA	113%		40-130%

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	122A-SD-0-2		
Lab Sample ID:	JD76131-21	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4734.D	1	11/08/23 06:43	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	5.7	1.0	0.14	ug/kg		J
2706-90-3	Perfluoropentanoic acid	0.20	0.52	0.090	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	0.15	0.26	0.039	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.24	0.26	0.065	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.86	0.26	0.10	ug/kg		
375-95-1	Perfluorononanoic acid	0.20	0.26	0.065	ug/kg	J	
335-76-2	Perfluorodecanoic acid	0.13	0.26	0.090	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.12	0.26	0.078	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	R	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	R	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.71	0.26	0.065	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	UJ	
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.26	0.090	ug/kg		
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg		
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	122A-SD-0-2		
Lab Sample ID:	JD76131-21	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	UJ
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	110%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	88%		40-135%
	13C3-PFHxS	3% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	122A-SD-0-2		
Lab Sample ID:	JD76131-21	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	118%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	126%		25-135%
	d7-MeFOSE	96%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	68%		40-200%
	13C2-6:2FTS	109%		40-200%
	13C2-8:2FTS	121%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	122A-SD-2-12		
Lab Sample ID:	JD76131-22	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4735.D	1	11/08/23 06:58	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.082	ug/kg	
307-24-4	Perfluorohexanoic acid	0.064	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.10	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.27	0.23	0.093	ug/kg	
375-95-1	Perfluorononanoic acid	0.059	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.44	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	122A-SD-2-12		
Lab Sample ID:	JD76131-22	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	110%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	122A-SD-2-12		
Lab Sample ID:	JD76131-22	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	107%		40-170%
	d5-EtFOSAA	125%		25-135%
	d7-MeFOSE	94%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	107%		40-200%
	13C2-6:2FTS	110%		40-200%
	13C2-8:2FTS	132%		40-300%
	13C3-HFPO-DA	96%		40-130%

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	122A-R-0-2		
Lab Sample ID:	JD76131-23	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4736.D	1	11/08/23 07:13	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.18	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	1.3	0.23	0.092	ug/kg	
375-95-1	Perfluorononanoic acid	0.28	0.23	0.057	ug/kg	
335-76-2	Perfluorodecanoic acid	0.11	0.23	0.080	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.13	0.23	0.069	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.096	0.23	0.080	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.79	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	122A-R-0-2		
Lab Sample ID:	JD76131-23	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	UJ
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	38% [a]		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	122A-R-0-2		
Lab Sample ID:	JD76131-23	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	128%		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	96%		40-200%
	13C2-6:2FTS	121%		40-200%
	13C2-8:2FTS	125%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	122A-R-2-12		
Lab Sample ID:	JD76131-24	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4739.D	1	11/08/23 07:59	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.90	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.078	ug/kg	
307-24-4	Perfluorohexanoic acid	0.062	0.22	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.22	0.056	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.26	0.22	0.090	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.22	0.056	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.078	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.067	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.078	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.075	0.22	0.056	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.056	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.078	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.067	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	122A-R-2-12		
Lab Sample ID:	JD76131-24	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.13	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.067	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.69	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	113%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	122A-R-2-12		
Lab Sample ID:	JD76131-24	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	87.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	102%		40-170%
	d5-EtFOSAA	103%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	91%		40-200%
	13C2-8:2FTS	94%		40-300%
	13C3-HFPO-DA	94%		40-130%

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	103C-SD-0-2		
Lab Sample ID:	JD76131-25	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4740.D	1	11/08/23 08:14	PC	11/07/23 08:45	OP50294	T2Q89
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.065	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.10	0.27	0.095	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.14	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.43	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	103C-SD-0-2		
Lab Sample ID:	JD76131-25	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	UJ
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	113%		40-130%
	13C7-PFUnDA	116%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	103C-SD-0-2		
Lab Sample ID:	JD76131-25	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	90%		40-170%
	d5-EtFOSAA	95%		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	87%		10-130%
	13C2-4:2FTS	85%		40-200%
	13C2-6:2FTS	94%		40-200%
	13C2-8:2FTS	91%		40-300%
	13C3-HFPO-DA	89%		40-130%

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	103C-SD-2-12		
Lab Sample ID:	JD76131-26	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2281.D	1	11/10/23 19:23	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.081	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.058	ug/kg	
335-67-1	Perfluorooctanoic acid	0.10	0.23	0.093	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.23	0.058	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.078	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	103C-SD-2-12		
Lab Sample ID:	JD76131-26	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	110%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	61%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	107%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	103C-SD-2-12		
Lab Sample ID:	JD76131-26	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	116%		40-170%
	d5-EtFOSAA	114%		25-135%
	d7-MeFOSE	57%		10-130%
	d9-EtFOSE	49%		10-130%
	13C2-4:2FTS	114%		40-200%
	13C2-6:2FTS	109%		40-200%
	13C2-8:2FTS	115%		40-300%
	13C3-HFPO-DA	89%		40-130%

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	103C-R-0-2		
Lab Sample ID:	JD76131-27	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2282.D	1	11/10/23 19:39	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R	
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg		UJ
307-24-4	Perfluorohexanoic acid	0.046	0.27	0.040	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.14	0.27	0.067	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.39	0.27	0.11	ug/kg		
375-95-1	Perfluorononanoic acid	0.21	0.27	0.067	ug/kg	J	
335-76-2	Perfluorodecanoic acid	0.11	0.27	0.094	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.13	0.27	0.081	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.55	0.27	0.067	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	UJ	
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.27	0.094	ug/kg		
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg		
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	103C-R-0-2		
Lab Sample ID:	JD76131-27	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	UJ
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	33% [a]		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	103C-R-0-2		
Lab Sample ID:	JD76131-27	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	86%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	142%		40-170%
	d5-EtFOSAA	144% [a]		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	100%		40-200%
	13C2-6:2FTS	144%		40-200%
	13C2-8:2FTS	146%		40-300%
	13C3-HFPO-DA	80%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	103C-R-2-12		
Lab Sample ID:	JD76131-28	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2283.D	1	11/10/23 19:54	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.15	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	1.2	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.18	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.46	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	103C-R-2-12		
Lab Sample ID:	JD76131-28	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	UJ
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	47%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	103C-R-2-12		
Lab Sample ID:	JD76131-28	**Date Sampled:**	11/03/23
Matrix:	SO - Soil	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	116%		40-130%
	d3-MeFOSA	87%		10-130%
	d5-EtFOSA	86%		10-130%
	d3-MeFOSAA	140%		40-170%
	d5-EtFOSAA	157% [a]		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	56%		10-130%
	13C2-4:2FTS	142%		40-200%
	13C2-6:2FTS	167%		40-200%
	13C2-8:2FTS	175%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11032023		
Lab Sample ID:	JD76131-29	**Date Sampled:**	11/03/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4653.D	1	11/07/23 00:06	PC	11/06/23 15:00	OP50295	T2Q88
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11032023		
Lab Sample ID:	JD76131-29	**Date Sampled:**	11/03/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	115%		5-130%
	13C5-PFPeA	114%		40-130%
	13C5-PFHxA	120%		40-130%
	13C4-PFHpA	118%		40-130%
	13C8-PFOA	121%		40-130%
	13C9-PFNA	123%		40-130%
	13C6-PFDA	144% [a]		40-130%
	13C7-PFUnDA	125%		30-130%
	13C2-PFDoDA	113%		10-130%
	13C2-PFTeDA	114%		10-130%
	13C3-PFBS	116%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11032023		
Lab Sample ID:	JD76131-29	**Date Sampled:**	11/03/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/04/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	128%		40-130%
	13C8-FOSA	121%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	87%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	116%		25-135%
	d7-MeFOSE	113%		10-130%
	d9-EtFOSE	113%		10-130%
	13C2-4:2FTS	116%		40-200%
	13C2-6:2FTS	85%		40-200%
	13C2-8:2FTS	94%		40-300%
	13C3-HFPO-DA	127%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/27/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

AECOM

VALIDATION REPORT – JD76288 Correction/Replacement

Project Name: NYSDEC WA#44.1 Rural Background Study for PFAS in Soil

AECOM Project #60679961

The detected result for PFDoS was qualified 'UJ' on the Form I for sample JD76288-5 (field sample ID 112-R-0-2) by 3rd party validator – Validata Chemical Services Inc. (Validata). This was an error. The blanks associated with this sample did not show any detections for this compound. The correct qualification should be 'J' due to the low % recovery of the laboratory control sample. This is what was indicated in the text of the validation report and also verified by AECOM by reviewing the laboratory report. The 'UJ' qualifier has been crossed out and a 'J' qualifier applied to the Form I in the validation report. The changes are noted in red and initialed/dated.

No other changes have been made to the validation report.

Prepared By: Ann Marie Kropovitch, Chemist **Date: 1/16/2025**

Reviewed By: Peter R. Fairbanks, Senior Chemist **Date: 1/16/2025**

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD76288
SAMPLING DATE(S):	November 6 and 7, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD76288-1	112-NS-0-2	X
JD76288-1MS	112-NS-0-2MS	X
JD76288-1MSD	112-NS-0-2MSD	X
JD76288-2	112-NS-212	X
JD76288-3	112-SD-0-2	X
JD76288-4	112-SD-2-12	X
JD76288-5	112-R-0-2	X
JD76288-6	112-R-2-12	X
JD76288-7	021-SD-0-2	X
JD76288-8	021-SD-2-12	X
JD76288-9	021-R-0-2	X
JD76288-10	021-R-2-12	X
JD76288-11	RB-11062023	X
JD76288-12	007-SD-0-2	X
JD76288-13	007-SD-2-12	X
JD76288-14	FD-11072023	X
JD76288-15	007-R-0-2	X
JD76288-16	007-R-2-12	X

LAB ID	CLIENT ID	PFAS
JD76288-16MS	007-R-2-12MS	X
JD76288-16MSD	007-R-2-12MSD	X
JD76288-17	001-SD-0-2	X
JD76288-18	001-SD-2-12	X
JD76288-19	001-R-0-2	X
JD76288-20	001-R-2-12	X
JD76288-21	025-NS-0-2	X
JD76288-22	025-NS-2-12	X
JD76288-23	025-SD-0-2	X
JD76288-24	025-SD-2-12	X
JD76288-25	025-R-0-2	X
JD76288-26	025-R-212	X
JD76288-27	RB-11072023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD76288

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76288-1	112-NS-0-2	13C4PFBA	PFBA	R
JD76288-3	112-SD-0-2	13C4PFBA	PFBA	R
JD76288-5	112-R-0-2	13C4PFBA	PFBA	R
JD76288-6	112-R-2-12	13C4PFBA	PFBA	R
JD76288-9	021-R-0-2	13C4PFBA	PFBA	R
JD76288-10	021-R-2-12	13C4PFBA	PFBA	R
JD76288-12	007-SD-0-2	13C4PFBA	PFBA	R
JD76288-14	FD-11072023	13C4PFBA	PFBA	R
JD76288-15	007-R-0-2	13C4PFBA	PFBA	R
JD76288-17	001-SD-0-2	13C4PFBA	PFBA	R
JD76288-19	001-R-0-2	13C4PFBA	PFBA	R
JD76288-20	001-R-2-12	13C4PFBA	PFBA	R
JD76288-21	025-NS-0-2	13C4PFBA	PFBA	R
JD76288-22	025-NS-2-12	13C4PFBA	PFBA	R
JD76288-23	025-SD-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA PFMPA PFMBA 3:3FTCA	R
JD76288-24	025-SD-2-12	13C4PFBA	PFBA	R
JD76288-25	025-R-0-2	13C4PFBA	PFBA	R

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76288-25	025-R-0-2	13C5PFPeA	PFPeA PFMPA PFMBA 3:3FTCA	R
JD76288-26	025-R-212	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-11062023 and RB-11072023, were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using the samples listed below. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD76288-1	112-NS-0-2	RPD > 30%	PFOS	UJ
		Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ
JD76288-16	007-R-2-12	Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ

VII.) Laboratory Control Samples (LCS):

LCS, OP050383-LCS, met all criteria. No qualification was made based on this finding.

LLCS, OP50390-LLCS, met all criteria. No qualification was made.

The following LCS recoveries were outside the 70-130% limits. Qualification for recoveries < 70% are estimated "J/UJ", unless "R" for low EIS recoveries. Several analytes reported recoveries > 130% limit in OP50382-LLCS. All associated sample results were non-detect. No qualification was made based on recoveries > 130%.

LCS ID	Associated Samples	Analytes
OP50390-LCS	JD76288-11 JD76288-27	PFMPA 3:3FTCA PFDoS NFDHA
OP50383-LLCS	JD76288-1 JD76299-2 JD76288-3 JD76288-4 JD76288-5 JD76288-6 JD76288-7 JD76288-8 JD76288-9 JD76288-10	PFDoS EtFOSAA PFMPA 3:3FTCA

	JD76288-12	
LCS ID	**Associated Samples**	**Analytes**
OP50383-LLCS	JD76288-13 JD76288-14 JD76288-15	PFDoS EtFOSAA PFMPA 3:3FTCA
OP50382-LLCS OP50382-LCS	JD76288-16 JD76288-17 JD76288-18 JD76288-19 JD76288-20 JD76288-21 JD76288-22 JD76288-23 JD76288-24 JD76288-25 JD76288-26	PFMPA 3:3FTCA

VIII.) Field Duplicates:

One set of field duplicate samples (007-SD-2-12 / FD-11072023) was identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD76288-2	112-NS-212	13C4PFBA 13C5PFPeA	PFBA PFPeA PFMPA PFMBA 3:3FTCA	UJ
JD76288-3	112-SD-0-2	13C2PFTeDA D7MeFOSE D9EtFOSE 13C3HFPO-DA	PFTeDA PFTrDA MeFOSE EtFOSE HFPO-DA	UJ J UJ UJ UJ
JD76288-4	112-SD-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA PFMPA PFMBA 3:3FTCA	UJ J UJ UJ UJ
JD76288-5	112-R-0-2	13C2PFTeDA D5-EtFOSA D7MeFOSE D9EtFOSE 13C3HFPO-DA	PFTeDA PFTrDA EtFOSA MeFOSE EtFOSE HFPO-DA	J J UJ UJ UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76288-7	021-SD-0-2	13C4PFBA	PFBA	J
JD76288-8	021-SD-2-12	13C4PFBA D9EtFOSE	PFBA EtFOSE	J UJ
JD76288-9	021-R-0-2	D9EtFOSE	EtFOSE	UJ
JD76288-10	021-R-2-12	D9EtFOSE	EtFOSE	UJ
JD76288-12	007-SD-0-2	D9EtFOSE	EtFOSE	UJ
JD76288-13	007-SD-2-12	13C4PFBA	PFBA	UJ
JD76288-16	007-R-2-12	13C4PFBA	PFBA	UJ
JD76288-18	001-SD-2-12	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	112-NS-0-2		
Lab Sample ID:	JD76288-1	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2284.D	1	11/10/23 20:09	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.27	0.067	ug/kg	UJ
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-NS-0-2		
Lab Sample ID:	JD76288-1	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	28% [a]		40-130%
	13C5-PFHxA	92%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-NS-0-2		
Lab Sample ID:	JD76288-1	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	62%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	171% [a]		40-170%
	d5-EtFOSAA	168% [b]		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	216% [b]		40-200%
	13C2-8:2FTS	195%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside control limits due to possible matrix interference.
(b) Outside control limits due to matrix interference, confirmed by MS/MSD.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	112-NS-2-12		
Lab Sample ID:	JD76288-2	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2285.D	1	11/10/23 20:24	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.086	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.24	0.097	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.083	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-NS-2-12		
Lab Sample ID:	JD76288-2	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	UJ
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	35% [a]		40-130%
	13C5-PFHxA	73%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	80%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-NS-2-12		
Lab Sample ID:	JD76288-2	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	85%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	129%		40-170%
	d5-EtFOSAA	126%		25-135%
	d7-MeFOSE	56%		10-130%
	d9-EtFOSE	52%		10-130%
	13C2-4:2FTS	103%		40-200%
	13C2-6:2FTS	138%		40-200%
	13C2-8:2FTS	146%		40-300%
	13C3-HFPO-DA	67%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	112-SD-0-2		
Lab Sample ID:	JD76288-3	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	32.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2286.D	1	11/10/23 20:39	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	6.9	2.4	0.33	ug/kg	R	
2706-90-3	Perfluoropentanoic acid	1.9	1.2	0.21	ug/kg		
307-24-4	Perfluorohexanoic acid	ND	0.60	0.089	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.49	0.60	0.15	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.35	0.60	0.24	ug/kg	J	
375-95-1	Perfluorononanoic acid	0.81	0.60	0.15	ug/kg		
335-76-2	Perfluorodecanoic acid	0.69	0.60	0.21	ug/kg		
2058-94-8	Perfluoroundecanoic acid	1.1	0.60	0.18	ug/kg		
307-55-1	Perfluorododecanoic acid	0.52	0.60	0.24	ug/kg	J	
72629-94-8	Perfluorotridecanoic acid	0.37	0.60	0.27	ug/kg	J	J
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg		UJ
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.21	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.60	0.30	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.33	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	1.5	0.60	0.15	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.60	0.42	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.33	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.60	0.15	ug/kg	UJ	
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.4	0.83	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.4	0.30	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.4	0.57	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.60	0.21	ug/kg		
31506-32-8	MeFOSA	ND	0.60	0.18	ug/kg		
4151-50-2	EtFOSA	ND	0.60	0.15	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-SD-0-2		
Lab Sample ID:	JD76288-3	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	32.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.60	0.24	ug/kg	
2991-50-6	EtFOSAA	ND	0.60	0.39	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	6.0	0.83	ug/kg	UJ
1691-99-2	EtFOSE	ND	6.0	2.2	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	2.4	0.54	ug/kg	UJ
919005-14-4	ADONA	ND	2.4	0.36	ug/kg	
377-73-1	PFMPA	ND	1.2	0.089	ug/kg	UJ
863090-89-5	PFMBA	ND	1.2	0.18	ug/kg	
151772-58-6	NFDHA	ND	1.2	0.39	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.4	0.77	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.4	0.54	ug/kg	
113507-82-7	PFEESA	ND	1.2	0.089	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	3.0	0.72	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	15	1.8	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	15	1.9	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	20% [a]		40-130%
	13C5-PFHxA	65%		40-130%
	13C4-PFHpA	80%		40-130%
	13C8-PFOA	82%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	84%		30-130%
	13C2-PFDoDA	70%		10-130%
	13C2-PFTeDA	47%		10-130%
	13C3-PFBS	74%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-SD-0-2		
Lab Sample ID:	JD76288-3	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	32.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	85%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	58%		10-130%
	d5-EtFOSA	52%		10-130%
	d3-MeFOSAA	139%		40-170%
	d5-EtFOSAA	140% [a]		25-135%
	d7-MeFOSE	47%		10-130%
	d9-EtFOSE	36%		10-130%
	13C2-4:2FTS	90%		40-200%
	13C2-6:2FTS	218% [a]		40-200%
	13C2-8:2FTS	281%		40-300%
	13C3-HFPO-DA	45%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	112-SD-2-12		
Lab Sample ID:	JD76288-4	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2287.D	1	11/10/23 20:55	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.33	0.62	0.11	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.17	0.31	0.047	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.33	0.31	0.078	ug/kg	
335-67-1	Perfluorooctanoic acid	0.56	0.31	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.48	0.31	0.078	ug/kg	
335-76-2	Perfluorodecanoic acid	0.14	0.31	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.31	0.093	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.53	0.31	0.078	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.078	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.093	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.078	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-SD-2-12		
Lab Sample ID:	JD76288-4	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.19	ug/kg	
377-73-1	PFMPA	ND	0.62	0.047	ug/kg	UJ
863090-89-5	PFMBA	ND	0.62	0.093	ug/kg	UJ
151772-58-6	NFDHA	ND	0.62	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.62	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.8	0.96	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.8	0.98	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-SD-2-12		
Lab Sample ID:	JD76288-4	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	143%		40-170%
	d5-EtFOSAA	152% [a]		25-135%
	d7-MeFOSE	60%		10-130%
	d9-EtFOSE	50%		10-130%
	13C2-4:2FTS	158%		40-200%
	13C2-6:2FTS	203% [a]		40-200%
	13C2-8:2FTS	225%		40-300%
	13C3-HFPO-DA	70%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	112-R-0-2		
Lab Sample ID:	JD76288-5	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	35.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2288.D	1	11/10/23 21:10	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	2.2	0.31	ug/kg	R
2706-90-3	Perfluoropentanoic acid	2.6	1.1	0.20	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.56	0.084	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.21	0.56	0.14	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.40	0.56	0.22	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.56	0.14	ug/kg	
335-76-2	Perfluorodecanoic acid	2.0	0.56	0.20	ug/kg	
2058-94-8	Perfluoroundecanoic acid	1.1	0.56	0.17	ug/kg	
307-55-1	Perfluorododecanoic acid	0.54	0.56	0.22	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.64	0.56	0.25	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	0.47	0.56	0.28	ug/kg	J J
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.56	0.20	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.56	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.56	0.31	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.56	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.2	0.56	0.14	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.56	0.39	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.56	0.31	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	5.2	0.56	0.14	ug/kg	~~UJ~~ J
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.2	0.78	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.2	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.2	0.53	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.56	0.20	ug/kg	
31506-32-8	MeFOSA	ND	0.56	0.17	ug/kg	
4151-50-2	EtFOSA	ND	0.56	0.14	ug/kg	UJ

J added AMK 1/15/25

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-R-0-2		
Lab Sample ID:	JD76288-5	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	35.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.56	0.22	ug/kg	
2991-50-6	EtFOSAA	ND	0.56	0.36	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	5.6	0.78	ug/kg	UJ
1691-99-2	EtFOSE	ND	5.6	2.0	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	2.2	0.50	ug/kg	
919005-14-4	ADONA	ND	2.2	0.34	ug/kg	
377-73-1	PFMPA	ND	1.1	0.084	ug/kg	UJ
863090-89-5	PFMBA	ND	1.1	0.17	ug/kg	
151772-58-6	NFDHA	ND	1.1	0.36	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.2	0.73	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.2	0.50	ug/kg	
113507-82-7	PFEESA	ND	1.1	0.084	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.8	0.67	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	14	1.7	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	14	1.8	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	16% [a]		40-130%
	13C5-PFHxA	53%		40-130%
	13C4-PFHpA	63%		40-130%
	13C8-PFOA	72%		40-130%
	13C9-PFNA	72%		40-130%
	13C6-PFDA	74%		40-130%
	13C7-PFUnDA	73%		30-130%
	13C2-PFDoDA	51%		10-130%
	13C2-PFTeDA	40%		10-130%
	13C3-PFBS	65%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-R-0-2		
Lab Sample ID:	JD76288-5	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	35.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	75%		40-130%
	13C8-FOSA	69%		40-130%
	d3-MeFOSA	50%		10-130%
	d5-EtFOSA	37%		10-130%
	d3-MeFOSAA	105%		40-170%
	d5-EtFOSAA	108%		25-135%
	d7-MeFOSE	37%		10-130%
	d9-EtFOSE	26%		10-130%
	13C2-4:2FTS	146%		40-200%
	13C2-6:2FTS	215% [a]		40-200%
	13C2-8:2FTS	217%		40-300%
	13C3-HFPO-DA	34% [a]		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	112-R-2-12		
Lab Sample ID:	JD76288-6	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2289.D	1	11/10/23 21:25	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.26	0.59	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.29	0.073	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.38	0.29	0.073	ug/kg	
335-76-2	Perfluorodecanoic acid	0.17	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.13	0.29	0.088	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.11	0.29	0.10	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.63	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.088	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-R-2-12		
Lab Sample ID:	JD76288-6	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.044	ug/kg	UJ
863090-89-5	PFMBA	ND	0.59	0.088	ug/kg	
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.91	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	40%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	112-R-2-12		
Lab Sample ID:	JD76288-6	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	136%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	60%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	128%		40-200%
	13C2-6:2FTS	178%		40-200%
	13C2-8:2FTS	173%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	021-SD-0-2		
Lab Sample ID:	JD76288-7	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2290.D	1	11/10/23 21:40	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.38	0.87	0.12	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.30	0.44	0.076	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.22	0.054	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.22	0.087	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.22	0.054	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.098	0.22	0.076	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.16	0.22	0.065	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.22	0.087	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.098	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.54	0.22	0.076	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.22	0.054	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.054	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.87	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.87	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.87	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.076	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.065	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.054	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	021-SD-0-2		
Lab Sample ID:	JD76288-7	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.087	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.80	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.87	0.20	ug/kg	
919005-14-4	ADONA	ND	0.87	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.065	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.87	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.87	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.69	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	27%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	021-SD-0-2		
Lab Sample ID:	JD76288-7	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	64%		10-130%
	d3-MeFOSAA	152%		40-170%
	d5-EtFOSAA	152% [a]		25-135%
	d7-MeFOSE	60%		10-130%
	d9-EtFOSE	53%		10-130%
	13C2-4:2FTS	157%		40-200%
	13C2-6:2FTS	185%		40-200%
	13C2-8:2FTS	254%		40-300%
	13C3-HFPO-DA	69%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	021-SD-2-12		
Lab Sample ID:	JD76288-8	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2294.D	1	11/10/23 22:41	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.47	0.88	0.12	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.33	0.44	0.077	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.055	ug/kg	
335-67-1	Perfluorooctanoic acid	0.097	0.22	0.088	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.22	0.055	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.088	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.48	0.22	0.077	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.090	0.22	0.055	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.88	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.88	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.88	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	021-SD-2-12		
Lab Sample ID:	JD76288-8	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.088	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.81	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.88	0.20	ug/kg	
919005-14-4	ADONA	ND	0.88	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.88	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.88	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.70	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	53%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	021-SD-2-12		
Lab Sample ID:	JD76288-8	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	129%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	55%		10-130%
	d9-EtFOSE	47%		10-130%
	13C2-4:2FTS	134%		40-200%
	13C2-6:2FTS	180%		40-200%
	13C2-8:2FTS	205%		40-300%
	13C3-HFPO-DA	77%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	021-R-0-2		
Lab Sample ID:	JD76288-9	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2295.D	1	11/10/23 22:57	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.42	0.63	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.36	0.32	0.047	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.33	0.32	0.079	ug/kg	
335-67-1	Perfluorooctanoic acid	1.0	0.32	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.27	0.32	0.079	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.32	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.32	0.095	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.15	0.32	0.11	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.80	0.32	0.079	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.079	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.095	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.079	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	021-R-0-2		
Lab Sample ID:	JD76288-9	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.28	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.047	ug/kg	UJ
863090-89-5	PFMBA	ND	0.63	0.095	ug/kg	
151772-58-6	NFDHA	ND	0.63	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.9	0.98	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.9	0.99	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	82%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	85%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	61%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	82%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	021-R-0-2		
Lab Sample ID:	JD76288-9	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	62.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	60%		10-130%
	d3-MeFOSAA	139%		40-170%
	d5-EtFOSAA	161% [a]		25-135%
	d7-MeFOSE	52%		10-130%
	d9-EtFOSE	44%		10-130%
	13C2-4:2FTS	147%		40-200%
	13C2-6:2FTS	193%		40-200%
	13C2-8:2FTS	213%		40-300%
	13C3-HFPO-DA	64%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	021-R-2-12		
Lab Sample ID:	JD76288-10	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2296.D	1	11/10/23 23:12	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.068	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.10	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	021-R-2-12		
Lab Sample ID:	JD76288-10	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	48%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	021-R-2-12		
Lab Sample ID:	JD76288-10	**Date Sampled:**	11/06/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	137%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	54%		10-130%
	d9-EtFOSE	49%		10-130%
	13C2-4:2FTS	142%		40-200%
	13C2-6:2FTS	158%		40-200%
	13C2-8:2FTS	182%		40-300%
	13C3-HFPO-DA	74%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11062023		
Lab Sample ID:	JD76288-11	**Date Sampled:**	11/06/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2245.D	1	11/10/23 05:13	PC	11/09/23 15:50	OP50390	T1Q63
Run #2							

	Initial Volume	Final Volume
Run #1	476 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0084	0.00098	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0042	0.00077	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0021	0.00053	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0021	0.00079	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0021	0.00042	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0021	0.00065	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0021	0.00058	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00081	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00083	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00080	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0021	0.00069	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0021	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0021	0.0012	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0021	0.00045	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00042	ug/l	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0084	0.0024	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0084	0.00096	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0084	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0021	0.00072	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00067	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00056	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11062023		
Lab Sample ID:	JD76288-11	**Date Sampled:**	11/06/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00054	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00096	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0084	0.0019	ug/l	UJ
919005-14-4	ADONA	ND	0.0084	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0042	0.00032	ug/l	UJ
863090-89-5	PFMBA	ND	0.0042	0.00059	ug/l	
151772-58-6	NFDHA	ND	0.0042	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0084	0.0026	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0084	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0042	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.011	0.0025	ug/l	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.053	0.0075	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.053	0.0065	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	106%		5-130%
	13C5-PFPeA	106%		40-130%
	13C5-PFHxA	109%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	125%		40-135%
	13C3-PFHxS	120%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11062023		
Lab Sample ID:	JD76288-11	**Date Sampled:**	11/06/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	61%		10-130%
	d5-EtFOSA	63%		10-130%
	d3-MeFOSAA	112%		40-170%
	d5-EtFOSAA	113%		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	111%		40-200%
	13C2-6:2FTS	114%		40-200%
	13C2-8:2FTS	110%		40-300%
	13C3-HFPO-DA	118%		40-130%

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	007-SD-0-2		
Lab Sample ID:	JD76288-12	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2297.D	1	11/10/23 23:27	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.099	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.098	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.091	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.099	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.28	0.071	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	007-SD-0-2		
Lab Sample ID:	JD76288-12	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	68%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	007-SD-0-2		
Lab Sample ID:	JD76288-12	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	158%		40-170%
	d5-EtFOSAA	142% [a]		25-135%
	d7-MeFOSE	59%		10-130%
	d9-EtFOSE	48%		10-130%
	13C2-4:2FTS	164%		40-200%
	13C2-6:2FTS	169%		40-200%
	13C2-8:2FTS	161%		40-300%
	13C3-HFPO-DA	78%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	007-SD-2-12		
Lab Sample ID:	JD76288-13	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2298.D	1	11/10/23 23:42	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.23	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.057	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.23	0.092	ug/kg	
375-95-1	Perfluorononanoic acid	0.096	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.069	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.084	0.23	0.057	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	007-SD-2-12		
Lab Sample ID:	JD76288-13	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	72%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	007-SD-2-12		
Lab Sample ID:	JD76288-13	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	117%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	85%		10-130%
	d5-EtFOSA	86%		10-130%
	d3-MeFOSAA	140%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	129%		40-200%
	13C2-6:2FTS	151%		40-200%
	13C2-8:2FTS	128%		40-300%
	13C3-HFPO-DA	94%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11072023		
Lab Sample ID:	JD76288-14	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2299.D	1	11/10/23 23:58	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.082	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.059	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.094	ug/kg	
375-95-1	Perfluorononanoic acid	0.071	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.15	0.24	0.059	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11072023		
Lab Sample ID:	JD76288-14	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	43%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11072023		
Lab Sample ID:	JD76288-14	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	135%		40-170%
	d5-EtFOSAA	122%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	56%		10-130%
	13C2-4:2FTS	148%		40-200%
	13C2-6:2FTS	152%		40-200%
	13C2-8:2FTS	144%		40-300%
	13C3-HFPO-DA	87%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	007-R-0-2		
Lab Sample ID:	JD76288-15	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2300.D	1	11/11/23 00:13	PC	11/10/23 11:13	OP50383	T1Q64
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.092	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.45	0.26	0.066	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.18	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.092	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.26	0.079	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.092	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.26	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.092	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	007-R-0-2		
Lab Sample ID:	JD76288-15	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.96	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.24	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.079	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	44%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	84%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	71%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	007-R-0-2		
Lab Sample ID:	JD76288-15	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	168%		40-170%
	d5-EtFOSAA	174% [a]		25-135%
	d7-MeFOSE	58%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	174%		40-200%
	13C2-6:2FTS	206% [a]		40-200%
	13C2-8:2FTS	229%		40-300%
	13C3-HFPO-DA	70%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	007-R-2-12		
Lab Sample ID:	JD76288-16	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2252.D	1	11/10/23 06:59	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.95	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.16	0.47	0.083	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.083	0.24	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.24	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.27	0.24	0.095	ug/kg	
375-95-1	Perfluorononanoic acid	0.068	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.095	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.12	0.24	0.059	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.95	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.95	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.95	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	007-R-2-12		
Lab Sample ID:	JD76288-16	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.095	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.95	0.21	ug/kg	
919005-14-4	ADONA	ND	0.95	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.95	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.95	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	54%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	105%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	007-R-2-12		
Lab Sample ID:	JD76288-16	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	92%		10-130%
	d5-EtFOSA	88%		10-130%
	d3-MeFOSAA	134%		40-170%
	d5-EtFOSAA	136% [a]		25-135%
	d7-MeFOSE	75%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	113%		40-200%
	13C2-6:2FTS	127%		40-200%
	13C2-8:2FTS	169%		40-300%
	13C3-HFPO-DA	105%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CSL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	001-SD-0-2		
Lab Sample ID:	JD76288-17	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2256.D	1	11/10/23 08:01	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.35	0.47	0.083	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.24	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.059	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.094	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.059	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.24	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	001-SD-0-2		
Lab Sample ID:	JD76288-17	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	26% [a]		40-130%
	13C5-PFHxA	85%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	001-SD-0-2		
Lab Sample ID:	JD76288-17	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	69%		10-130%
	d3-MeFOSAA	147%		40-170%
	d5-EtFOSAA	148% [a]		25-135%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	107%		40-200%
	13C2-6:2FTS	186%		40-200%
	13C2-8:2FTS	199%		40-300%
	13C3-HFPO-DA	74%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	001-SD-2-12		
Lab Sample ID:	JD76288-18	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2257.D	1	11/10/23 08:16	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.84	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.42	0.073	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.21	0.031	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.052	ug/kg	
335-67-1	Perfluorooctanoic acid	0.087	0.21	0.084	ug/kg	J
375-95-1	Perfluorononanoic acid	0.093	0.21	0.052	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.21	0.073	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.063	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.084	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.094	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.10	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.073	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.10	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.10	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.21	0.052	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.052	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.84	0.29	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.84	0.10	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.84	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.073	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.063	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.052	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	001-SD-2-12		
Lab Sample ID:	JD76288-18	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.084	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.29	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.77	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.84	0.19	ug/kg	
919005-14-4	ADONA	ND	0.84	0.13	ug/kg	
377-73-1	PFMPA	ND	0.42	0.031	ug/kg	UJ
863090-89-5	PFMBA	ND	0.42	0.063	ug/kg	
151772-58-6	NFDHA	ND	0.42	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.84	0.27	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.84	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.42	0.031	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.2	0.65	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.2	0.66	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	73%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	128%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	001-SD-2-12		
Lab Sample ID:	JD76288-18	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	117%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	106%		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	63%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	114%		40-200%
	13C2-8:2FTS	105%		40-300%
	13C3-HFPO-DA	121%		40-130%

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	001-R-0-2		
Lab Sample ID:	JD76288-19	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	50.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2258.D	1	11/10/23 08:31	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.6	0.21	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.78	0.14	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.39	0.058	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.32	0.39	0.097	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.63	0.39	0.16	ug/kg	
375-95-1	Perfluorononanoic acid	0.40	0.39	0.097	ug/kg	
335-76-2	Perfluorodecanoic acid	0.14	0.39	0.14	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.39	0.12	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.39	0.16	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.39	0.18	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.39	0.19	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.39	0.14	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.39	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.39	0.21	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.39	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.91	0.39	0.097	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.39	0.27	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.39	0.21	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.39	0.097	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.6	0.54	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.6	0.19	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.6	0.37	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.39	0.14	ug/kg	
31506-32-8	MeFOSA	ND	0.39	0.12	ug/kg	
4151-50-2	EtFOSA	ND	0.39	0.097	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	001-R-0-2		
Lab Sample ID:	JD76288-19	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	50.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.39	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	0.39	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.9	0.54	ug/kg	
1691-99-2	EtFOSE	ND	3.9	1.4	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.6	0.35	ug/kg	
919005-14-4	ADONA	ND	1.6	0.23	ug/kg	
377-73-1	PFMPA	ND	0.78	0.058	ug/kg	UJ
863090-89-5	PFMBA	ND	0.78	0.12	ug/kg	
151772-58-6	NFDHA	ND	0.78	0.25	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.6	0.51	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.6	0.35	ug/kg	
113507-82-7	PFEESA	ND	0.78	0.058	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.47	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.7	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.7	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	17% [a]		40-130%
	13C5-PFHxA	84%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	001-R-0-2		
Lab Sample ID:	JD76288-19	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	50.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	167%		40-170%
	d5-EtFOSAA	168% [a]		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	140%		40-200%
	13C2-6:2FTS	223% [a]		40-200%
	13C2-8:2FTS	263%		40-300%
	13C3-HFPO-DA	70%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	001-R-2-12		
Lab Sample ID:	JD76288-20	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2259.D	1	11/10/23 08:47	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.085	0.27	0.067	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	001-R-2-12		
Lab Sample ID:	JD76288-20	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	10% [a]		40-130%
	13C5-PFHxA	61%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	74%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	001-R-2-12		
Lab Sample ID:	JD76288-20	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	81%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	116%		40-170%
	d5-EtFOSAA	126%		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	51%		40-200%
	13C2-6:2FTS	135%		40-200%
	13C2-8:2FTS	161%		40-300%
	13C3-HFPO-DA	60%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	025-NS-0-2		
Lab Sample ID:	JD76288-21	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2260.D	1	11/10/23 09:02	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	14.0	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	0.26	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.068	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-NS-0-2		
Lab Sample ID:	JD76288-21	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	11% [a]		40-130%
	13C5-PFHxA	62%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	112%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	73%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-NS-0-2		
Lab Sample ID:	JD76288-21	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	148%		40-170%
	d5-EtFOSAA	149% [a]		25-135%
	d7-MeFOSE	66%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	53%		40-200%
	13C2-6:2FTS	125%		40-200%
	13C2-8:2FTS	183%		40-300%
	13C3-HFPO-DA	55%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	025-NS-2-12		
Lab Sample ID:	JD76288-22	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2261.D	1	11/10/23 09:17	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.89	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.078	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.22	0.033	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.055	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.089	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.22	0.055	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.22	0.078	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.089	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.078	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.071	0.22	0.055	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.89	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.89	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.89	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.078	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-NS-2-12		
Lab Sample ID:	JD76288-22	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.089	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.81	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.89	0.20	ug/kg	
919005-14-4	ADONA	ND	0.89	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.89	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.89	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.70	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	44%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-NS-2-12		
Lab Sample ID:	JD76288-22	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%		40-130%
	13C8-FOSA	94%		40-130%
	d3-MeFOSA	90%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	123%		40-170%
	d5-EtFOSAA	113%		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	95%		40-200%
	13C2-6:2FTS	95%		40-200%
	13C2-8:2FTS	131%		40-300%
	13C3-HFPO-DA	107%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	025-SD-0-2		
Lab Sample ID:	JD76288-23	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2262.D	1	11/10/23 09:32	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.4	0.46	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	1.7	0.29	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.84	0.13	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.67	0.84	0.21	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.39	0.84	0.34	ug/kg	J
375-95-1	Perfluorononanoic acid	1.2	0.84	0.21	ug/kg	
335-76-2	Perfluorodecanoic acid	0.59	0.84	0.29	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	1.1	0.84	0.25	ug/kg	
307-55-1	Perfluorododecanoic acid	0.53	0.84	0.34	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.48	0.84	0.38	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.84	0.42	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.84	0.29	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.84	0.42	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.84	0.46	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.84	0.42	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.1	0.84	0.21	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.84	0.59	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.84	0.46	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.84	0.21	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	3.4	1.2	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	3.4	0.42	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	3.4	0.80	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.84	0.29	ug/kg	
31506-32-8	MeFOSA	ND	0.84	0.25	ug/kg	
4151-50-2	EtFOSA	ND	0.84	0.21	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-SD-0-2		
Lab Sample ID:	JD76288-23	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.84	0.34	ug/kg	
2991-50-6	EtFOSAA	ND	0.84	0.55	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	8.4	1.2	ug/kg	
1691-99-2	EtFOSE	ND	8.4	3.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	3.4	0.76	ug/kg	
919005-14-4	ADONA	ND	3.4	0.50	ug/kg	
377-73-1	PFMPA	ND	1.7	0.13	ug/kg	R
863090-89-5	PFMBA	ND	1.7	0.25	ug/kg	R
151772-58-6	NFDHA	ND	1.7	0.55	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	3.4	1.1	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	3.4	0.76	ug/kg	
113507-82-7	PFEESA	ND	1.7	0.13	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	4.2	1.0	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	21	2.6	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	21	2.6	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	6% [a]		40-130%
	13C5-PFHxA	40%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	80%		10-130%
	13C2-PFTeDA	66%		10-130%
	13C3-PFBS	66%		40-135%
	13C3-PFHxS	135% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-SD-0-2		
Lab Sample ID:	JD76288-23	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	171% [a]		40-170%
	d5-EtFOSAA	163% [a]		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	37% [a]		40-200%
	13C2-6:2FTS	200%		40-200%
	13C2-8:2FTS	273%		40-300%
	13C3-HFPO-DA	34% [a]		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	025-SD-2-12		
Lab Sample ID:	JD76288-24	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2263.D	1	11/10/23 09:48	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.098	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.070	ug/kg	
335-67-1	Perfluorooctanoic acid	0.44	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.084	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.59	0.28	0.070	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-SD-2-12		
Lab Sample ID:	JD76288-24	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	29% [a]		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-SD-2-12		
Lab Sample ID:	JD76288-24	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	127%		40-170%
	d5-EtFOSAA	135%		25-135%
	d7-MeFOSE	67%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	105%		40-200%
	13C2-6:2FTS	167%		40-200%
	13C2-8:2FTS	153%		40-300%
	13C3-HFPO-DA	94%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	025-R-0-2		
Lab Sample ID:	JD76288-25	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	26.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2264.D	1	11/10/23 10:03	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.1	0.42	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	1.5	0.27	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.77	0.11	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.64	0.77	0.19	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.77	0.31	ug/kg	
375-95-1	Perfluorononanoic acid	0.88	0.77	0.19	ug/kg	
335-76-2	Perfluorodecanoic acid	0.60	0.77	0.27	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	1.3	0.77	0.23	ug/kg	
307-55-1	Perfluorododecanoic acid	0.52	0.77	0.31	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.64	0.77	0.34	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.77	0.38	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.77	0.27	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.77	0.38	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.77	0.42	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.77	0.38	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.0	0.77	0.19	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.77	0.54	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.77	0.42	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.77	0.19	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	3.1	1.1	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	3.1	0.38	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	3.1	0.73	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.77	0.27	ug/kg	
31506-32-8	MeFOSA	ND	0.77	0.23	ug/kg	
4151-50-2	EtFOSA	ND	0.77	0.19	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-R-0-2		
Lab Sample ID:	JD76288-25	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	26.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.77	0.31	ug/kg	
2991-50-6	EtFOSAA	ND	0.77	0.50	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	7.7	1.1	ug/kg	
1691-99-2	EtFOSE	ND	7.7	2.8	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	3.1	0.69	ug/kg	
919005-14-4	ADONA	ND	3.1	0.46	ug/kg	
377-73-1	PFMPA	ND	1.5	0.11	ug/kg	R
863090-89-5	PFMBA	ND	1.5	0.23	ug/kg	R
151772-58-6	NFDHA	ND	1.5	0.50	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	3.1	1.0	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	3.1	0.69	ug/kg	
113507-82-7	PFEESA	ND	1.5	0.11	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	3.8	0.92	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	19	2.4	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	19	2.4	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	7% [a]		40-130%
	13C5-PFHxA	46%		40-130%
	13C4-PFHpA	82%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	56%		40-135%
	13C3-PFHxS	79%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-R-0-2		
Lab Sample ID:	JD76288-25	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	26.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	89%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	63%		10-130%
	d3-MeFOSAA	149%		40-170%
	d5-EtFOSAA	162% [a]		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	50%		10-130%
	13C2-4:2FTS	44%		40-200%
	13C2-6:2FTS	188%		40-200%
	13C2-8:2FTS	196%		40-300%
	13C3-HFPO-DA	35% [a]		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	025-R-2-12		
Lab Sample ID:	JD76288-26	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2265.D	1	11/10/23 10:18	PC	11/09/23 16:00	OP50382	T1Q63
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.21	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.21	0.29	0.073	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.45	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.26	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.29	0.087	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.49	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-R-2-12		
Lab Sample ID:	JD76288-26	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.044	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	025-R-2-12		
Lab Sample ID:	JD76288-26	**Date Sampled:**	11/07/23
Matrix:	SO - Soil	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	139%		40-170%
	d5-EtFOSAA	159% [a]		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	59%		10-130%
	13C2-4:2FTS	120%		40-200%
	13C2-6:2FTS	143%		40-200%
	13C2-8:2FTS	170%		40-300%
	13C3-HFPO-DA	94%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11072023		
Lab Sample ID:	JD76288-27	**Date Sampled:**	11/07/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2246.D	1	11/10/23 05:28	PC	11/09/23 15:50	OP50390	T1Q63
Run #2							

	Initial Volume	Final Volume
Run #1	535 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0075	0.00087	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0037	0.00068	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00047	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00070	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00037	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00058	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00051	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00072	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00074	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00071	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00062	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00094	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00092	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0013	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00037	ug/l	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0075	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0075	0.00085	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0075	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00064	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00060	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00050	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11072023		
Lab Sample ID:	JD76288-27	**Date Sampled:**	11/07/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00048	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00085	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0075	0.0017	ug/l	UJ
919005-14-4	ADONA	ND	0.0075	0.0011	ug/l	
377-73-1	PFMPA	ND	0.0037	0.00028	ug/l	UJ
863090-89-5	PFMBA	ND	0.0037	0.00052	ug/l	
151772-58-6	NFDHA	ND	0.0037	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0075	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0075	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0037	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0093	0.0023	ug/l	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.047	0.0067	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.047	0.0058	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	105%		5-130%
	13C5-PFPeA	107%		40-130%
	13C5-PFHxA	112%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11072023		
Lab Sample ID:	JD76288-27	**Date Sampled:**	11/07/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/08/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	130%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	141%		40-170%
	d5-EtFOSAA	122%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	103%		40-200%
	13C2-6:2FTS	94%		40-200%
	13C2-8:2FTS	97%		40-300%
	13C3-HFPO-DA	118%		40-130%

CWL 12/29/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD76441
SAMPLING DATE(S):	November 8, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD76441-1	015B-SD-0-2	X
JD76441-2	015B-SD-2-12	X
JD76441-3	FD-11082023	X
JD76441-4	015B-0-2	X
JD76441-5	015B-2-12	X
JD76441-5MS	015B-2-12MS	X
JD76441-5MSD	015B-2-12MSD	X
JD76441-6	012-SD-0-2	X
JD76441-7	012-SD-2-12	X
JD76441-8	012R-0-2	X
JD76441-9	012R-2-12	X
JD76441-10	011-SD-0-2	X
JD76441-11	011-SD-2-12	X
JD76441-12	011-R-0-2	X
JD76441-13	011-R-2-12	X
JD76441-14	014-SD-0-2	X
JD76441-15	014-SD-2-12	X
JD76441-16	014-R-0-2	X

LAB ID	CLIENT ID	PFAS
JD76441-17	014-R-2-12	X
JD76441-18	014-NS-0-2	X
JD76441-19	014-NS-2-12	X
JD76441-20	RB-11082023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD76441

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76441-6	012-SD-0-2	13C4PFBA	PFBA	R
JD76441-7	012-SD-2-12	13C4PFBA	PFBA	R
JD76441-12	011-R-0-2	13C4PFBA	PFBA	R
JD76441-13	011-R-2-12	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blank, RB-11082023 was free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD76441-5/015B-R-2-12. All criteria were met. No qualification was necessary.

VII.) Laboratory Control Samples (LCS):

All Low Level LCS Recovery criteria were met. No qualification was necessary.

LCS OP50419-LBS reported Relative Percent Differences (RPDs) out for PFOS, 8:2FTS and EtFOSAA. Sample, JD76441-20/RB-11082023 is associated with this LCS>. All sample results are non-detect are estimated and have been qualified “UJ”.

LCS OP50418-LBS reported PFDoS < the 70% lower control limit. This analytes in in all nineteen (19) soil samples were non-detects. These analytes are estimated and have been qualified “UJ”.

VIII.) Field Duplicates:

One set of field duplicate samples (015B-2-12 / FD-11082023) was identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76441-6	012-SD-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD76441-7	012-SD-2-12	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD76441-8	012R-0-2	13C4PFBA	PFBA	J
JD76441-12	011-R-0-2	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD76441-13	011-R-2-12	13C5-PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD76441-14	014-SD-0-2	13C4PFBA	PFBA	UJ
JD76441-16	014-R-0-2	D3MeFOSA D5EtFOSA	MeFOSA EtFOSA	J UJ
JD76441-18	014-NS-0-2	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	015B-SD-0-2		
Lab Sample ID:	JD76441-1	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	48.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4802.D	1	11/14/23 00:20	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.78	1.6	0.22	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.14	0.81	0.14	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.41	0.061	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.19	0.41	0.10	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.41	0.16	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.41	0.10	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.41	0.14	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.19	0.41	0.12	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.41	0.16	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.41	0.18	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.41	0.20	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.41	0.14	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.41	0.20	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.41	0.22	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.41	0.20	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.41	0.10	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.41	0.28	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.41	0.22	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.41	0.10	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.6	0.57	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.6	0.20	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.6	0.39	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.41	0.14	ug/kg	
31506-32-8	MeFOSA	ND	0.41	0.12	ug/kg	
4151-50-2	EtFOSA	ND	0.41	0.10	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	015B-SD-0-2		
Lab Sample ID:	JD76441-1	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	48.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.41	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	0.41	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	4.1	0.57	ug/kg	
1691-99-2	EtFOSE	ND	4.1	1.5	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.6	0.37	ug/kg	
919005-14-4	ADONA	ND	1.6	0.24	ug/kg	
377-73-1	PFMPA	ND	0.81	0.061	ug/kg	
863090-89-5	PFMBA	ND	0.81	0.12	ug/kg	
151772-58-6	NFDHA	ND	0.81	0.26	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.6	0.53	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.6	0.37	ug/kg	
113507-82-7	PFEESA	ND	0.81	0.061	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.0	0.49	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	10	1.3	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	10	1.3	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	51%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	69%		10-130%
	13C3-PFBS	113%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	015B-SD-0-2		
Lab Sample ID:	JD76441-1	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	48.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	104%		40-170%
	d5-EtFOSAA	116%		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	134%		40-200%
	13C2-6:2FTS	136%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	97%		40-130%

CWL 12/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	015B-SD-2-12		
Lab Sample ID:	JD76441-2	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4803.D	1	11/14/23 00:36	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.30	0.044	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.095	0.30	0.074	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.30	0.074	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.089	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.30	0.074	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.074	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.089	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.074	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	015B-SD-2-12		
Lab Sample ID:	JD76441-2	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.41	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.044	ug/kg	
863090-89-5	PFMBA	ND	0.59	0.089	ug/kg	
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.4	0.92	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.4	0.93	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	97%		5-130%
	13C5-PFPeA	91%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	015B-SD-2-12		
Lab Sample ID:	JD76441-2	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	96%		40-170%
	d5-EtFOSAA	101%		25-135%
	d7-MeFOSE	58%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	118%		40-200%
	13C2-6:2FTS	106%		40-200%
	13C2-8:2FTS	98%		40-300%
	13C3-HFPO-DA	99%		40-130%

CWL 12/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11082023		
Lab Sample ID:	JD76441-3	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4804.D	1	11/14/23 00:51	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.23	1.2	0.17	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.31	0.046	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.31	0.077	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.31	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.31	0.077	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.31	0.092	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.31	0.077	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.077	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.092	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.077	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11082023		
Lab Sample ID:	JD76441-3	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	
863090-89-5	PFMBA	ND	0.61	0.092	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.7	0.95	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.7	0.97	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	100%		5-130%
	13C5-PFPeA	103%		40-130%
	13C5-PFHxA	108%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	120%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11082023		
Lab Sample ID:	JD76441-3	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	102%		40-170%
	d5-EtFOSAA	114%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	104%		40-200%
	13C2-6:2FTS	105%		40-200%
	13C2-8:2FTS	94%		40-300%
	13C3-HFPO-DA	110%		40-130%

CWL 12/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	015B-R-0-2		
Lab Sample ID:	JD76441-4	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4808.D	1	11/14/23 01:52	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.27	1.5	0.21	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.75	0.13	ug/kg	
307-24-4	Perfluorohexanoic acid	0.091	0.37	0.056	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.23	0.37	0.094	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.37	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.37	0.094	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.37	0.13	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.16	0.37	0.11	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.37	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.37	0.17	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.37	0.19	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.37	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.37	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.37	0.21	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.37	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.37	0.094	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.37	0.26	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.37	0.21	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.37	0.094	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.52	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.19	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.36	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.37	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.37	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.37	0.094	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	015B-R-0-2		
Lab Sample ID:	JD76441-4	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.37	0.15	ug/kg	
2991-50-6	EtFOSAA	ND	0.37	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.7	0.52	ug/kg	
1691-99-2	EtFOSE	ND	3.7	1.4	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.34	ug/kg	
919005-14-4	ADONA	ND	1.5	0.22	ug/kg	
377-73-1	PFMPA	ND	0.75	0.056	ug/kg	
863090-89-5	PFMBA	ND	0.75	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.75	0.24	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.49	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.34	ug/kg	
113507-82-7	PFEESA	ND	0.75	0.056	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.45	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.4	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.4	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	015B-R-0-2		
Lab Sample ID:	JD76441-4	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	97%		40-170%
	d5-EtFOSAA	99%		25-135%
	d7-MeFOSE	63%		10-130%
	d9-EtFOSE	61%		10-130%
	13C2-4:2FTS	95%		40-200%
	13C2-6:2FTS	82%		40-200%
	13C2-8:2FTS	109%		40-300%
	13C3-HFPO-DA	95%		40-130%

CWL 12/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	015B-R-2-12		
Lab Sample ID:	JD76441-5	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4809.D	1	11/14/23 02:08	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.29	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	0.089	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.076	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.11	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	015B-R-2-12		
Lab Sample ID:	JD76441-5	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	
863090-89-5	PFMBA	ND	0.54	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	105%		5-130%
	13C5-PFPeA	103%		40-130%
	13C5-PFHxA	109%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	108%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	111%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	015B-R-2-12		
Lab Sample ID:	JD76441-5	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	119%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	105%		40-170%
	d5-EtFOSAA	113%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	118%		40-200%
	13C2-8:2FTS	105%		40-300%
	13C3-HFPO-DA	107%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	012-SD-0-2		
Lab Sample ID:	JD76441-6	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4810.D	1	11/14/23 02:23	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.35	0.62	0.11	ug/kg	J J
307-24-4	Perfluorohexanoic acid	ND	0.31	0.047	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.31	0.078	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.31	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.31	0.078	ug/kg	
335-76-2	Perfluorodecanoic acid	0.12	0.31	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.18	0.31	0.093	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.31	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.31	0.078	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.078	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.093	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.078	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	012-SD-0-2		
Lab Sample ID:	JD76441-6	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.28	ug/kg	
919005-14-4	ADONA	ND	1.2	0.19	ug/kg	
377-73-1	PFMPA	ND	0.62	0.047	ug/kg	UJ
863090-89-5	PFMBA	ND	0.62	0.093	ug/kg	UJ
151772-58-6	NFDHA	ND	0.62	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.62	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.8	0.96	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.8	0.98	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	25% [a]		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	012-SD-0-2		
Lab Sample ID:	JD76441-6	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	75%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	80%		40-170%
	d5-EtFOSAA	97%		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	62%		10-130%
	13C2-4:2FTS	98%		40-200%
	13C2-6:2FTS	115%		40-200%
	13C2-8:2FTS	129%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	012-SD-2-12		
Lab Sample ID:	JD76441-7	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4811.D	1	11/14/23 02:38	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.91	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.079	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.23	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.23	0.091	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.23	0.057	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.23	0.079	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.079	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.079	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	012-SD-2-12		
Lab Sample ID:	JD76441-7	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.20	ug/kg	
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.068	ug/kg	UJ
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	25% [a]		40-130%
	13C5-PFHxA	79%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	114%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	012-SD-2-12		
Lab Sample ID:	JD76441-7	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	87%		10-130%
	d5-EtFOSA	95%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	83%		40-200%
	13C2-6:2FTS	114%		40-200%
	13C2-8:2FTS	127%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	012-R-0-2		
Lab Sample ID:	JD76441-8	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4812.D	1	11/14/23 02:53	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.51	0.88	0.12	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.11	0.44	0.077	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.052	0.22	0.033	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.22	0.055	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.22	0.088	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.22	0.055	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.099	0.22	0.066	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.22	0.088	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.099	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.077	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.22	0.055	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.88	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.88	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.88	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	012-R-0-2		
Lab Sample ID:	JD76441-8	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.088	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.80	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.88	0.20	ug/kg	
919005-14-4	ADONA	ND	0.88	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.88	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.88	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	46%		5-130%
	13C5-PFPeA	89%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	012-R-0-2		
Lab Sample ID:	JD76441-8	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	114%		40-170%
	d5-EtFOSAA	115%		25-135%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	78%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	116%		40-200%
	13C2-8:2FTS	103%		40-300%
	13C3-HFPO-DA	95%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	012-R-2-12		
Lab Sample ID:	JD76441-9	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4813.D	1	11/14/23 03:09	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.21	1.1	0.16	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.065	0.28	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.28	0.071	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.28	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.28	0.071	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	012-R-2-12		
Lab Sample ID:	JD76441-9	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	100%		5-130%
	13C5-PFPeA	94%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	012-R-2-12		
Lab Sample ID:	JD76441-9	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	105%		40-170%
	d5-EtFOSAA	113%		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	127%		40-200%
	13C2-6:2FTS	122%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	98%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	011-SD-0-2		
Lab Sample ID:	JD76441-10	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4814.D	1	11/14/23 03:24	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.088	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	011-SD-0-2		
Lab Sample ID:	JD76441-10	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	74%		5-130%
	13C5-PFPeA	96%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	110%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	011-SD-0-2		
Lab Sample ID:	JD76441-10	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	118%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	87%		10-130%
	d3-MeFOSAA	109%		40-170%
	d5-EtFOSAA	116%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	83%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	96%		40-200%
	13C2-8:2FTS	99%		40-300%
	13C3-HFPO-DA	107%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	011-SD-2-12		
Lab Sample ID:	JD76441-11	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4815.D	1	11/14/23 03:39	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.25	0.099	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	011-SD-2-12		
Lab Sample ID:	JD76441-11	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		5-130%
	13C5-PFPeA	95%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	113%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	011-SD-2-12		
Lab Sample ID:	JD76441-11	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	87%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	101%		40-170%
	d5-EtFOSAA	106%		25-135%
	d7-MeFOSE	57%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	101%		40-200%
	13C2-6:2FTS	90%		40-200%
	13C2-8:2FTS	87%		40-300%
	13C3-HFPO-DA	100%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	011-R-0-2		
Lab Sample ID:	JD76441-12	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4816.D	1	11/14/23 03:54	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	011-R-0-2		
Lab Sample ID:	JD76441-12	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	UJ
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	24% [a]		40-130%
	13C5-PFHxA	84%		40-130%
	13C4-PFHpA	88%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	83%		40-130%
	13C7-PFUnDA	87%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	67%		10-130%
	13C3-PFBS	80%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	011-R-0-2		
Lab Sample ID:	JD76441-12	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	83%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	85%		40-170%
	d5-EtFOSAA	92%		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	65%		10-130%
	13C2-4:2FTS	93%		40-200%
	13C2-6:2FTS	92%		40-200%
	13C2-8:2FTS	74%		40-300%
	13C3-HFPO-DA	82%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 12/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	011-R-2-12		
Lab Sample ID:	JD76441-13	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4817.D	1	11/14/23 04:10	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.060	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.084	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.12	0.23	0.092	ug/kg	J
375-95-1	Perfluorononanoic acid	0.072	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.069	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.23	0.057	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	011-R-2-12		
Lab Sample ID:	JD76441-13	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	UJ
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	28% [a]		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	011-R-2-12		
Lab Sample ID:	JD76441-13	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	89%		10-130%
	d3-MeFOSAA	91%		40-170%
	d5-EtFOSAA	96%		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	95%		40-200%
	13C2-6:2FTS	93%		40-200%
	13C2-8:2FTS	114%		40-300%
	13C3-HFPO-DA	94%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	014-SD-0-2		
Lab Sample ID:	JD76441-14	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4821.D	1	11/14/23 05:11	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.11	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.086	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.19	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.10	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-SD-0-2		
Lab Sample ID:	JD76441-14	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	36%		5-130%
	13C5-PFPeA	74%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	81%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	60%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	79%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-SD-0-2		
Lab Sample ID:	JD76441-14	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	54%		10-130%
	d5-EtFOSA	57%		10-130%
	d3-MeFOSAA	102%		40-170%
	d5-EtFOSAA	117%		25-135%
	d7-MeFOSE	59%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	100%		40-200%
	13C2-6:2FTS	116%		40-200%
	13C2-8:2FTS	109%		40-300%
	13C3-HFPO-DA	76%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	014-SD-2-12		
Lab Sample ID:	JD76441-15	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4822.D	1	11/14/23 05:26	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.29	0.90	0.12	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.084	0.45	0.079	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.23	0.034	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.23	0.056	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.23	0.090	ug/kg	J
375-95-1	Perfluorononanoic acid	0.098	0.23	0.056	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.079	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.079	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.23	0.056	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.056	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.079	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-SD-2-12		
Lab Sample ID:	JD76441-15	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.14	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	
863090-89-5	PFMBA	ND	0.45	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		5-130%
	13C5-PFPeA	101%		40-130%
	13C5-PFHxA	110%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	115%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-SD-2-12		
Lab Sample ID:	JD76441-15	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	121%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	122%		40-170%
	d5-EtFOSAA	124%		25-135%
	d7-MeFOSE	94%		10-130%
	d9-EtFOSE	92%		10-130%
	13C2-4:2FTS	118%		40-200%
	13C2-6:2FTS	141%		40-200%
	13C2-8:2FTS	123%		40-300%
	13C3-HFPO-DA	105%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	014-R-0-2		
Lab Sample ID:	JD76441-16	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4823.D	1	11/14/23 05:42	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.62	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.16	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.15	0.27	0.095	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.17	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.47	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-R-0-2		
Lab Sample ID:	JD76441-16	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	56%		5-130%
	13C5-PFPeA	54%		40-130%
	13C5-PFHxA	58%		40-130%
	13C4-PFHpA	57%		40-130%
	13C8-PFOA	57%		40-130%
	13C9-PFNA	58%		40-130%
	13C6-PFDA	54%		40-130%
	13C7-PFUnDA	55%		30-130%
	13C2-PFDoDA	52%		10-130%
	13C2-PFTeDA	51%		10-130%
	13C3-PFBS	58%		40-135%
	13C3-PFHxS	63%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-R-0-2		
Lab Sample ID:	JD76441-16	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	63%		40-130%
	13C8-FOSA	77%		40-130%
	d3-MeFOSA	47%		10-130%
	d5-EtFOSA	48%		10-130%
	d3-MeFOSAA	78%		40-170%
	d5-EtFOSAA	88%		25-135%
	d7-MeFOSE	55%		10-130%
	d9-EtFOSE	50%		10-130%
	13C2-4:2FTS	73%		40-200%
	13C2-6:2FTS	67%		40-200%
	13C2-8:2FTS	65%		40-300%
	13C3-HFPO-DA	50%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	014-R-2-12		
Lab Sample ID:	JD76441-17	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4824.D	1	11/14/23 05:57	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.26	0.94	0.13	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.082	ug/kg	
307-24-4	Perfluorohexanoic acid	0.064	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.20	0.23	0.094	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-R-2-12		
Lab Sample ID:	JD76441-17	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		5-130%
	13C5-PFPeA	88%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-R-2-12		
Lab Sample ID:	JD76441-17	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	83%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	58%		10-130%
	d5-EtFOSA	63%		10-130%
	d3-MeFOSAA	92%		40-170%
	d5-EtFOSAA	98%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	80%		40-200%
	13C2-6:2FTS	112%		40-200%
	13C2-8:2FTS	102%		40-300%
	13C3-HFPO-DA	92%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	014-NS-0-2		
Lab Sample ID:	JD76441-18	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	94.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4825.D	1	11/14/23 06:12	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.84	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.42	0.074	ug/kg	
307-24-4	Perfluorohexanoic acid	0.17	0.21	0.032	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.053	ug/kg	
335-67-1	Perfluorooctanoic acid	0.11	0.21	0.084	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.21	0.053	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.21	0.074	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.063	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.084	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.095	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.083	0.21	0.074	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	0.78	0.21	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	10.8	0.21	0.053	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.053	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.84	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.84	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.84	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.074	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.063	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.053	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-NS-0-2		
Lab Sample ID:	JD76441-18	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	94.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.084	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.77	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.84	0.19	ug/kg	
919005-14-4	ADONA	ND	0.84	0.13	ug/kg	
377-73-1	PFMPA	ND	0.42	0.032	ug/kg	
863090-89-5	PFMBA	ND	0.42	0.063	ug/kg	
151772-58-6	NFDHA	ND	0.42	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.84	0.27	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.84	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.42	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.25	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.3	0.65	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.3	0.66	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-NS-0-2		
Lab Sample ID:	JD76441-18	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	94.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	88%		10-130%
	d3-MeFOSAA	94%		40-170%
	d5-EtFOSAA	95%		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	96%		40-200%
	13C2-6:2FTS	83%		40-200%
	13C2-8:2FTS	78%		40-300%
	13C3-HFPO-DA	97%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	014-NS-2-12		
Lab Sample ID:	JD76441-19	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4826.D	1	11/14/23 06:27	PC	11/13/23 12:00	OP50418	T2Q90
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.86	0.12	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.43	0.076	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.22	0.032	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.22	0.054	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.22	0.086	ug/kg	
375-95-1	Perfluorononanoic acid	0.086	0.22	0.054	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.076	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.065	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.086	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.097	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.076	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.15	0.22	0.054	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.054	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.86	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.86	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.86	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.076	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.065	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.054	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-NS-2-12		
Lab Sample ID:	JD76441-19	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.086	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.79	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.86	0.19	ug/kg	
919005-14-4	ADONA	ND	0.86	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	
863090-89-5	PFMBA	ND	0.43	0.065	ug/kg	
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.86	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.86	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.67	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		5-130%
	13C5-PFPeA	94%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	112%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	014-NS-2-12		
Lab Sample ID:	JD76441-19	**Date Sampled:**	11/08/23
Matrix:	SO - Soil	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	90.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	83%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	81%		40-170%
	d5-EtFOSAA	83%		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	104%		40-200%
	13C2-6:2FTS	91%		40-200%
	13C2-8:2FTS	71%		40-300%
	13C3-HFPO-DA	102%		40-130%

CWL 12/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11082023		
Lab Sample ID:	JD76441-20	**Date Sampled:**	11/08/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4796.D	1	11/13/23 22:49	PC	11/10/23 16:35	OP50419	T2Q90
Run #2							

	Initial Volume	Final Volume
Run #1	497 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00094	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00099	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	UJ
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00092	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	UJ
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11082023		
Lab Sample ID:	JD76441-20	**Date Sampled:**	11/08/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00092	ug/l	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0072	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	99%		5-130%
	13C5-PFPeA	96%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	115%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	108%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11082023		
Lab Sample ID:	JD76441-20	**Date Sampled:**	11/08/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	103%		40-170%
	d5-EtFOSAA	101%		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	94%		10-130%
	13C2-4:2FTS	82%		40-200%
	13C2-6:2FTS	84%		40-200%
	13C2-8:2FTS	77%		40-300%
	13C3-HFPO-DA	102%		40-130%

CWL 12/28/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

AECOM

VALIDATION REPORT – JD76818 Correction/Replacement

Project Name: NYSDEC WA#44.1 Rural Background Study for PFAS in Soil

AECOM Project #60679961

Sample JD76818-12 (field sample ID 006-R-0-2) was incorrectly reported by the laboratory as having a preparation weight of 500 grams. The laboratory report was re-issued on 1/7/25 using the correct weight for this sample of 5.01 grams. This resulted in the detections and reporting limits for this sample to be changed.

Revised laboratory Form Is have been added to the end of the Validata report and marked in red as new. The original Form Is for the sample have been crossed out in red. No other changes were made to the Validata report. We have also carried any qualifiers applied by Validata to that sample over to the revised Form Is.

Prepared By: Ann Marie Kropovitch, Chemist **Date: 01/17/2025**

Reviewed By: Peter R. Fairbanks, Senior Chemist **Date: 01/17/2025**

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD76818
SAMPLING DATE(S):	November 9 and 10, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD76818-1	016E-SD-0-2	X
JD76818-2	016E-SD-2-12	X
JD76818-3	016E-R-0-2	X
JD76818-4	016E-R-2-12	X
JD76818-5	002-SD-0-2	X
JD76818-6	002-SD-2-12	X
JD76818-7	FD-11092023	X
JD76818-8	001-R-0-2	X
JD76818-9	002-R-2-12	X
JD76818-9MS	002-R-2-12MS	X
JD76818-9MSD	002-R-2-12MSD	X
JD76818-10	006-SD-0-2	X
JD76818-11	006-SD-2-12	X
JD76818-12	006-R-0-2	X
JD76818-13	006-R-2-12	X
JD76818-14	005-NS-0-2	X
JD76818-15	005-NS-2-12	X
JD76818-16	005-SD-0-2	X

LAB ID	CLIENT ID	PFAS
JD76818-17	005-SD-2-12	X
JD76818-18	005-R-0-2	X
JD76818-19	005-R-2-12	X
JD76818-20	RB-11092023	X
JD76818-21	022A-SD-0-2	X
JD76818-22	022A-SD-2-12	X
JD76818-23	022A-R-0-2	X
JD76818-24	022A-R-2-12	X
JD76818-25	RB-11102023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD76818

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76818-10	006-SD-0-2	13C2PFDoDA 13C2PFTeDA D3-MeFOSA D4-EtFOSA	PFDoDA PFTeDA PFTrDA MeFOSA EtFOSA	R
JD76818-11	006-SD-2-12	13C2PFTeDA D9EtFOSA 13C26:2FTS	PFTeDA PFTrDA EtFOSE 6:2FTS	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-11092023 and RB-11102023, were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD76818-8/002-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD76818-9	002-R-2-12	Recovery < lower control limit of 70%	PFDoS PFMPA 3:3FTCA	UJ UJ UJ

VII.) Laboratory Control Samples (LCS):

LLCS, OP50457-LLCS, and LCS, OP50457-LCS met all criteria. No qualification was made based on this finding.

LLCS, OP50454-LLCS, met all criteria, except PFHxS, PFHpS, PFOS and EtFOSAA reported recoveries > the upper control limit. These analytes were non-detect in the associated samples. The following samples reported positive results for PFOS, these results are estimated and have been qualified "J".

LCS ID	Associated Samples	Analytes
OP50454-LLCS	JD76818-12 JD76818-13 JD76818-14 JD76818-15 JD76818-16 JD76818-17	PFOS
OP50454-LLCS	JD76818-18 JD76818-19 JD76818-21 JD76818-22 JD76818-23 JD76818-24	PFOS

LCS, OP50454-LCS, met all criteria. No qualification was made.

LLCS, OP50453-LLCS, met all criteria, except PFHxS and 6:2FTS, reported recoveries > the upper control limit. These analytes were non-detect in the associated samples. No qualification was necessary.

The following LCS recoveries were outside the 70-130% limits. Qualification for recoveries < 70% are all associated results are non-detects and have been qualified "UJ".

LCS ID	Associated Samples	Analytes
OP50453-LCS	JD76818-1 JD76818-2 JD76818-3 JD76818-4 JD76818-5 JD76818-6 JD76818-7 JD76818-8 JD76818-9 JD76818-10 JD76818-11	PFDoS

VIII.) Field Duplicates:

Field Duplicate pair 002-SD-212/FD-11092023 set in this SDG. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76818-1	016E-SD-0-2	13C4PFBA	PFBA	J
JD76818-5	002-SD-0-2	13C4PFBA	PFBA	UJ
JD76818-6	002-SD-2-12	D9-EtFOSE	EtFOSE	UJ
JD76818-7	FD-11092023	D9-EtFOSE	EtFOSE	UJ
JD76818-8	001-R-0-2	13C4PFBA	PFBA	J
JD76818-10	006-SD-0-2	13C8PFOA	PFOA	J
		13C9PFNA	PFNA	J
		13C6PFDA	PFDA	UJ
		13C7PFUnDA	PFUnA	J
		13C3PFBS	PFBS	UJ
		13C3PFHxS	PRPeS	UJ
			PFHxS	UJ
		13C8PFOS	PFOS	UJ
			PFHpS	UJ
			PFNS	UJ
			PFDS	UJ
			PFDoS	UJ
		13C8FOSA	PFOSA	UJ
		D3MeFOSAA	MeFOSAA	UJ
		D5EtFOSAA	EtFOSAA	UJ
		D7MeFOSE	MeFOSE	UJ
		D9EtFOSE	EtFOSE	UJ
JD76818-11	006-SD-2-12	13C4PFHpA	PFHpA	UJ
		13C8PFOA	PFOA	UJ
		13C9PFNA	PFNA	UJ
		13C6PFDA	PFDA	UJ
		13C7PFUnDA	PFUnA	UJ
		13C2PFDoDA	PFDoA	UJ
		13C3PFBS	PFBS	UJ
		13C3PFHxS	PRPeS	UJ
			PFHxS	UJ
		13C8PFOS	PFOS	UJ
			PFHpS	UJ
			PFNS	UJ
			PFDS	UJ
			PFDoS	UJ
		13C8FOSA	PFOSA	UJ
		D3MEFOSA	MeFOSA	UJ
		D5EtFOSA	EtFOSA	UJ
		D3MeFOSAA	MeFOSAA	UJ
		D5EtFOSAA	EtFOSAA	UJ
		D7MeFOSE	MeFOSE	UJ
JD76818-13	006-R-2-12	13C4PFBA	PFBA	J
		13C5PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
		13C4PFHpA	PFHpA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD76818-13	006-R-2-12	13C8PFOA	PFOA	J
		13C9PFNA	PFNA	UJ
		13C2PFTeDA	PFTeDA	UJ
			PFTrDA	UJ
		D3MEFOSA	MeFOSA	UJ
		D5EtFOSA	EtFOSA	UJ
		D3MeFOSAA	MeFOSAA	UJ
		D5EtFOSAA	EtFOSAA	UJ
		D7MeFOSE	MeFOSE	UJ
		D9EtFOSE	EtFOSE	UJ
		13C24:2FTS	4:2FTS	UJ
		13C26:2FTS	6:2FTS	UJ
		13C3HFPODA	HFPO-DA	UJ
JD76818-15	005-NS-2-12	D3MeFOSA	MEFOSA	UJ
JD76818-16	005-SD-0-2	13C5PFPeA	PFPeA	UJ
			3:3FTCA	UJ
			PFMPA	UJ
			PFMBA	UJ
		13C5PFHxA	PFHxA	UJ
			5:3FTCA	UJ
			7:3FTCA	UJ
			PFEESA	UJ
			NFDHA	UJ
		13C4PFHpA	PFHpA	UJ
		13C2PFTeDA	PFTeDA	UJ
			PFTrDA	UJ
		D9EtFOSE	EtFOSE	UJ
		13C3HFPODA	HFPODA	UJ
JD76818-17	005-SD-2-12	D3MeFOSA	MeFOSA	UJ
JD76818-18	005-R-0-2	D7MeFOSE	MeFOSE	UJ
		D9EtFOSE	EtFOSE	UJ
JD76818-21	022A-SD-0-2	13C24:2FTS	4:2FTS	UJ
JD76818-23	022A-R-0-2	13C2PFTeDA	PFTeDA	UJ
			PFTrDA	UJ
		D9EtFOSE	EtFOSE	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	016E-SD-0-2		
Lab Sample ID:	JD76818-1	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4865.D	1	11/14/23 20:25	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.6	1.2	0.17	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.34	0.60	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.24	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.55	0.30	0.075	ug/kg	
335-67-1	Perfluorooctanoic acid	0.91	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.70	0.30	0.075	ug/kg	
335-76-2	Perfluorodecanoic acid	0.27	0.30	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.24	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.13	0.30	0.11	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.93	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	016E-SD-0-2		
Lab Sample ID:	JD76818-1	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	016E-SD-0-2		
Lab Sample ID:	JD76818-1	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	64%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	103%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	73%		10-130%
	13C2-4:2FTS	103%		40-200%
	13C2-6:2FTS	108%		40-200%
	13C2-8:2FTS	123%		40-300%
	13C3-HFPO-DA	85%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	016E-SD-2-12		
Lab Sample ID:	JD76818-2	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4886.D	1	11/15/23 14:30	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.10	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.11	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.25	0.063	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	016E-SD-2-12		
Lab Sample ID:	JD76818-2	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		5-130%
	13C5-PFPeA	95%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	016E-SD-2-12		
Lab Sample ID:	JD76818-2	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	115%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	155%		40-200%
	13C2-8:2FTS	131%		40-300%
	13C3-HFPO-DA	98%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	016E-R-0-2		
Lab Sample ID:	JD76818-3	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4867.D	1	11/14/23 20:55	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.5	1.4	0.20	ug/kg	
2706-90-3	Perfluoropentanoic acid	0.35	0.72	0.13	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.36	0.36	0.054	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.53	0.36	0.090	ug/kg	
335-67-1	Perfluorooctanoic acid	1.3	0.36	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.49	0.36	0.090	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.36	0.13	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.22	0.36	0.11	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.36	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.36	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.36	0.18	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.36	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.36	0.18	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.36	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.36	0.18	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.2	0.36	0.090	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.36	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.36	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.36	0.090	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.51	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.18	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.34	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.36	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.36	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.36	0.090	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	016E-R-0-2		
Lab Sample ID:	JD76818-3	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.36	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.36	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.6	0.51	ug/kg	
1691-99-2	EtFOSE	ND	3.6	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.33	ug/kg	
919005-14-4	ADONA	ND	1.4	0.22	ug/kg	
377-73-1	PFMPA	ND	0.72	0.054	ug/kg	
863090-89-5	PFMBA	ND	0.72	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.72	0.24	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.47	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.33	ug/kg	
113507-82-7	PFEESA	ND	0.72	0.054	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.8	0.43	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.0	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.0	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	107%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	016E-R-0-2		
Lab Sample ID:	JD76818-3	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	122%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	148%		40-200%
	13C2-6:2FTS	187%		40-200%
	13C2-8:2FTS	137%		40-300%
	13C3-HFPO-DA	82%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	016E-R-2-12		
Lab Sample ID:	JD76818-4	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4868.D	1	11/14/23 21:11	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.31	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.092	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.26	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.26	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.072	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.092	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.079	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.092	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.26	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.092	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	016E-R-2-12		
Lab Sample ID:	JD76818-4	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.96	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.53	0.079	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	108%		5-130%
	13C5-PFPeA	101%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	113%		40-130%
	13C8-PFOA	114%		40-130%
	13C9-PFNA	116%		40-130%
	13C6-PFDA	122%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	102%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	111%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	016E-R-2-12		
Lab Sample ID:	JD76818-4	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		40-130%
	13C8-FOSA	114%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	122%		40-170%
	d5-EtFOSAA	135%		25-135%
	d7-MeFOSE	93%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	123%		40-200%
	13C2-6:2FTS	141%		40-200%
	13C2-8:2FTS	135%		40-300%
	13C3-HFPO-DA	104%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	002-SD-0-2		
Lab Sample ID:	JD76818-5	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	18.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4869.D	1	11/14/23 21:26	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	4.3	0.59	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	2.2	0.38	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.1	0.16	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.70	1.1	0.27	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	1.1	0.43	ug/kg	
375-95-1	Perfluorononanoic acid	0.49	1.1	0.27	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.95	1.1	0.38	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	1.4	1.1	0.32	ug/kg	
307-55-1	Perfluorododecanoic acid	0.61	1.1	0.43	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.64	1.1	0.49	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	1.1	0.54	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.1	0.38	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.1	0.54	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.1	0.59	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.1	0.54	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.3	1.1	0.27	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	1.1	0.76	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.1	0.59	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.1	0.27	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	4.3	1.5	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	4.3	0.54	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	4.3	1.0	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.1	0.38	ug/kg	
31506-32-8	MeFOSA	ND	1.1	0.32	ug/kg	
4151-50-2	EtFOSA	ND	1.1	0.27	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	002-SD-0-2		
Lab Sample ID:	JD76818-5	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	18.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.43	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.70	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	11	1.5	ug/kg	
1691-99-2	EtFOSE	ND	11	3.9	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	4.3	0.97	ug/kg	
919005-14-4	ADONA	ND	4.3	0.65	ug/kg	
377-73-1	PFMPA	ND	2.2	0.16	ug/kg	
863090-89-5	PFMBA	ND	2.2	0.32	ug/kg	
151772-58-6	NFDHA	ND	2.2	0.70	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	4.3	1.4	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	4.3	0.97	ug/kg	
113507-82-7	PFEESA	ND	2.2	0.16	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	5.4	1.3	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	27	3.4	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	27	3.4	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	85%		40-130%
	13C4-PFHpA	85%		40-130%
	13C8-PFOA	82%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	79%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	74%		40-135%
	13C3-PFHxS	62%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	002-SD-0-2		
Lab Sample ID:	JD76818-5	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	18.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	63%		10-130%
	d5-EtFOSA	58%		10-130%
	d3-MeFOSAA	109%		40-170%
	d5-EtFOSAA	115%		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	52%		10-130%
	13C2-4:2FTS	129%		40-200%
	13C2-6:2FTS	142%		40-200%
	13C2-8:2FTS	120%		40-300%
	13C3-HFPO-DA	70%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	002-SD-2-12		
Lab Sample ID:	JD76818-6	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4870.D	1	11/14/23 21:41	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.92	1.5	0.20	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.24	0.73	0.13	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.25	0.36	0.054	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.26	0.36	0.091	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.44	0.36	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.36	0.091	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.14	0.36	0.13	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.36	0.11	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.36	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.36	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.36	0.18	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.36	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.36	0.18	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.36	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.36	0.18	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.51	0.36	0.091	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.36	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.36	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.36	0.091	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.51	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.18	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.34	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.36	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.36	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.36	0.091	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	002-SD-2-12		
Lab Sample ID:	JD76818-6	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.36	0.15	ug/kg	
2991-50-6	EtFOSAA	ND	0.36	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.6	0.51	ug/kg	
1691-99-2	EtFOSE	ND	3.6	1.3	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.33	ug/kg	
919005-14-4	ADONA	ND	1.5	0.22	ug/kg	
377-73-1	PFMPA	ND	0.73	0.054	ug/kg	
863090-89-5	PFMBA	ND	0.73	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.73	0.24	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.47	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.33	ug/kg	
113507-82-7	PFEESA	ND	0.73	0.054	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.8	0.44	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.1	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.1	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	96%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	108%		40-135%
	13C3-PFHxS	112%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	002-SD-2-12		
Lab Sample ID:	JD76818-6	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	58%		10-130%
	d5-EtFOSA	53%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	127%		25-135%
	d7-MeFOSE	66%		10-130%
	d9-EtFOSE	45%		10-130%
	13C2-4:2FTS	157%		40-200%
	13C2-6:2FTS	159%		40-200%
	13C2-8:2FTS	159%		40-300%
	13C3-HFPO-DA	92%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	FD-11092023		
Lab Sample ID:	JD76818-7	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4871.D	1	11/14/23 21:56	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.2	1.3	0.18	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.22	0.67	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.28	0.33	0.050	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.27	0.33	0.084	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.44	0.33	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.20	0.33	0.084	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.16	0.33	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.14	0.33	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.67	0.33	0.084	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.084	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.084	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11092023		
Lab Sample ID:	JD76818-7	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.050	ug/kg	
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.4	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.4	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11092023		
Lab Sample ID:	JD76818-7	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	59%		10-130%
	d5-EtFOSA	47%		10-130%
	d3-MeFOSAA	106%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	38%		10-130%
	13C2-4:2FTS	170%		40-200%
	13C2-6:2FTS	138%		40-200%
	13C2-8:2FTS	160%		40-300%
	13C3-HFPO-DA	89%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	002-R-0-2		
Lab Sample ID:	JD76818-8	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4872.D	1	11/14/23 22:12	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.96	1.4	0.19	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.69	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	0.31	0.34	0.051	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.28	0.34	0.086	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.34	0.14	ug/kg	J
375-95-1	Perfluorononanoic acid	0.22	0.34	0.086	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.13	0.34	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.19	0.34	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.34	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.53	0.34	0.086	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.086	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.086	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	002-R-0-2		
Lab Sample ID:	JD76818-8	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.69	0.051	ug/kg	
863090-89-5	PFMBA	ND	0.69	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.69	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.45	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.69	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.6	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.6	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	30%		5-130%
	13C5-PFPeA	78%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	72%		10-130%
	13C3-PFBS	81%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	002-R-0-2		
Lab Sample ID:	JD76818-8	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	64%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	134%		40-170%
	d5-EtFOSAA	139% [a]		25-135%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	56%		10-130%
	13C2-4:2FTS	117%		40-200%
	13C2-6:2FTS	152%		40-200%
	13C2-8:2FTS	126%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	002-R-2-12		
Lab Sample ID:	JD76818-9	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4873.D	1	11/14/23 22:27	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	002-R-2-12		
Lab Sample ID:	JD76818-9	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	98%		5-130%
	13C5-PFPeA	97%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	002-R-2-12		
Lab Sample ID:	JD76818-9	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	64%		10-130%
	d3-MeFOSAA	98%		40-170%
	d5-EtFOSAA	97%		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	109%		40-200%
	13C2-6:2FTS	92%		40-200%
	13C2-8:2FTS	87%		40-300%
	13C3-HFPO-DA	104%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	006-SD-0-2		
Lab Sample ID:	JD76818-10	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4874.D	1	11/14/23 22:42	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.56	1.4	0.19	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.70	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	0.10	0.35	0.053	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.38	0.35	0.088	ug/kg	
335-67-1	Perfluorooctanoic acid	0.56	0.35	0.14	ug/kg	J
375-95-1	Perfluorononanoic acid	0.40	0.35	0.088	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.35	0.12	ug/kg	UJ
2058-94-8	Perfluoroundecanoic acid	0.29	0.35	0.11	ug/kg	J J
307-55-1	Perfluorododecanoic acid	ND	0.35	0.14	ug/kg	R
72629-94-8	Perfluorotridecanoic acid	ND	0.35	0.16	ug/kg	R
376-06-7	Perfluorotetradecanoic acid	ND	0.35	0.18	ug/kg	R
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.35	0.12	ug/kg	UJ
2706-91-4	Perfluoropentanesulfonic acid	ND	0.35	0.18	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.35	0.19	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.35	0.18	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	ND	0.35	0.088	ug/kg	UJ
68259-12-1	Perfluorononanesulfonic acid	ND	0.35	0.25	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.35	0.19	ug/kg	UJ
79780-39-5	Perfluorododecanesulfonic aci	ND	0.35	0.088	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.49	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.18	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.35	0.12	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.35	0.11	ug/kg	R
4151-50-2	EtFOSA	ND	0.35	0.088	ug/kg	R

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	006-SD-0-2		
Lab Sample ID:	JD76818-10	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.35	0.14	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.35	0.23	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.5	0.49	ug/kg	UJ
1691-99-2	EtFOSE	ND	3.5	1.3	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.32	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.70	0.053	ug/kg	
863090-89-5	PFMBA	ND	0.70	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.70	0.23	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.46	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.32	ug/kg	
113507-82-7	PFEESA	ND	0.70	0.053	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.8	0.42	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.8	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.8	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	87%		5-130%
	13C5-PFPeA	76%		40-130%
	13C5-PFHxA	62%		40-130%
	13C4-PFHpA	50%		40-130%
	13C8-PFOA	45%		40-130%
	13C9-PFNA	38% [a]		40-130%
	13C6-PFDA	32% [a]		40-130%
	13C7-PFUnDA	21% [a]		30-130%
	13C2-PFDoDA	9% [a]		10-130%
	13C2-PFTeDA	0% [a]		10-130%
	13C3-PFBS	44%		40-135%
	13C3-PFHxS	21% [a]		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	006-SD-0-2		
Lab Sample ID:	JD76818-10	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	10% [a]		40-130%
	13C8-FOSA	21% [a]		40-130%
	d3-MeFOSA	8% [a]		10-130%
	d5-EtFOSA	3% [a]		10-130%
	d3-MeFOSAA	24% [a]		40-170%
	d5-EtFOSAA	20% [a]		25-135%
	d7-MeFOSE	20%		10-130%
	d9-EtFOSE	12%		10-130%
	13C2-4:2FTS	88%		40-200%
	13C2-6:2FTS	59%		40-200%
	13C2-8:2FTS	28% [a]		40-300%
	13C3-HFPO-DA	69%		40-130%

(a) Outside control limits due to matrix interference, samples clogged SPE cartridge.

CWL 1/6/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	006-SD-2-12		
Lab Sample ID:	JD76818-11	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4878.D	1	11/14/23 23:43	PC	11/14/23 09:45	OP50453	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.32	1.2	0.16	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.072	ug/kg	UJ
335-67-1	Perfluorooctanoic acid	ND	0.29	0.12	ug/kg	UJ
375-95-1	Perfluorononanoic acid	ND	0.29	0.072	ug/kg	UJ
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	UJ
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.087	ug/kg	UJ
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	UJ
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	R
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	R
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	UJ
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	UJ
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	ND	0.29	0.072	ug/kg	UJ
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	UJ
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	R
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	UJ
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	006-SD-2-12		
Lab Sample ID:	JD76818-11	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	R
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	52%		40-130%
	13C4-PFHpA	40%		40-130%
	13C8-PFOA	32% [a]		40-130%
	13C9-PFNA	28% [a]		40-130%
	13C6-PFDA	29% [a]		40-130%
	13C7-PFUnDA	21% [a]		30-130%
	13C2-PFDoDA	15%		10-130%
	13C2-PFTeDA	3% [a]		10-130%
	13C3-PFBS	46%		40-135%
	13C3-PFHxS	38% [a]		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	006-SD-2-12		
Lab Sample ID:	JD76818-11	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	24% [a]		40-130%
	13C8-FOSA	28% [a]		40-130%
	d3-MeFOSA	10%		10-130%
	d5-EtFOSA	10%		10-130%
	d3-MeFOSAA	29% [a]		40-170%
	d5-EtFOSAA	23% [a]		25-135%
	d7-MeFOSE	10%		10-130%
	d9-EtFOSE	9% [a]		10-130%
	13C2-4:2FTS	72%		40-200%
	13C2-6:2FTS	6% [a]		40-200%
	13C2-8:2FTS	26% [a]		40-300%
	13C3-HFPO-DA	61%		40-130%

(a) Outside control limits due to matrix interference, samples clogged SPE cartridge.

CWL 1/6/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

REPLACED DO NOT USE

SGS North America Inc.

Report of Analysis

Client Sample ID:	006-R-0-2		
Lab Sample ID:	JD76818-12	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5124.D	1	11/20/23 18:46	PC	11/14/23 16:30	OP50454	T2Q94
Run #2							

	Initial Weight	Final Volume
Run #1	500 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.015	0.0020	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.0074	0.0013	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.0037	0.00056	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.0016	0.0037	0.00093	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.0037	0.0015	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.0037	0.00093	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.0037	0.0013	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.0037	0.0011	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.0037	0.0015	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.0037	0.0017	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.0037	0.0019	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0037	0.0013	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0037	0.0019	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0037	0.0020	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0037	0.0019	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.0028	0.0037	0.00093	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.0037	0.0026	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0037	0.0020	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0037	0.00093	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.015	0.0052	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.015	0.0019	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.015	0.0035	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0037	0.0013	ug/kg	
31506-32-8	MeFOSA	ND	0.0037	0.0011	ug/kg	
4151-50-2	EtFOSA	ND	0.0037	0.00093	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

J

REPLACED DO NOT USE

Report of Analysis

Client Sample ID:	006-R-0-2		
Lab Sample ID:	JD76818-12	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0037	0.0015	ug/kg	
2991-50-6	EtFOSAA	ND	0.0037	0.0024	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.037	0.0052	ug/kg	
1691-99-2	EtFOSE	ND	0.037	0.014	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.015	0.0033	ug/kg	
919005-14-4	ADONA	ND	0.015	0.0022	ug/kg	
377-73-1	PFMPA	ND	0.0074	0.00056	ug/kg	
863090-89-5	PFMBA	ND	0.0074	0.0011	ug/kg	
151772-58-6	NFDHA	ND	0.0074	0.0024	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.015	0.0048	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.015	0.0033	ug/kg	
113507-82-7	PFEESA	ND	0.0074	0.00056	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.019	0.0045	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.093	0.012	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.093	0.012	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	117%		5-130%
	13C5-PFPeA	114%		40-130%
	13C5-PFHxA	114%		40-130%
	13C4-PFHpA	114%		40-130%
	13C8-PFOA	117%		40-130%
	13C9-PFNA	133% [a]		40-130%
	13C6-PFDA	129%		40-130%
	13C7-PFUnDA	118%		30-130%
	13C2-PFDoDA	123%		10-130%
	13C2-PFTeDA	116%		10-130%
	13C3-PFBS	127%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

REPLACED DO NOT USE

SGS North America Inc.

Report of Analysis

Client Sample ID:	006-R-0-2		
Lab Sample ID:	JD76818-12	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	129%		40-130%
	13C8-FOSA	157% [a]		40-130%
	d3-MeFOSA	136% [a]		10-130%
	d5-EtFOSA	132% [a]		10-130%
	d3-MeFOSAA	130%		40-170%
	d5-EtFOSAA	130%		25-135%
	d7-MeFOSE	133% [a]		10-130%
	d9-EtFOSE	125%		10-130%
	13C2-4:2FTS	132%		40-200%
	13C2-6:2FTS	141%		40-200%
	13C2-8:2FTS	143%		40-300%
	13C3-HFPO-DA	120%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 1/6/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

NEW

SGS North America Inc.

Report of Analysis

Client Sample ID:	006-R-0-2		
Lab Sample ID:	JD76818-12	Date Sampled:	11/09/23
Matrix:	SO - Soil	Date Received:	11/11/23
Method:	EPA 1633/1633 DRAFT EPA 1633 DRAFT	Percent Solids:	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5124.D	1	11/20/23 18:46	PC	11/14/23 16:30	OP50454	T2Q94
Run #2							

	Initial Weight	Final Volume
Run #1	5.01 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.5	0.20	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.74	0.13	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.37	0.056	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.16	0.37	0.093	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.37	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.37	0.093	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.37	0.13	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.37	0.11	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.37	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.37	0.17	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.37	0.19	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.37	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.37	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.37	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.37	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.37	0.093	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.37	0.26	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.37	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.37	0.093	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.52	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.19	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.35	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.37	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.37	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.37	0.093	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

AMK 1/13/25

NEW

SGS North America Inc.

Report of Analysis

Client Sample ID:	006-R-0-2		
Lab Sample ID:	JD76818-12	Date Sampled:	11/09/23
Matrix:	SO - Soil	Date Received:	11/11/23
Method:	EPA 1633/1633 DRAFT EPA 1633 DRAFT	Percent Solids:	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.37	0.15	ug/kg	
2991-50-6	EtFOSAA	ND	0.37	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.7	0.52	ug/kg	
1691-99-2	EtFOSE	ND	3.7	1.4	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.33	ug/kg	
919005-14-4	ADONA	ND	1.5	0.22	ug/kg	
377-73-1	PFMPA	ND	0.74	0.056	ug/kg	
863090-89-5	PFMBA	ND	0.74	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.74	0.24	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.48	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.33	ug/kg	
113507-82-7	PFEESA	ND	0.74	0.056	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.44	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.3	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.3	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	117%		8-130%
	13C5-PFPeA	114%		35-130%
	13C5-PFHxA	114%		40-130%
	13C4-PFHpA	114%		40-130%
	13C8-PFOA	117%		40-130%
	13C9-PFNA	133% [a]		40-130%
	13C6-PFDA	129%		40-130%
	13C7-PFUnDA	118%		40-130%
	13C2-PFDoDA	123%		40-130%
	13C2-PFTeDA	116%		20-130%
	13C3-PFBS	127%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

AMK 1/13/25

NEW

SGS North America Inc.

Report of Analysis

Client Sample ID:	006-R-0-2		
Lab Sample ID:	JD76818-12	Date Sampled:	11/09/23
Matrix:	SO - Soil	Date Received:	11/11/23
Method:	EPA 1633/1633 DRAFT EPA 1633 DRAFT	Percent Solids:	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	129%		40-130%
	13C8-FOSA	157% [a]		40-130%
	d3-MeFOSA	136% [a]		10-130%
	d5-EtFOSA	132% [a]		10-130%
	d3-MeFOSAA	130%		40-135%
	d5-EtFOSAA	130%		40-150%
	d7-MeFOSE	133% [a]		20-130%
	d9-EtFOSE	125%		15-130%
	13C2-4:2FTS	132%		40-165%
	13C2-6:2FTS	141%		40-215%
	13C2-8:2FTS	143%		40-275%
	13C3-HFPO-DA	120%		40-130%

(a) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

AMK 1/13/25

SGS North America Inc.

Report of Analysis

Client Sample ID:	006-R-2-12		
Lab Sample ID:	JD76818-13	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4894.D	1	11/15/23 17:07	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	0.33	1.2	0.17	ug/kg	J	J
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.11	ug/kg		UJ
307-24-4	Perfluorohexanoic acid	ND	0.30	0.045	ug/kg		
375-85-9	Perfluoroheptanoic acid	ND	0.30	0.075	ug/kg		UJ
335-67-1	Perfluorooctanoic acid	0.25	0.30	0.12	ug/kg	J	J
375-95-1	Perfluorononanoic acid	ND	0.30	0.075	ug/kg		UJ
335-76-2	Perfluorodecanoic acid	ND	0.30	0.11	ug/kg		
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.090	ug/kg		
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg		UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg		UJ
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.30	0.075	ug/kg	J	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg		UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg		UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.30	0.11	ug/kg		
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg		UJ
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg		UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	006-R-2-12		
Lab Sample ID:	JD76818-13	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	UJ
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	UJ
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	UJ
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	UJ
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	UJ
151772-58-6	NFDHA	ND	0.60	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	49%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	47%		40-130%
	13C4-PFHpA	47%		40-130%
	13C8-PFOA	45%		40-130%
	13C9-PFNA	49%		40-130%
	13C6-PFDA	52%		40-130%
	13C7-PFUnDA	53%		30-130%
	13C2-PFDoDA	52%		10-130%
	13C2-PFTeDA	35%		10-130%
	13C3-PFBS	72%		40-135%
	13C3-PFHxS	64%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	006-R-2-12		
Lab Sample ID:	JD76818-13	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	64%		40-130%
	13C8-FOSA	68%		40-130%
	d3-MeFOSA	45%		10-130%
	d5-EtFOSA	44%		10-130%
	d3-MeFOSAA	46%		40-170%
	d5-EtFOSAA	49%		25-135%
	d7-MeFOSE	47%		10-130%
	d9-EtFOSE	37%		10-130%
	13C2-4:2FTS	35% [a]		40-200%
	13C2-6:2FTS	49%		40-200%
	13C2-8:2FTS	54%		40-300%
	13C3-HFPO-DA	41%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 1/6/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	005-NS-0-2		
Lab Sample ID:	JD76818-14	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4895.D	1	11/15/23 17:23	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.091	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.065	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.26	0.065	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.074	0.26	0.065	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-NS-0-2		
Lab Sample ID:	JD76818-14	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	86%		5-130%
	13C5-PFPeA	83%		40-130%
	13C5-PFHxA	84%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	82%		10-130%
	13C2-PFTeDA	57%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-NS-0-2		
Lab Sample ID:	JD76818-14	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	82%		40-130%
	13C8-FOSA	77%		40-130%
	d3-MeFOSA	60%		10-130%
	d5-EtFOSA	63%		10-130%
	d3-MeFOSAA	86%		40-170%
	d5-EtFOSAA	83%		25-135%
	d7-MeFOSE	55%		10-130%
	d9-EtFOSE	53%		10-130%
	13C2-4:2FTS	93%		40-200%
	13C2-6:2FTS	76%		40-200%
	13C2-8:2FTS	76%		40-300%
	13C3-HFPO-DA	84%		40-130%

CWL 1/6/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	005-NS-2-12		
Lab Sample ID:	JD76818-15	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4896.D	1	11/15/23 17:38	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	0.043	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.083	0.27	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.066	ug/kg	
335-76-2	Perfluorodecanoic acid	0.10	0.27	0.093	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.27	0.066	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.27	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-NS-2-12		
Lab Sample ID:	JD76818-15	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	90%		5-130%
	13C5-PFPeA	86%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	64%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-NS-2-12		
Lab Sample ID:	JD76818-15	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		40-130%
	13C8-FOSA	69%		40-130%
	d3-MeFOSA	49%		10-130%
	d5-EtFOSA	60%		10-130%
	d3-MeFOSAA	88%		40-170%
	d5-EtFOSAA	83%		25-135%
	d7-MeFOSE	55%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	91%		40-200%
	13C2-6:2FTS	84%		40-200%
	13C2-8:2FTS	96%		40-300%
	13C3-HFPO-DA	92%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	005-SD-0-2		
Lab Sample ID:	JD76818-16	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4897.D	1	11/15/23 17:53	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.23	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	UJ
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.067	ug/kg	UJ
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.098	0.27	0.080	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.27	0.067	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-SD-0-2		
Lab Sample ID:	JD76818-16	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	UJ
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.080	ug/kg	UJ
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	uJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	54%		5-130%
	13C5-PFPeA	49%		40-130%
	13C5-PFHxA	49%		40-130%
	13C4-PFHpA	49%		40-130%
	13C8-PFOA	56%		40-130%
	13C9-PFNA	52%		40-130%
	13C6-PFDA	67%		40-130%
	13C7-PFUnDA	68%		30-130%
	13C2-PFDoDA	62%		10-130%
	13C2-PFTeDA	46%		10-130%
	13C3-PFBS	57%		40-135%
	13C3-PFHxS	60%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-SD-0-2		
Lab Sample ID:	JD76818-16	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	68%		40-130%
	13C8-FOSA	73%		40-130%
	d3-MeFOSA	58%		10-130%
	d5-EtFOSA	54%		10-130%
	d3-MeFOSAA	60%		40-170%
	d5-EtFOSAA	62%		25-135%
	d7-MeFOSE	51%		10-130%
	d9-EtFOSE	44%		10-130%
	13C2-4:2FTS	53%		40-200%
	13C2-6:2FTS	51%		40-200%
	13C2-8:2FTS	61%		40-300%
	13C3-HFPO-DA	48%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	005-SD-2-12		
Lab Sample ID:	JD76818-17	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4898.D	1	11/15/23 18:08	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.25	0.97	0.13	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.086	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.24	0.097	ug/kg	J
375-95-1	Perfluorononanoic acid	0.073	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.24	0.060	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-SD-2-12		
Lab Sample ID:	JD76818-17	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	71%		5-130%
	13C5-PFPeA	65%		40-130%
	13C5-PFHxA	71%		40-130%
	13C4-PFHpA	70%		40-130%
	13C8-PFOA	70%		40-130%
	13C9-PFNA	68%		40-130%
	13C6-PFDA	74%		40-130%
	13C7-PFUnDA	80%		30-130%
	13C2-PFDoDA	74%		10-130%
	13C2-PFTeDA	64%		10-130%
	13C3-PFBS	69%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-SD-2-12		
Lab Sample ID:	JD76818-17	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	74%		40-130%
	d3-MeFOSA	46%		10-130%
	d5-EtFOSA	54%		10-130%
	d3-MeFOSAA	76%		40-170%
	d5-EtFOSAA	81%		25-135%
	d7-MeFOSE	50%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	58%		40-200%
	13C2-6:2FTS	71%		40-200%
	13C2-8:2FTS	70%		40-300%
	13C3-HFPO-DA	61%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	005-R-0-2		
Lab Sample ID:	JD76818-18	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4899.D	1	11/15/23 18:23	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.25	1.0	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.090	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.091	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.15	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-R-0-2		
Lab Sample ID:	JD76818-18	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	70%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	69%		40-130%
	13C4-PFHpA	72%		40-130%
	13C8-PFOA	71%		40-130%
	13C9-PFNA	75%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	68%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	78%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-R-0-2		
Lab Sample ID:	JD76818-18	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		40-130%
	13C8-FOSA	75%		40-130%
	d3-MeFOSA	50%		10-130%
	d5-EtFOSA	53%		10-130%
	d3-MeFOSAA	85%		40-170%
	d5-EtFOSAA	89%		25-135%
	d7-MeFOSE	49%		10-130%
	d9-EtFOSE	47%		10-130%
	13C2-4:2FTS	58%		40-200%
	13C2-6:2FTS	58%		40-200%
	13C2-8:2FTS	66%		40-300%
	13C3-HFPO-DA	63%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	005-R-2-12		
Lab Sample ID:	JD76818-19	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4900.D	1	11/15/23 18:39	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.16	0.94	0.13	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.083	ug/kg	
307-24-4	Perfluorohexanoic acid	0.052	0.24	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.24	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.15	0.24	0.094	ug/kg	J
375-95-1	Perfluorononanoic acid	0.075	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.15	0.24	0.059	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-R-2-12		
Lab Sample ID:	JD76818-19	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	67%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	005-R-2-12		
Lab Sample ID:	JD76818-19	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	80%		40-130%
	d3-MeFOSA	55%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	84%		40-170%
	d5-EtFOSAA	89%		25-135%
	d7-MeFOSE	51%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	100%		40-200%
	13C2-6:2FTS	96%		40-200%
	13C2-8:2FTS	87%		40-300%
	13C3-HFPO-DA	95%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11092023		
Lab Sample ID:	JD76818-20	**Date Sampled:**	11/09/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4855.D	1	11/14/23 17:53	PC	11/13/23 03:37	OP50457	T2Q91
Run #2							

	Initial Volume	Final Volume
Run #1	499 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.00093	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00073	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00075	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00079	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00076	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00066	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00098	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.00091	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00069	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00064	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11092023		
Lab Sample ID:	JD76818-20	**Date Sampled:**	11/09/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00091	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0038	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0062	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	104%		5-130%
	13C5-PFPeA	100%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11092023		
Lab Sample ID:	JD76818-20	**Date Sampled:**	11/09/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	112%		40-130%
	13C8-FOSA	88%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	93%		40-170%
	d5-EtFOSAA	89%		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	93%		10-130%
	13C2-4:2FTS	96%		40-200%
	13C2-6:2FTS	88%		40-200%
	13C2-8:2FTS	94%		40-300%
	13C3-HFPO-DA	109%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	022A-SD-0-2		
Lab Sample ID:	JD76818-21	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4901.D	1	11/15/23 18:54	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.43	1.4	0.19	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.69	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	0.17	0.35	0.052	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.31	0.35	0.087	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.59	0.35	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.38	0.35	0.087	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.35	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.35	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.35	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.35	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.35	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.35	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.35	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.35	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.35	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.35	0.087	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.35	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.35	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.35	0.087	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.49	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.35	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.35	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.35	0.087	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	022A-SD-0-2		
Lab Sample ID:	JD76818-21	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.35	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.35	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.5	0.49	ug/kg	
1691-99-2	EtFOSE	ND	3.5	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.69	0.052	ug/kg	
863090-89-5	PFMBA	ND	0.69	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.69	0.23	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.45	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.69	0.052	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.42	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.7	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.7	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	67%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	68%		40-130%
	13C4-PFHpA	74%		40-130%
	13C8-PFOA	71%		40-130%
	13C9-PFNA	69%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	53%		10-130%
	13C3-PFBS	81%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	022A-SD-0-2		
Lab Sample ID:	JD76818-21	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	81%		40-130%
	d3-MeFOSA	64%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	78%		40-170%
	d5-EtFOSAA	88%		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	56%		10-130%
	13C2-4:2FTS	40%		40-200%
	13C2-6:2FTS	77%		40-200%
	13C2-8:2FTS	69%		40-300%
	13C3-HFPO-DA	61%		40-130%

CWL 1/6/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	022A-SD-2-12		
Lab Sample ID:	JD76818-22	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4905.D	1	11/15/23 19:55	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.30	1.0	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.091	ug/kg	
307-24-4	Perfluorohexanoic acid	0.045	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.080	0.26	0.078	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.26	0.065	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	022A-SD-2-12		
Lab Sample ID:	JD76818-22	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	022A-SD-2-12		
Lab Sample ID:	JD76818-22	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	69%		40-130%
	d3-MeFOSA	61%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	81%		40-170%
	d5-EtFOSAA	90%		25-135%
	d7-MeFOSE	52%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	69%		40-200%
	13C2-6:2FTS	97%		40-200%
	13C2-8:2FTS	66%		40-300%
	13C3-HFPO-DA	86%		40-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	022A-R-0-2		
Lab Sample ID:	JD76818-23	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4906.D	1	11/15/23 20:11	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.22	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.098	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.070	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.19	0.28	0.098	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.22	0.28	0.084	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.28	0.070	ug/kg	J J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

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Report of Analysis

Client Sample ID:	022A-R-0-2		
Lab Sample ID:	JD76818-23	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	64%		5-130%
	13C5-PFPeA	59%		40-130%
	13C5-PFHxA	59%		40-130%
	13C4-PFHpA	62%		40-130%
	13C8-PFOA	60%		40-130%
	13C9-PFNA	60%		40-130%
	13C6-PFDA	54%		40-130%
	13C7-PFUnDA	67%		30-130%
	13C2-PFDoDA	65%		10-130%
	13C2-PFTeDA	39%		10-130%
	13C3-PFBS	71%		40-135%
	13C3-PFHxS	68%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	022A-R-0-2		
Lab Sample ID:	JD76818-23	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	79%		40-130%
	13C8-FOSA	83%		40-130%
	d3-MeFOSA	58%		10-130%
	d5-EtFOSA	55%		10-130%
	d3-MeFOSAA	73%		40-170%
	d5-EtFOSAA	82%		25-135%
	d7-MeFOSE	52%		10-130%
	d9-EtFOSE	42%		10-130%
	13C2-4:2FTS	66%		40-200%
	13C2-6:2FTS	89%		40-200%
	13C2-8:2FTS	75%		40-300%
	13C3-HFPO-DA	51%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	022A-R-2-12		
Lab Sample ID:	JD76818-24	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4907.D	1	11/15/23 20:26	PC	11/14/23 16:30	OP50454	T2Q91
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.15	0.98	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.25	0.098	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.086	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	022A-R-2-12		
Lab Sample ID:	JD76818-24	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	84%		5-130%
	13C5-PFPeA	80%		40-130%
	13C5-PFHxA	85%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	85%		40-130%
	13C9-PFNA	84%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	104%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	022A-R-2-12		
Lab Sample ID:	JD76818-24	**Date Sampled:**	11/10/23
Matrix:	SO - Soil	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	82%		40-130%
	d3-MeFOSA	61%		10-130%
	d5-EtFOSA	62%		10-130%
	d3-MeFOSAA	87%		40-170%
	d5-EtFOSAA	99%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	75%		40-200%
	13C2-6:2FTS	90%		40-200%
	13C2-8:2FTS	97%		40-300%
	13C3-HFPO-DA	79%		40-130%

CWL 1/6/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11102023		
Lab Sample ID:	JD76818-25	**Date Sampled:**	11/10/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q4856.D	1	11/14/23 18:08	PC	11/13/23 03:37	OP50457	T2Q91
Run #2							

	Initial Volume	Final Volume
Run #1	519 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0077	0.00090	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0039	0.00070	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00048	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00072	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00039	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00060	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00073	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00064	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00097	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00094	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00041	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00039	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0077	0.00088	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00066	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00062	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11102023		
Lab Sample ID:	JD76818-25	**Date Sampled:**	11/10/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00088	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0039	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0039	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0039	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0039	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0096	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0069	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0060	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	105%		5-130%
	13C5-PFPeA	98%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11102023		
Lab Sample ID:	JD76818-25	**Date Sampled:**	11/10/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/11/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	94%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	100%		10-130%
	d3-MeFOSAA	106%		40-170%
	d5-EtFOSAA	101%		25-135%
	d7-MeFOSE	98%		10-130%
	d9-EtFOSE	102%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	105%		40-200%
	13C2-8:2FTS	103%		40-300%
	13C3-HFPO-DA	108%		40-130%

CWL 1/6/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD77514
SAMPLING DATE(S):	November 20 and 21, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD77514-1	121-SD-0.0-2.0	X
JD77514-2	121-SD-2.0-12.0	X
JD77514-2MS	121-SD-2.0-12.0MS	X
JD77514-2MSD	121-SD-2.0-12.0MSD	X
JD77514-3	121-R-0.0-2.0	X
JD77514-4	121-R-2.0-12.0	X
JD77514-5	106-SD-0.0-2.0	X
JD77514-6	106-SD-2.0-12.0	X
JD77514-7	106-R-0.0-2.0	X
JD77514-8	106-R-2.0-12.0	X
JD77514-9	093-SD-0.0-2.0	X
JD77514-10	093-SD-2.0-12.0	X
JD77514-11	093-R-0.0-2.0	X
JD77514-12	093-R-2.0-12.0	X
JD77514-13	093-NS-0.0-2.0	X
JD77514-14	093-NS-2.0-12.0	X
JD77514-15	085-SD-0.0-2.0	X
JD77514-16	085-SD-2.0-12.0	X

LAB ID	CLIENT ID	PFAS
JD77514-17	085-R-0.0-2.0	X
JD77514-18	085-R-2.0-12.0	X
JD77514-19	099F-SD-0.0-2.0	X
JD77514-20	099F-SD-2.0-12.0	X
JD77514-21	099F-R-0.0-2.0	X
JD77514-22	099F-R-2.0-12.0	X
JD77514-23	RB-11202023	X
JD77514-24	RB-11212023	X
JD77514-25	FD-11202023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD77514

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD77514-7	106-R-0.0-2.0	13C4PFBA	PFBA	R
JD77514-8	106-R-2.0-12.0	13C4PFBA	PFBA	R
JD77514-9	093-SD-0.0-2.0	13C4PFBA	PFBA	R
JD77514-15	085-SD-0.0-2.0	13C4PFBA	PFBA	R
JD77514-21	099F-R-0.0-2.0	13C4PFBA	PFBA	R
JD77514-22	099F-R-2.0-12.0	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-11202023 and RB-11212023, were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on the following samples. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD77514-2	121-SD-2.0-12.0	RPD > 30%	PFHxA	J
		Recovery < lower control limit of 70%	MeFOSE	UJ
			PFMPA	UJ
			3:3FTCA	UJ

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD77514-17	085-R-0.0-2.0	Recovery < lower control limit of 70%	PFMPA	UJ
			3:3FTCA	UJ

VII.) Laboratory Control Samples (LCS):

LCS and Low Level LCS, OP50708-LCS and OP50708-LLCS met all criteria. No qualification was made based on this finding.

The following LCS recoveries were outside the 70-130% limits. Qualification for recoveries < 70% are estimated "J/UJ".

LCS ID	Associated Samples	Analytes
OP50702-LCS	JD77514-1 JD77514-2 JD77514-3 JD77514-4 JD77514-5 JD77514-6 JD77514-7 JD77514-8 JD77514-9 JD77514-10 JD77514-11 JD77514-12 JD77514-13 JD77514-14 JD77514-15 JD77514-16	PFMPA 3:3FTCA

OP50727-LLCS OP50727-LCS	JD77514-17 JD77514-18 JD77514-19 JD77514-20 JD77514-21 JD77514-22 JD77514-25	PFMPA 3:3FTCA MeFOSE PFNS

VIII.) Field Duplicates:

One set of field duplicate samples (121-SD-2.0-12.0 / FD-11202023) was identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD77514-1	121-SD-0.0-2.0	13C4PFBA	PFBA	UJ
JD77514-2	121-SD-2.0-12.0	13C4PFBA	PFBA	UJ
JD77514-3	121-R-0.0-2.0	13C4PFBA	PFBA	UJ
JD77514-4	121-R-2.0-12.0	13C4PFBA	PFBA	UJ
JD77514-5	106-SD-0.0-2.0	13C4PFBA	PFBA	UJ
JD77514-6	106-SD-2.0-12.0	13C4PFBA	PFBA	UJ
JD77514-7	106-R-0.0-2.0	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD77514-8	106-R-2.0-12.0	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77514-9	093-SD-0.0-2.0	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77514-10	093-SD-2.0-12.0	13C4PFBA	PFBA	UJ
JD77514-11	093-R-0.0-2.0	13C4PFBA	PFBA	J
JD77514-12	093-R-2.0-12.0	13C4PFBA	PFBA	J
JD77514-13	093-NS-0.0-2.0	13C4PFBA	PFBA	UJ
JD77514-14	093-NS-2.0-12.0	13C4PFBA	PFBA	UJ
JD77514-15	085-SD-0.0-2.0	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD77514-16	085-SD-2.0-12.0	D5EtFOSA D9EtFOSE	EtFOSA EtFOSE	UJ UJ
JD77514-17	085-R-0.0-2.0	13C4PFBA	PFBA	J
JD77514-18	085-R-2.0-12.0	13C4PFBA	PFBA	J
JD77514-19	099F-SD-0.0-2.0	13C4PFBA	PFBA	J
JD77514-20	099F-SD-2.0-12.0	13C4PFBA	PFBA	UJ
JD77514-25	FD-11202023	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	121-SD-0.0-2.0		
Lab Sample ID:	JD77514-1	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2493.D	1	11/29/23 22:14	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.15	0.54	0.094	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.10	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.21	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.37	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.38	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	0.21	0.27	0.094	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.16	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.12	0.27	0.094	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.90	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	121-SD-0.0-2.0		
Lab Sample ID:	JD77514-1	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	121-SD-0.0-2.0		
Lab Sample ID:	JD77514-1	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	122%		40-170%
	d5-EtFOSAA	118%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	103%		40-200%
	13C2-6:2FTS	136%		40-200%
	13C2-8:2FTS	124%		40-300%
	13C3-HFPO-DA	69%		40-130%

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	121-SD-2.0-12.0		
Lab Sample ID:	JD77514-2	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2494.D	1	11/29/23 22:29	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	0.087	0.24	0.036	ug/kg	J J
375-85-9	Perfluoroheptanoic acid	0.13	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.53	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.098	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	121-SD-2.0-12.0		
Lab Sample ID:	JD77514-2	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	50%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	112%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	121-SD-2.0-12.0		
Lab Sample ID:	JD77514-2	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	128%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	85%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	100%		40-170%
	d5-EtFOSAA	111%		25-135%
	d7-MeFOSE	66%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	83%		40-200%
	13C2-6:2FTS	100%		40-200%
	13C2-8:2FTS	111%		40-300%
	13C3-HFPO-DA	74%		40-130%

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	121-R-0.0-2.0		
Lab Sample ID:	JD77514-3	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2495.D	1	11/29/23 22:44	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	0.29	0.25	0.099	ug/kg	
375-95-1	Perfluorononanoic acid	0.28	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	0.090	0.25	0.087	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.52	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	121-R-0.0-2.0		
Lab Sample ID:	JD77514-3	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	107%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	121-R-0.0-2.0		
Lab Sample ID:	JD77514-3	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	115%		40-170%
	d5-EtFOSAA	108%		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	122%		40-200%
	13C2-8:2FTS	130%		40-300%
	13C3-HFPO-DA	73%		40-130%

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	121-R-2.0-12.0		
Lab Sample ID:	JD77514-4	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2496.D	1	11/29/23 22:59	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	0.096	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.069	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.24	0.097	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.069	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	121-R-2.0-12.0		
Lab Sample ID:	JD77514-4	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	69%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	110%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	121-R-2.0-12.0		
Lab Sample ID:	JD77514-4	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	64%		10-130%
	d3-MeFOSAA	86%		40-170%
	d5-EtFOSAA	96%		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	110%		40-200%
	13C2-6:2FTS	115%		40-200%
	13C2-8:2FTS	134%		40-300%
	13C3-HFPO-DA	75%		40-130%

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	106-SD-0.0-2.0		
Lab Sample ID:	JD77514-5	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2497.D	1	11/29/23 23:15	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.48	0.085	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.069	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.24	0.097	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	106-SD-0.0-2.0		
Lab Sample ID:	JD77514-5	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	54%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	118%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	106-SD-0.0-2.0		
Lab Sample ID:	JD77514-5	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	86%		40-170%
	d5-EtFOSAA	83%		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	97%		40-200%
	13C2-6:2FTS	86%		40-200%
	13C2-8:2FTS	97%		40-300%
	13C3-HFPO-DA	73%		40-130%

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	106-SD-2.0-12.0		
Lab Sample ID:	JD77514-6	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2498.D	1	11/29/23 23:30	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.91	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	
307-24-4	Perfluorohexanoic acid	0.067	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.080	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.23	0.091	ug/kg	
375-95-1	Perfluorononanoic acid	0.069	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.068	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.091	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.23	0.057	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.91	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.91	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.91	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.068	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	106-SD-2.0-12.0		
Lab Sample ID:	JD77514-6	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.091	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.83	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.91	0.21	ug/kg	
919005-14-4	ADONA	ND	0.91	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.068	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.91	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.91	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	80%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	111%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	106-SD-2.0-12.0		
Lab Sample ID:	JD77514-6	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	78%		40-170%
	d5-EtFOSAA	81%		25-135%
	d7-MeFOSE	59%		10-130%
	d9-EtFOSE	52%		10-130%
	13C2-4:2FTS	100%		40-200%
	13C2-6:2FTS	89%		40-200%
	13C2-8:2FTS	92%		40-300%
	13C3-HFPO-DA	75%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	106-R-0.0-2.0		
Lab Sample ID:	JD77514-7	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2499.D	1	11/29/23 23:45	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.18	0.54	0.095	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.088	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.31	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.35	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.20	0.27	0.082	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.74	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	106-R-0.0-2.0		
Lab Sample ID:	JD77514-7	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.082	ug/kg	UJ
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	32% [a]		40-130%
	13C5-PFHxA	86%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	106-R-0.0-2.0		
Lab Sample ID:	JD77514-7	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	83%		40-170%
	d5-EtFOSAA	82%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	52%		10-130%
	13C2-4:2FTS	79%		40-200%
	13C2-6:2FTS	103%		40-200%
	13C2-8:2FTS	103%		40-300%
	13C3-HFPO-DA	67%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	106-R-2.0-12.0		
Lab Sample ID:	JD77514-8	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2500.D	1	11/30/23 00:00	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.88	0.12	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.44	0.077	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.054	0.22	0.033	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.058	0.22	0.055	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.26	0.22	0.088	ug/kg	
375-95-1	Perfluorononanoic acid	0.17	0.22	0.055	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.077	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.066	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.088	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.099	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.077	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.22	0.055	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.055	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.88	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.88	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.88	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.077	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.066	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.055	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	106-R-2.0-12.0		
Lab Sample ID:	JD77514-8	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.088	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.80	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.88	0.20	ug/kg	
919005-14-4	ADONA	ND	0.88	0.13	ug/kg	
377-73-1	PFMPA	ND	0.44	0.033	ug/kg	UJ
863090-89-5	PFMBA	ND	0.44	0.066	ug/kg	UJ
151772-58-6	NFDHA	ND	0.44	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.88	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.88	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.44	0.033	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.5	0.68	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.5	0.69	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	49%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	118%		40-130%
	13C7-PFUnDA	111%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	106-R-2.0-12.0		
Lab Sample ID:	JD77514-8	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	89.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	114%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	82%		40-170%
	d5-EtFOSAA	78%		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	110%		40-200%
	13C2-6:2FTS	98%		40-200%
	13C2-8:2FTS	90%		40-300%
	13C3-HFPO-DA	73%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	093-SD-0.0-2.0		
Lab Sample ID:	JD77514-9	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2501.D	1	11/30/23 00:16	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.097	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-SD-0.0-2.0		
Lab Sample ID:	JD77514-9	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	UJ
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	119%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-SD-0.0-2.0		
Lab Sample ID:	JD77514-9	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	100%		40-170%
	d5-EtFOSAA	91%		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	97%		40-200%
	13C2-8:2FTS	98%		40-300%
	13C3-HFPO-DA	79%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	093-SD-2.0-12.0		
Lab Sample ID:	JD77514-10	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2505.D	1	11/30/23 01:17	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	0.053	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.31	0.25	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-SD-2.0-12.0		
Lab Sample ID:	JD77514-10	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	64%		10-130%
	13C3-PFBS	87%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-SD-2.0-12.0		
Lab Sample ID:	JD77514-10	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	78%		40-170%
	d5-EtFOSAA	76%		25-135%
	d7-MeFOSE	62%		10-130%
	d9-EtFOSE	53%		10-130%
	13C2-4:2FTS	82%		40-200%
	13C2-6:2FTS	78%		40-200%
	13C2-8:2FTS	80%		40-300%
	13C3-HFPO-DA	76%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	093-R-0.0-2.0		
Lab Sample ID:	JD77514-11	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2506.D	1	11/30/23 01:32	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.81	1.1	0.15	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.21	0.55	0.097	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.15	0.28	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.55	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.23	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.096	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.49	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-R-0.0-2.0		
Lab Sample ID:	JD77514-11	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	64%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	109%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-R-0.0-2.0		
Lab Sample ID:	JD77514-11	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	90%		40-170%
	d5-EtFOSAA	85%		25-135%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	53%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	102%		40-200%
	13C2-8:2FTS	105%		40-300%
	13C3-HFPO-DA	67%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	093-R-2.0-12.0		
Lab Sample ID:	JD77514-12	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2507.D	1	11/30/23 01:47	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.40	1.0	0.14	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.091	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.083	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.29	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.26	0.065	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.35	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-R-2.0-12.0		
Lab Sample ID:	JD77514-12	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	22%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-R-2.0-12.0		
Lab Sample ID:	JD77514-12	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	82%		40-170%
	d5-EtFOSAA	88%		25-135%
	d7-MeFOSE	61%		10-130%
	d9-EtFOSE	54%		10-130%
	13C2-4:2FTS	107%		40-200%
	13C2-6:2FTS	82%		40-200%
	13C2-8:2FTS	98%		40-300%
	13C3-HFPO-DA	76%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	093-NS-0.0-0.2		
Lab Sample ID:	JD77514-13	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2508.D	1	11/30/23 02:02	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.081	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.058	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.23	0.093	ug/kg	
375-95-1	Perfluorononanoic acid	0.079	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.23	0.058	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-NS-0.0-0.2		
Lab Sample ID:	JD77514-13	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	106%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-NS-0.0-0.2		
Lab Sample ID:	JD77514-13	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	87%		40-170%
	d5-EtFOSAA	84%		25-135%
	d7-MeFOSE	67%		10-130%
	d9-EtFOSE	57%		10-130%
	13C2-4:2FTS	83%		40-200%
	13C2-6:2FTS	81%		40-200%
	13C2-8:2FTS	82%		40-300%
	13C3-HFPO-DA	76%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	093-NS-2.0-12.0		
Lab Sample ID:	JD77514-14	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2509.D	1	11/30/23 02:18	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.86	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.43	0.075	ug/kg	
307-24-4	Perfluorohexanoic acid	0.064	0.22	0.032	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.059	0.22	0.054	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.098	0.22	0.086	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.22	0.054	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.075	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.065	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.086	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.097	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.075	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.22	0.054	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.054	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.86	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.86	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.86	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.075	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.065	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.054	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-NS-2.0-12.0		
Lab Sample ID:	JD77514-14	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.086	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.30	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.79	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.86	0.19	ug/kg	
919005-14-4	ADONA	ND	0.86	0.13	ug/kg	
377-73-1	PFMPA	ND	0.43	0.032	ug/kg	UJ
863090-89-5	PFMBA	ND	0.43	0.065	ug/kg	
151772-58-6	NFDHA	ND	0.43	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.86	0.28	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.86	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.032	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.26	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.4	0.67	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.4	0.68	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	86%		40-130%
	13C8-PFOA	83%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	67%		10-130%
	13C3-PFBS	88%		40-135%
	13C3-PFHxS	83%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	093-NS-2.0-12.0		
Lab Sample ID:	JD77514-14	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	91.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	77%		40-130%
	13C8-FOSA	91%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	56%		10-130%
	d3-MeFOSAA	74%		40-170%
	d5-EtFOSAA	69%		25-135%
	d7-MeFOSE	56%		10-130%
	d9-EtFOSE	50%		10-130%
	13C2-4:2FTS	83%		40-200%
	13C2-6:2FTS	91%		40-200%
	13C2-8:2FTS	74%		40-300%
	13C3-HFPO-DA	72%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	085A-SD-0.0-2.0		
Lab Sample ID:	JD77514-15	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2510.D	1	11/30/23 02:33	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.14	0.57	0.099	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.11	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.26	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.28	0.099	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.15	0.28	0.085	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.58	0.28	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	085A-SD-0.0-2.0		
Lab Sample ID:	JD77514-15	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	UJ
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	35% [a]		40-130%
	13C5-PFHxA	83%		40-130%
	13C4-PFHpA	84%		40-130%
	13C8-PFOA	85%		40-130%
	13C9-PFNA	79%		40-130%
	13C6-PFDA	81%		40-130%
	13C7-PFUnDA	87%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	085A-SD-0.0-2.0		
Lab Sample ID:	JD77514-15	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	104%		40-170%
	d5-EtFOSAA	100%		25-135%
	d7-MeFOSE	64%		10-130%
	d9-EtFOSE	51%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	92%		40-200%
	13C2-8:2FTS	91%		40-300%
	13C3-HFPO-DA	62%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	085A-SD-2.0-12.0		
Lab Sample ID:	JD77514-16	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2511.D	1	11/30/23 02:48	PC	11/28/23 13:00	OP50702	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.36	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.10	0.56	0.098	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.11	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.28	0.070	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.36	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.12	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.084	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.28	0.070	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	085A-SD-2.0-12.0		
Lab Sample ID:	JD77514-16	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		5-130%
	13C5-PFPeA	104%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	106%		40-130%
	13C9-PFNA	110%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	085A-SD-2.0-12.0		
Lab Sample ID:	JD77514-16	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	54%		10-130%
	d5-EtFOSA	42%		10-130%
	d3-MeFOSAA	104%		40-170%
	d5-EtFOSAA	106%		25-135%
	d7-MeFOSE	58%		10-130%
	d9-EtFOSE	49%		10-130%
	13C2-4:2FTS	124%		40-200%
	13C2-6:2FTS	132%		40-200%
	13C2-8:2FTS	125%		40-300%
	13C3-HFPO-DA	77%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	085A-R-0.0-2.0		
Lab Sample ID:	JD77514-17	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2517.D	1	11/30/23 04:19	PC	11/28/23 15:50	OP50727	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.1	1.1	0.16	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.23	0.57	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.32	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.35	0.29	0.071	ug/kg	
335-67-1	Perfluorooctanoic acid	1.1	0.29	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.39	0.29	0.071	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.64	0.29	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	085A-R-0.0-2.0		
Lab Sample ID:	JD77514-17	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	67%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	085A-R-0.0-2.0		
Lab Sample ID:	JD77514-17	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	112%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	121%		40-170%
	d5-EtFOSAA	116%		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	73%		10-130%
	13C2-4:2FTS	107%		40-200%
	13C2-6:2FTS	107%		40-200%
	13C2-8:2FTS	144%		40-300%
	13C3-HFPO-DA	72%		40-130%

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

4.18

Client Sample ID:	085A-R-2.0-12.0		
Lab Sample ID:	JD77514-18	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2518.D	1	11/30/23 04:35	PC	11/28/23 15:50	OP50727	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.47	1.0	0.14	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.12	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.13	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.28	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.11	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	085A-R-2.0-12.0		
Lab Sample ID:	JD77514-18	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	74%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	111%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	085A-R-2.0-12.0		
Lab Sample ID:	JD77514-18	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	94%		40-170%
	d5-EtFOSAA	89%		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	63%		10-130%
	13C2-4:2FTS	98%		40-200%
	13C2-6:2FTS	138%		40-200%
	13C2-8:2FTS	112%		40-300%
	13C3-HFPO-DA	70%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	099F-SD-0.0-2.0		
Lab Sample ID:	JD77514-19	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2519.D	1	11/30/23 04:50	PC	11/28/23 15:50	OP50727	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.91	1.2	0.17	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.25	0.60	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.23	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.32	0.30	0.075	ug/kg	
335-67-1	Perfluorooctanoic acid	0.76	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.56	0.30	0.075	ug/kg	
335-76-2	Perfluorodecanoic acid	0.13	0.30	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.16	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.72	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	099F-SD-0.0-2.0		
Lab Sample ID:	JD77514-19	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	UJ
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	77%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	88%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	099F-SD-0.0-2.0		
Lab Sample ID:	JD77514-19	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	95%		40-170%
	d5-EtFOSAA	108%		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	65%		10-130%
	13C2-4:2FTS	105%		40-200%
	13C2-6:2FTS	111%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	75%		40-130%

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	099F-SD-2.0-12.0		
Lab Sample ID:	JD77514-20	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2523.D	1	11/30/23 05:51	PC	11/28/23 15:50	OP50727	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	0.13	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.42	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.17	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	099F-SD-2.0-12.0		
Lab Sample ID:	JD77514-20	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	099F-SD-2.0-12.0		
Lab Sample ID:	JD77514-20	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	87%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	88%		40-170%
	d5-EtFOSAA	91%		25-135%
	d7-MeFOSE	68%		10-130%
	d9-EtFOSE	62%		10-130%
	13C2-4:2FTS	83%		40-200%
	13C2-6:2FTS	111%		40-200%
	13C2-8:2FTS	93%		40-300%
	13C3-HFPO-DA	77%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	099F-R-0.0-2.0		
Lab Sample ID:	JD77514-21	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2524.D	1	11/30/23 06:06	PC	11/28/23 15:50	OP50727	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.17	0.54	0.094	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.22	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.27	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	0.78	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.28	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.12	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.094	0.27	0.094	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.41	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	099F-R-0.0-2.0		
Lab Sample ID:	JD77514-21	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	83%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	099F-R-0.0-2.0		
Lab Sample ID:	JD77514-21	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	101%		40-170%
	d5-EtFOSAA	109%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	100%		40-200%
	13C2-6:2FTS	114%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	71%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	099F-R-2.0-12.0		
Lab Sample ID:	JD77514-22	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2525.D	1	11/30/23 06:22	PC	11/28/23 15:50	OP50727	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.092	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.14	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.34	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.17	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.091	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.26	0.065	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	099F-R-2.0-12.0		
Lab Sample ID:	JD77514-22	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	59%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	99%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	108%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	099F-R-2.0-12.0		
Lab Sample ID:	JD77514-22	**Date Sampled:**	11/21/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	102%		40-170%
	d5-EtFOSAA	123%		25-135%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	123%		40-200%
	13C2-6:2FTS	106%		40-200%
	13C2-8:2FTS	107%		40-300%
	13C3-HFPO-DA	75%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11202023		
Lab Sample ID:	JD77514-23	**Date Sampled:**	11/20/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2532.D	1	11/30/23 08:08	PC	11/27/23 02:17	OP50708	T1Q66
Run #2							

	Initial Volume	Final Volume
Run #1	483 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0083	0.00096	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0041	0.00076	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0021	0.00052	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0021	0.00078	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0021	0.00041	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0021	0.00057	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00080	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00082	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00079	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0021	0.00068	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0021	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0021	0.00045	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0083	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0083	0.00094	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0083	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0021	0.00071	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00066	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00055	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11202023		
Lab Sample ID:	JD77514-23	**Date Sampled:**	11/20/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00053	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00094	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0083	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0083	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00058	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0083	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0083	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.052	0.0074	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.052	0.0064	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	100%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	77%		10-130%
	13C2-PFTeDA	58%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11202023		
Lab Sample ID:	JD77514-23	**Date Sampled:**	11/20/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	64%		10-130%
	d5-EtFOSA	69%		10-130%
	d3-MeFOSAA	78%		40-170%
	d5-EtFOSAA	66%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	68%		10-130%
	13C2-4:2FTS	77%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	65%		40-300%
	13C3-HFPO-DA	82%		40-130%

CWL 1/8/23

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11212023		
Lab Sample ID:	JD77514-24	**Date Sampled:**	11/21/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2536.D	1	11/30/23 09:10	PC	11/27/23 02:17	OP50708	T1Q66
Run #2							

	Initial Volume	Final Volume
Run #1	504 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0079	0.00092	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.00072	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00029	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	0.00087	0.0020	0.00074	ug/l	J
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00040	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00062	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00055	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00076	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00078	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00075	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.00065	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.00097	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.00043	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.00040	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0079	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0079	0.00090	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0079	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0020	0.00068	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.00063	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.00053	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11212023		
Lab Sample ID:	JD77514-24	**Date Sampled:**	11/21/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0020	0.00051	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.00090	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.020	0.0028	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0037	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0079	0.0018	ug/l	
919005-14-4	ADONA	ND	0.0079	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0040	0.00030	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.00056	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0079	0.0024	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0079	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.00027	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0099	0.0024	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.0071	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.0061	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	90%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	67%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	78%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11212023		
Lab Sample ID:	JD77514-24	**Date Sampled:**	11/21/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	77%		40-130%
	d3-MeFOSA	64%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	74%		40-170%
	d5-EtFOSAA	74%		25-135%
	d7-MeFOSE	75%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	89%		40-200%
	13C2-6:2FTS	60%		40-200%
	13C2-8:2FTS	59%		40-300%
	13C3-HFPO-DA	76%		40-130%

CWL 1/8/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11202023		
Lab Sample ID:	JD77514-25	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2526.D	1	11/30/23 06:37	PC	11/28/23 15:50	OP50727	T1Q66
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.082	ug/kg	
307-24-4	Perfluorohexanoic acid	0.14	0.24	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.095	0.24	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.24	0.094	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.24	0.059	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.12	0.24	0.059	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.16	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11202023		
Lab Sample ID:	JD77514-25	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.4	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11202023		
Lab Sample ID:	JD77514-25	**Date Sampled:**	11/20/23
Matrix:	SO - Soil	**Date Received:**	11/22/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	100%		40-170%
	d5-EtFOSAA	99%		25-135%
	d7-MeFOSE	77%		10-130%
	d9-EtFOSE	69%		10-130%
	13C2-4:2FTS	104%		40-200%
	13C2-6:2FTS	112%		40-200%
	13C2-8:2FTS	83%		40-300%
	13C3-HFPO-DA	77%		40-130%

CWL 1/8/23

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N = Indicates presumptive evidence of a compound

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD77742
SAMPLING DATE(S):	November 27 and 28, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD77742-1	109-SD-0-2	X
JD77742-2	109-SD-2-12	X
JD77742-3	109-R-0-2	X
JD77742-4	109-R-2-12	X
JD77742-5	102-SD-0-2	X
JD77742-6	102-SD-212	X
JD77742-7	FD-11272023	X
JD77742-8	102-R-0-2	X
JD77742-9	102-R-2-12	X
JD77742-9MS	102-R-2-12MS	X
JD77742-9MSD	102-R-2-12MSD	X
JD77742-10	RB-11272023	X
JD77742-11	024-NS-0-2	X
JD77742-12	024-NS-2-12	X
JD77742-13	024-SD-0-2	X
JD77742-14	024-SD-2-12	X
JD77742-15	024-R-0-2	X
JD77742-16	024-R-2-12	X

LAB ID	CLIENT ID	PFAS
JD77742-17	003-SD-0-2	X
JD77742-18	003-SD-2-12	X
JD77742-19	003-R-0-2	X
JD77742-20	003-R-2-12	X
JD77742-21	020B-SD-0-2	X
JD77742-22	020B-SD-2-12	X
JD77742-23	FD-11282023	X
JD77742-24	020B-R-0-2	X
JD77742-25	020B-R-2-12	X
JD77742-25MS	020B-R-2-12MS	X
JD77742-25MSD	020B-R-2-12MSD	X
JD77742-26	013-R-0-2	X
JD77742-27	013-R-2-12	X
JD77742-28	013-SD-0-2	X
JD77742-29	013-SD-2-12	X
JD77742-30	RB-11282023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD77742

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD77742-2	109-SD-2-12	13C4PFBA	PFBA	R
JD77742-3	109-R-0-2	13C4PFBA	PFBA	R
JD77742-5	102-SD-0-2	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD77742-6	102-SD-212	13C4PFBA	PFBA	R
JD77742-7	FD-11272023	13C4PFBA	PFBA	R
JD77742-11	024-NS-0-2	13C4PFBA	PFBA	R
JD77742-13	024-SD-0-2	13C4PFBA	PFBA	R
JD77742-14	024-SD-2-12	13C4PFBA	PFBA	R
JD77742-15	024-R-0-2	13C4PFBA	PFBA	R
JD77742-16	024-R-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	R
JD77742-24	020B-R-0-2	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination, except OP50767-MB reported PFNA and PFUnA with positive results. The associated samples were non-detects for these analytes. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-11022023 and RB-11032023, were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using the following samples. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD77742-9	102-R-2-12	RPD >30%	PFBA PFHpS PFOS PFNS PFDoS ADONA 9Cl-PF3ONS	J UJ J UJ UJ UJ UJ
JD77742-9	102-R-2-12	RPD > 30%	PFEESA 5:3FTCA 7:3FTCA	UJ
		Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ
JD77742-25	020B-R-2-12	RPD > 30%	PFTeDA PFMPA PFMBA 3:3FTCA	**UJ**

VII.) Laboratory Control Samples (LCS):

LLCS, OP50767-LLCS and LCS, OP50767-LCS met all criteria. No qualification was made based on this finding.

LCS, OP50765-LCS, met all criteria. No qualification was necessary.

The following LCS recoveries were outside the 70-130% limits. Qualification for recoveries < 70% are estimated "J/UJ", unless R for EIS failure.

LCS ID	Associated Samples	Analytes
OP50766-LLCS OP50766-LCS	JD77742-1 JD77742-2 JD77742-3 JD77742-4 JD77742-5 JD77742-6 JD77742-7 JD77742-8 JD77742-9 JD77742-11 JD77742-12 JD77742-13 JD77742-14 JD77742-15 JD77742-16 JD77742-17 JD77742-18 JD77742-19	PFMPA 3:3FTCA PFDoS

OP50765-LLCS	JD77742-20 JD77742-21 JD77742-22 JD77742-23 JD77742-24 JD77742-25 JD77742-26 JD77742-27 JD77742-28 JD77742-29	PFDoS

VIII.) Field Duplicates:

One set of field duplicate samples (1102SD-2-12 / FD-11272023) and (020B-SD-2-12/FD-11282023) were identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD77742-2	109-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ
JD77742-3	109-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77742-4	109-R-2-12	13C4PFBA	PFBA	UJ
JD77742-5	102-SD-0-2	13C5PFHxA 13C3PFBS 13C24:2FTS	PFHxA 5:3FTCA 7:3FTCA PFEESA NFDHA PFBS 4:2FTS	UJ UJ UJ UJ
JD77742-6	102-SD-212	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77742-7	FD-11272023	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ

JD77742-8	102-R-0-2	13C4PFBA	PFBA	UJ
JD77742-11	024-NS-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD77742-13	024-SD-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD77742-14	024-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ
JD77742-15	024-R-0-2	13C5PFPeA D5EtFOSA D9EtFOSE	PFPeA 3:3FTCA PFMPA PFMBA EtFOSA EtFOSE	UJ UJ UJ UJ
JD77742-16	024-R-2-12	13C5PFHxA 13C24:2FTS 13C3HFPO_DA	PFHxA 5:3FTCA 7:3FTCA PFEESA NFDHA 4:2FTS HFPO-DA	UJ UJ UJ UJ UJ
JD77742-19	003-R-0-2	13C4PFBA	PFBA	UJ
JD77742-21	020B-SD-0-2	13C4PFBA	PFBA	
JD77742-24	020B-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	109-SD-0-2		
Lab Sample ID:	JD77742-1	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5360.D	1	12/01/23 19:05	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.060	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.16	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.24	0.060	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	109-SD-0-2		
Lab Sample ID:	JD77742-1	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		5-130%
	13C5-PFPeA	89%		40-130%
	13C5-PFHxA	84%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	85%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	83%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	76%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	109-SD-0-2		
Lab Sample ID:	JD77742-1	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	138%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	131%		40-200%
	13C2-6:2FTS	126%		40-200%
	13C2-8:2FTS	146%		40-300%
	13C3-HFPO-DA	78%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	109-SD-2-12		
Lab Sample ID:	JD77742-2	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	94.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5337.D	1	12/01/23 12:56	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.83	0.11	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.42	0.073	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.21	0.031	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.052	ug/kg	
335-67-1	Perfluorooctanoic acid	0.095	0.21	0.083	ug/kg	J
375-95-1	Perfluorononanoic acid	0.18	0.21	0.052	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.21	0.073	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.063	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.083	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.094	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.10	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.073	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.10	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.11	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.10	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.21	0.052	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.15	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.11	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.052	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.83	0.29	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	0.10	0.83	0.10	ug/kg	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.83	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.073	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.063	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.052	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	109-SD-2-12		
Lab Sample ID:	JD77742-2	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	94.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.083	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.14	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	0.29	ug/kg	
1691-99-2	EtFOSE	ND	2.1	0.76	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.83	0.19	ug/kg	
919005-14-4	ADONA	ND	0.83	0.13	ug/kg	
377-73-1	PFMPA	ND	0.42	0.031	ug/kg	UJ
863090-89-5	PFMBA	ND	0.42	0.063	ug/kg	UJ
151772-58-6	NFDHA	ND	0.42	0.14	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.83	0.27	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.83	0.19	ug/kg	
113507-82-7	PFEESA	ND	0.42	0.031	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.2	0.65	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.2	0.66	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	12% [a]		40-130%
	13C5-PFHxA	70%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	81%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	80%		40-130%
	13C7-PFUnDA	86%		30-130%
	13C2-PFDoDA	75%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	72%		40-135%
	13C3-PFHxS	72%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	109-SD-2-12		
Lab Sample ID:	JD77742-2	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	94.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	82%		40-130%
	13C8-FOSA	87%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	95%		40-170%
	d5-EtFOSAA	92%		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	73%		10-130%
	13C2-4:2FTS	65%		40-200%
	13C2-6:2FTS	124%		40-200%
	13C2-8:2FTS	100%		40-300%
	13C3-HFPO-DA	53%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	109-R-0-2		
Lab Sample ID:	JD77742-3	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5338.D	1	12/01/23 13:11	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.3	0.46	ug/kg	R
2706-90-3	Perfluoropentanoic acid	1.5	1.7	0.29	ug/kg	J J
307-24-4	Perfluorohexanoic acid	ND	0.83	0.12	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.83	0.21	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.83	0.33	ug/kg	
375-95-1	Perfluorononanoic acid	0.75	0.83	0.21	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.59	0.83	0.29	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.89	0.83	0.25	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.83	0.33	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.83	0.37	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.83	0.42	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.92	0.83	0.29	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.83	0.42	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.83	0.46	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.83	0.42	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.3	0.83	0.21	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.83	0.58	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.83	0.46	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.83	0.21	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	3.3	1.2	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	3.3	0.42	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	3.3	0.79	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.83	0.29	ug/kg	
31506-32-8	MeFOSA	ND	0.83	0.25	ug/kg	
4151-50-2	EtFOSA	ND	0.83	0.21	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	109-R-0-2		
Lab Sample ID:	JD77742-3	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.83	0.33	ug/kg	
2991-50-6	EtFOSAA	ND	0.83	0.54	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	8.3	1.2	ug/kg	
1691-99-2	EtFOSE	ND	8.3	3.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	3.3	0.75	ug/kg	
919005-14-4	ADONA	ND	3.3	0.50	ug/kg	
377-73-1	PFMPA	ND	1.7	0.12	ug/kg	UJ
863090-89-5	PFMBA	ND	1.7	0.25	ug/kg	UJ
151772-58-6	NFDHA	ND	1.7	0.54	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	3.3	1.1	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	3.3	0.75	ug/kg	
113507-82-7	PFEESA	ND	1.7	0.12	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	4.2	1.0	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	21	2.6	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	21	2.6	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	41%		40-130%
	13C5-PFHxA	67%		40-130%
	13C4-PFHpA	70%		40-130%
	13C8-PFOA	71%		40-130%
	13C9-PFNA	77%		40-130%
	13C6-PFDA	69%		40-130%
	13C7-PFUnDA	82%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	66%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	109-R-0-2		
Lab Sample ID:	JD77742-3	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	66%		40-130%
	13C8-FOSA	61%		40-130%
	d3-MeFOSA	32%		10-130%
	d5-EtFOSA	12%		10-130%
	d3-MeFOSAA	85%		40-170%
	d5-EtFOSAA	96%		25-135%
	d7-MeFOSE	21%		10-130%
	d9-EtFOSE	14%		10-130%
	13C2-4:2FTS	142%		40-200%
	13C2-6:2FTS	173%		40-200%
	13C2-8:2FTS	162%		40-300%
	13C3-HFPO-DA	47%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	109-R-2-12		
Lab Sample ID:	JD77742-4	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5339.D	1	12/01/23 13:26	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.069	ug/kg	
335-67-1	Perfluorooctanoic acid	0.17	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.083	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	0.071	0.28	0.069	ug/kg	J J
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	109-R-2-12		
Lab Sample ID:	JD77742-4	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	U
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	33%		5-130%
	13C5-PFPeA	81%		40-130%
	13C5-PFHxA	86%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	84%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	84%		30-130%
	13C2-PFDoDA	80%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	81%		40-135%
	13C3-PFHxS	86%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	109-R-2-12		
Lab Sample ID:	JD77742-4	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	51%		10-130%
	d3-MeFOSAA	151%		40-170%
	d5-EtFOSAA	168% [a]		25-135%
	d7-MeFOSE	66%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	168%		40-200%
	13C2-6:2FTS	156%		40-200%
	13C2-8:2FTS	163%		40-300%
	13C3-HFPO-DA	62%		40-130%

(a) Outside control limits due to possible matrix interference.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	102-SD-0-2		
Lab Sample ID:	JD77742-5	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5340.D	1	12/01/23 17:18	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.5	0.21	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.76	0.13	ug/kg	R
307-24-4	Perfluorohexanoic acid	ND	0.38	0.057	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.29	0.38	0.095	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.52	0.38	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	0.48	0.38	0.095	ug/kg	
335-76-2	Perfluorodecanoic acid	0.19	0.38	0.13	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.15	0.38	0.11	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.38	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.38	0.17	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.38	0.19	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.38	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.38	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.38	0.21	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.38	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.38	0.095	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.38	0.27	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.38	0.21	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.38	0.095	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.53	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.19	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.36	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.38	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.38	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.38	0.095	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	102-SD-0-2		
Lab Sample ID:	JD77742-5	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.38	0.15	ug/kg	
2991-50-6	EtFOSAA	ND	0.38	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.8	0.53	ug/kg	
1691-99-2	EtFOSE	ND	3.8	1.4	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.34	ug/kg	
919005-14-4	ADONA	ND	1.5	0.23	ug/kg	
377-73-1	PFMPA	ND	0.76	0.057	ug/kg	R
863090-89-5	PFMBA	ND	0.76	0.11	ug/kg	R
151772-58-6	NFDHA	ND	0.76	0.25	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.49	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.34	ug/kg	
113507-82-7	PFEESA	ND	0.76	0.057	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.46	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.5	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.5	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	7% [a]		40-130%
	13C5-PFHxA	40%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	68%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	47%		40-135%
	13C3-PFHxS	82%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	102-SD-0-2		
Lab Sample ID:	JD77742-5	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	52.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	127%		40-170%
	d5-EtFOSAA	143% [a]		25-135%
	d7-MeFOSE	77%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	26% [a]		40-200%
	13C2-6:2FTS	101%		40-200%
	13C2-8:2FTS	167%		40-300%
	13C3-HFPO-DA	36% [a]		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	102-SD-2-12		
Lab Sample ID:	JD77742-6	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5341.D	1	12/01/23 13:58	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.18	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.73	0.67	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.12	0.33	0.050	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.33	0.083	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.33	0.13	ug/kg	J
375-95-1	Perfluorononanoic acid	0.27	0.33	0.083	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.33	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.33	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.33	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.33	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.33	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.33	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.33	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.33	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.33	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.33	0.083	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.33	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.33	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.33	0.083	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	0.18	1.3	0.17	ug/kg	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.33	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.33	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.33	0.083	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	102-SD-2-12		
Lab Sample ID:	JD77742-6	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.33	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.33	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.3	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.050	ug/kg	UJ
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.43	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.3	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.3	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	18% [a]		40-130%
	13C5-PFHxA	79%		40-130%
	13C4-PFHpA	86%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	72%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	102-SD-2-12		
Lab Sample ID:	JD77742-6	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	60.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	76%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	60%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	117%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	80%		40-200%
	13C2-6:2FTS	121%		40-200%
	13C2-8:2FTS	140%		40-300%
	13C3-HFPO-DA	77%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	FD-11272023		
Lab Sample ID:	JD77742-7	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5344.D	1	12/01/23 14:44	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.20	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.72	0.13	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.12	0.36	0.054	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.14	0.36	0.089	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.21	0.36	0.14	ug/kg	J
375-95-1	Perfluorononanoic acid	0.18	0.36	0.089	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.36	0.13	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.36	0.11	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.36	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.36	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.36	0.18	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.36	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.36	0.18	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.36	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.36	0.18	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.36	0.089	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.36	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.36	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.36	0.089	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.50	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.18	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.34	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.36	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.36	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.36	0.089	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11272023		
Lab Sample ID:	JD77742-7	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.36	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.36	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.6	0.50	ug/kg	
1691-99-2	EtFOSE	ND	3.6	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.32	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.72	0.054	ug/kg	UJ
863090-89-5	PFMBA	ND	0.72	0.11	ug/kg	UJ
151772-58-6	NFDHA	ND	0.72	0.23	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.47	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.32	ug/kg	
113507-82-7	PFEESA	ND	0.72	0.054	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.8	0.43	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.9	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.9	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	20% [a]		40-130%
	13C5-PFHxA	84%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	87%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11272023		
Lab Sample ID:	JD77742-7	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	93%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	133%		40-170%
	d5-EtFOSAA	138% [a]		25-135%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	83%		40-200%
	13C2-6:2FTS	154%		40-200%
	13C2-8:2FTS	140%		40-300%
	13C3-HFPO-DA	83%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	102-R-0-2		
Lab Sample ID:	JD77742-8	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5345.D	1	12/01/23 14:59	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.8	0.25	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.22	0.92	0.16	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.46	0.069	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.52	0.46	0.11	ug/kg	
335-67-1	Perfluorooctanoic acid	0.71	0.46	0.18	ug/kg	
375-95-1	Perfluorononanoic acid	1.2	0.46	0.11	ug/kg	
335-76-2	Perfluorodecanoic acid	0.41	0.46	0.16	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.78	0.46	0.14	ug/kg	
307-55-1	Perfluorododecanoic acid	0.37	0.46	0.18	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.41	0.46	0.21	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.46	0.23	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.18	0.46	0.16	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.46	0.23	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.46	0.25	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.46	0.23	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.0	0.46	0.11	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.46	0.32	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.46	0.25	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.46	0.11	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.8	0.64	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.8	0.23	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.8	0.43	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.46	0.16	ug/kg	
31506-32-8	MeFOSA	ND	0.46	0.14	ug/kg	
4151-50-2	EtFOSA	ND	0.46	0.11	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	102-R-0-2		
Lab Sample ID:	JD77742-8	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.46	0.18	ug/kg	
2991-50-6	EtFOSAA	ND	0.46	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	4.6	0.64	ug/kg	
1691-99-2	EtFOSE	ND	4.6	1.7	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.8	0.41	ug/kg	
919005-14-4	ADONA	ND	1.8	0.27	ug/kg	
377-73-1	PFMPA	ND	0.92	0.069	ug/kg	UJ
863090-89-5	PFMBA	ND	0.92	0.14	ug/kg	
151772-58-6	NFDHA	ND	0.92	0.30	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.8	0.59	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.8	0.41	ug/kg	
113507-82-7	PFEESA	ND	0.92	0.069	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.3	0.55	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	11	1.4	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	11	1.4	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	72%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	84%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	83%		30-130%
	13C2-PFDoDA	79%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	102-R-0-2		
Lab Sample ID:	JD77742-8	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	134%		40-170%
	d5-EtFOSAA	150% [a]		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	65%		10-130%
	13C2-4:2FTS	159%		40-200%
	13C2-6:2FTS	161%		40-200%
	13C2-8:2FTS	179%		40-300%
	13C3-HFPO-DA	72%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	102-R-2-12		
Lab Sample ID:	JD77742-9	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5346.D	1	12/01/23 15:14	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.73	1.2	0.17	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.25	0.61	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.27	0.30	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.41	0.30	0.076	ug/kg	
335-67-1	Perfluorooctanoic acid	0.67	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.40	0.30	0.076	ug/kg	
335-76-2	Perfluorodecanoic acid	0.19	0.30	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.25	0.30	0.091	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.21	0.30	0.11	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	UJ
1763-23-1	Perfluorooctanesulfonic acid	1.3	0.30	0.076	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	UJ
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	102-R-2-12		
Lab Sample ID:	JD77742-9	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	UJ
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	UJ
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.95	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	67%		5-130%
	13C5-PFPeA	85%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	83%		40-130%
	13C7-PFUnDA	79%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	102-R-2-12		
Lab Sample ID:	JD77742-9	**Date Sampled:**	11/27/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	127%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	136%		40-200%
	13C2-8:2FTS	158%		40-300%
	13C3-HFPO-DA	75%		40-130%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11272023		
Lab Sample ID:	JD77742-10	**Date Sampled:**	11/27/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5288.D	1	11/30/23 23:40	PC	11/30/23 03:03	OP50767	T2Q96
Run #2							

	Initial Volume	Final Volume
Run #1	548 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0073	0.00085	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0036	0.00067	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0018	0.00026	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0018	0.00046	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0018	0.00068	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0018	0.00036	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0018	0.00057	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0018	0.00050	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0018	0.00070	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0018	0.00072	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0018	0.00069	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0018	0.00060	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0018	0.00092	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0018	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0018	0.00089	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0018	0.00039	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0018	0.0013	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0018	0.00099	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0018	0.00036	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0073	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0073	0.00083	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0073	0.0013	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0018	0.00063	ug/l	
31506-32-8	MeFOSA	ND	0.0018	0.00058	ug/l	
4151-50-2	EtFOSA	ND	0.0018	0.00048	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11272023		
Lab Sample ID:	JD77742-10	**Date Sampled:**	11/27/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0018	0.00047	ug/l	
2991-50-6	EtFOSAA	ND	0.0018	0.00083	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.018	0.0025	ug/l	
1691-99-2	EtFOSE	ND	0.018	0.0034	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0073	0.0016	ug/l	
919005-14-4	ADONA	ND	0.0073	0.0011	ug/l	
377-73-1	PFMPA	ND	0.0036	0.00027	ug/l	
863090-89-5	PFMBA	ND	0.0036	0.00051	ug/l	
151772-58-6	NFDHA	ND	0.0036	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0073	0.0022	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0073	0.0016	ug/l	
113507-82-7	PFEESA	ND	0.0036	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0091	0.0022	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.046	0.0065	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.046	0.0056	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	99%		5-130%
	13C5-PFPeA	107%		40-130%
	13C5-PFHxA	107%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	103%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11272023		
Lab Sample ID:	JD77742-10	**Date Sampled:**	11/27/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	86%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	103%		40-170%
	d5-EtFOSAA	110%		25-135%
	d7-MeFOSE	96%		10-130%
	d9-EtFOSE	96%		10-130%
	13C2-4:2FTS	99%		40-200%
	13C2-6:2FTS	131%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	103%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	024-NS-0-2		
Lab Sample ID:	JD77742-11	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5347.D	1	12/01/23 15:29	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	1.2	0.49	0.086	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	0.11	0.25	0.098	ug/kg	J
375-95-1	Perfluorononanoic acid	0.27	0.25	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	0.13	0.25	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.14	0.25	0.074	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.50	0.25	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-NS-0-2		
Lab Sample ID:	JD77742-11	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	12% [a]		40-130%
	13C5-PFHxA	57%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	82%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	69%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-NS-0-2		
Lab Sample ID:	JD77742-11	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	85%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	104%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	73%		40-200%
	13C2-6:2FTS	108%		40-200%
	13C2-8:2FTS	102%		40-300%
	13C3-HFPO-DA	54%		40-130%

(a) Outside control limits due to possible matrix interference.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	024-NS-2-12		
Lab Sample ID:	JD77742-12	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5351.D	1	12/01/23 16:31	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.41	1.0	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.16	0.52	0.091	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.19	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.33	0.26	0.065	ug/kg	
335-67-1	Perfluorooctanoic acid	0.74	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	0.30	0.26	0.065	ug/kg	
335-76-2	Perfluorodecanoic acid	0.099	0.26	0.091	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.56	0.26	0.065	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-NS-2-12		
Lab Sample ID:	JD77742-12	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	82%		5-130%
	13C5-PFPeA	88%		40-130%
	13C5-PFHxA	85%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	79%		40-130%
	13C7-PFUnDA	86%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-NS-2-12		
Lab Sample ID:	JD77742-12	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	83%		40-130%
	13C8-FOSA	79%		40-130%
	d3-MeFOSA	64%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	109%		40-170%
	d5-EtFOSAA	118%		25-135%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	63%		10-130%
	13C2-4:2FTS	139%		40-200%
	13C2-6:2FTS	133%		40-200%
	13C2-8:2FTS	159%		40-300%
	13C3-HFPO-DA	83%		40-130%

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	024-SD-0-2		
Lab Sample ID:	JD77742-13	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5352.D	1	12/01/23 16:46	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.12	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.27	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	0.35	0.25	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.36	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	0.19	0.25	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.14	0.25	0.074	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.63	0.25	0.062	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-SD-0-2		
Lab Sample ID:	JD77742-13	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [a]		5-130%
	13C5-PFPeA	17% [a]		40-130%
	13C5-PFHxA	74%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	86%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-SD-0-2		
Lab Sample ID:	JD77742-13	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	87%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	136%		40-170%
	d5-EtFOSAA	123%		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	78%		40-200%
	13C2-6:2FTS	143%		40-200%
	13C2-8:2FTS	135%		40-300%
	13C3-HFPO-DA	72%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	024-SD-2-12		
Lab Sample ID:	JD77742-14	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5353.D	1	12/01/23 17:02	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.95	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.083	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.078	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.24	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.12	0.24	0.095	ug/kg	J
375-95-1	Perfluorononanoic acid	0.080	0.24	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.083	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.071	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.095	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.083	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.24	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.059	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.95	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.95	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.95	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.083	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.071	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-SD-2-12		
Lab Sample ID:	JD77742-14	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.095	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.95	0.21	ug/kg	
919005-14-4	ADONA	ND	0.95	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.071	ug/kg	UJ
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.95	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.95	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	3% [a]		5-130%
	13C5-PFPeA	13% [a]		40-130%
	13C5-PFHxA	65%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	75%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-SD-2-12		
Lab Sample ID:	JD77742-14	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	109%		40-170%
	d5-EtFOSAA	118%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	53%		40-200%
	13C2-6:2FTS	114%		40-200%
	13C2-8:2FTS	125%		40-300%
	13C3-HFPO-DA	61%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	024-R-0-2		
Lab Sample ID:	JD77742-15	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5354.D	1	12/01/23 17:33	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.4	0.46	ug/kg	R
2706-90-3	Perfluoropentanoic acid	2.1	1.7	0.29	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.84	0.13	ug/kg	
375-85-9	Perfluoroheptanoic acid	1.7	0.84	0.21	ug/kg	
335-67-1	Perfluorooctanoic acid	2.1	0.84	0.34	ug/kg	
375-95-1	Perfluorononanoic acid	2.4	0.84	0.21	ug/kg	
335-76-2	Perfluorodecanoic acid	0.93	0.84	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.83	0.84	0.25	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.84	0.34	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.84	0.38	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.84	0.42	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.84	0.29	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.84	0.42	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.84	0.46	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.84	0.42	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	6.2	0.84	0.21	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.84	0.59	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.84	0.46	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.84	0.21	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	3.4	1.2	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	3.4	0.42	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	3.4	0.80	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.84	0.29	ug/kg	
31506-32-8	MeFOSA	ND	0.84	0.25	ug/kg	
4151-50-2	EtFOSA	ND	0.84	0.21	ug/kg	UJ

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-R-0-2		
Lab Sample ID:	JD77742-15	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.84	0.34	ug/kg	
2991-50-6	EtFOSAA	ND	0.84	0.55	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	8.4	1.2	ug/kg	
1691-99-2	EtFOSE	ND	8.4	3.1	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	3.4	0.76	ug/kg	
919005-14-4	ADONA	ND	3.4	0.50	ug/kg	
377-73-1	PFMPA	ND	1.7	0.13	ug/kg	UJ
863090-89-5	PFMBA	ND	1.7	0.25	ug/kg	UJ
151772-58-6	NFDHA	ND	1.7	0.55	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	3.4	1.1	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	3.4	0.76	ug/kg	
113507-82-7	PFEESA	ND	1.7	0.13	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	4.2	1.0	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	21	2.6	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	21	2.6	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	37% [a]		40-130%
	13C5-PFHxA	75%		40-130%
	13C4-PFHpA	83%		40-130%
	13C8-PFOA	82%		40-130%
	13C9-PFNA	81%		40-130%
	13C6-PFDA	84%		40-130%
	13C7-PFUnDA	75%		30-130%
	13C2-PFDoDA	70%		10-130%
	13C2-PFTeDA	56%		10-130%
	13C3-PFBS	75%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-R-0-2		
Lab Sample ID:	JD77742-15	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	23.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	82%		40-130%
	13C8-FOSA	84%		40-130%
	d3-MeFOSA	56%		10-130%
	d5-EtFOSA	47%		10-130%
	d3-MeFOSAA	120%		40-170%
	d5-EtFOSAA	133%		25-135%
	d7-MeFOSE	56%		10-130%
	d9-EtFOSE	42%		10-130%
	13C2-4:2FTS	126%		40-200%
	13C2-6:2FTS	137%		40-200%
	13C2-8:2FTS	165%		40-300%
	13C3-HFPO-DA	61%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	024-R-2-12		
Lab Sample ID:	JD77742-16	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5355.D	1	12/01/23 17:49	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.090	ug/kg	R
307-24-4	Perfluorohexanoic acid	0.078	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.15	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.20	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	UJ
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-R-2-12		
Lab Sample ID:	JD77742-16	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	U J
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	R
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	R
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	R
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	2% [a]		5-130%
	13C5-PFPeA	8% [a]		40-130%
	13C5-PFHxA	48%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	78%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	81%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	62%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	024-R-2-12		
Lab Sample ID:	JD77742-16	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	137%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	38% [a]		40-200%
	13C2-6:2FTS	121%		40-200%
	13C2-8:2FTS	142%		40-300%
	13C3-HFPO-DA	42%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	003-SD-0-2		
Lab Sample ID:	JD77742-17	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5356.D	1	12/01/23 18:04	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.17	0.97	0.13	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.13	0.24	0.085	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.10	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.24	0.061	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	003-SD-0-2		
Lab Sample ID:	JD77742-17	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		5-130%
	13C5-PFPeA	93%		40-130%
	13C5-PFHxA	87%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	83%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	003-SD-0-2		
Lab Sample ID:	JD77742-17	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	125%		40-170%
	d5-EtFOSAA	130%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	126%		40-200%
	13C2-6:2FTS	132%		40-200%
	13C2-8:2FTS	142%		40-300%
	13C3-HFPO-DA	89%		40-130%

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	003-SD-2-12		
Lab Sample ID:	JD77742-18	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5357.D	1	12/01/23 18:19	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.92	0.13	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.080	ug/kg	
307-24-4	Perfluorohexanoic acid	0.038	0.23	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.073	0.23	0.057	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.096	0.23	0.092	ug/kg	J
375-95-1	Perfluorononanoic acid	0.18	0.23	0.057	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.080	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.069	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.092	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.080	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.18	0.23	0.057	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.057	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.92	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.92	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.92	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.080	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.069	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.057	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	003-SD-2-12		
Lab Sample ID:	JD77742-18	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.092	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.84	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.92	0.21	ug/kg	
919005-14-4	ADONA	ND	0.92	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.069	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.92	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.92	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.7	0.71	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.7	0.72	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		5-130%
	13C5-PFPeA	91%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	83%		40-130%
	13C7-PFUnDA	87%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	003-SD-2-12		
Lab Sample ID:	JD77742-18	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	85.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	86%		40-130%
	d3-MeFOSA	62%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	103%		40-170%
	d5-EtFOSAA	98%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	73%		10-130%
	13C2-4:2FTS	106%		40-200%
	13C2-6:2FTS	122%		40-200%
	13C2-8:2FTS	103%		40-300%
	13C3-HFPO-DA	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	003-R-0-2		
Lab Sample ID:	JD77742-19	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5358.D	1	12/01/23 18:34	PC	11/30/23 16:00	OP50766	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.60	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.10	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.28	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.79	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.45	0.30	0.075	ug/kg	
335-76-2	Perfluorodecanoic acid	0.14	0.30	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.095	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	003-R-0-2		
Lab Sample ID:	JD77742-19	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	87%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	80%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	85%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	74%		10-130%
	13C3-PFBS	87%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	003-R-0-2		
Lab Sample ID:	JD77742-19	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	123%		40-170%
	d5-EtFOSAA	123%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	75%		10-130%
	13C2-4:2FTS	118%		40-200%
	13C2-6:2FTS	156%		40-200%
	13C2-8:2FTS	163%		40-300%
	13C3-HFPO-DA	81%		40-130%

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	003-R-2-12		
Lab Sample ID:	JD77742-20	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5367.D	1	12/01/23 20:52	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.64	1.2	0.16	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.18	0.60	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.19	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.45	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.21	0.30	0.075	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.090	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.35	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	003-R-2-12		
Lab Sample ID:	JD77742-20	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	61%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	88%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	79%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	80%		40-135%
	13C3-PFHxS	82%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	003-R-2-12		
Lab Sample ID:	JD77742-20	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	62%		10-130%
	d3-MeFOSAA	148%		40-170%
	d5-EtFOSAA	141% [a]		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	142%		40-200%
	13C2-6:2FTS	143%		40-200%
	13C2-8:2FTS	149%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	020B-SD-0-2		
Lab Sample ID:	JD77742-21	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5369.D	1	12/01/23 21:22	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.29	0.043	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.097	0.29	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.29	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.23	0.29	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.29	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.071	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	020B-SD-0-2		
Lab Sample ID:	JD77742-21	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.90	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	43%		5-130%
	13C5-PFPeA	79%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	97%		10-130%
	13C3-PFBS	95%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	020B-SD-0-2		
Lab Sample ID:	JD77742-21	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	128%		40-170%
	d5-EtFOSAA	134%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	111%		40-200%
	13C2-6:2FTS	131%		40-200%
	13C2-8:2FTS	144%		40-300%
	13C3-HFPO-DA	92%		40-130%

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	020B-SD-2-12		
Lab Sample ID:	JD77742-22	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5370.D	1	12/01/23 21:38	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.097	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.086	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.28	0.069	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	020B-SD-2-12		
Lab Sample ID:	JD77742-22	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	
863090-89-5	PFMBA	ND	0.56	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	85%		5-130%
	13C5-PFPeA	101%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	83%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	020B-SD-2-12		
Lab Sample ID:	JD77742-22	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	118%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	163%		40-170%
	d5-EtFOSAA	154% [a]		25-135%
	d7-MeFOSE	87%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	123%		40-200%
	13C2-6:2FTS	157%		40-200%
	13C2-8:2FTS	139%		40-300%
	13C3-HFPO-DA	88%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11282023		
Lab Sample ID:	JD77742-23	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5371.D	1	12/01/23 21:53	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.090	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.10	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11282023		
Lab Sample ID:	JD77742-23	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		5-130%
	13C5-PFPeA	102%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	77%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11282023		
Lab Sample ID:	JD77742-23	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	121%		40-130%
	13C8-FOSA	123%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	148%		40-170%
	d5-EtFOSAA	155% [a]		25-135%
	d7-MeFOSE	94%		10-130%
	d9-EtFOSE	94%		10-130%
	13C2-4:2FTS	107%		40-200%
	13C2-6:2FTS	107%		40-200%
	13C2-8:2FTS	123%		40-300%
	13C3-HFPO-DA	90%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	020B-R-0-2		
Lab Sample ID:	JD77742-24	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	36.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5372.D	1	12/01/23 22:08	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	2.2	0.30	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.92	1.1	0.19	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.52	0.55	0.082	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.58	0.55	0.14	ug/kg	
335-67-1	Perfluorooctanoic acid	1.2	0.55	0.22	ug/kg	
375-95-1	Perfluorononanoic acid	0.76	0.55	0.14	ug/kg	
335-76-2	Perfluorodecanoic acid	0.32	0.55	0.19	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.39	0.55	0.16	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.55	0.22	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.25	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.27	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.28	0.55	0.19	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.55	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.8	0.55	0.14	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.55	0.38	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.30	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.55	0.14	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.2	0.77	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.2	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.2	0.52	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.19	ug/kg	
31506-32-8	MeFOSA	ND	0.55	0.16	ug/kg	
4151-50-2	EtFOSA	ND	0.55	0.14	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	020B-R-0-2		
Lab Sample ID:	JD77742-24	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	36.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.55	0.22	ug/kg	
2991-50-6	EtFOSAA	ND	0.55	0.36	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	5.5	0.77	ug/kg	
1691-99-2	EtFOSE	ND	5.5	2.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	2.2	0.49	ug/kg	
919005-14-4	ADONA	ND	2.2	0.33	ug/kg	
377-73-1	PFMPA	ND	1.1	0.082	ug/kg	UJ
863090-89-5	PFMBA	ND	1.1	0.16	ug/kg	UJ
151772-58-6	NFDHA	ND	1.1	0.36	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.2	0.71	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.2	0.49	ug/kg	
113507-82-7	PFEESA	ND	1.1	0.082	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.7	0.66	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	14	1.7	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	14	1.7	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	38% [a]		40-130%
	13C5-PFHxA	82%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	83%		40-130%
	13C6-PFDA	84%		40-130%
	13C7-PFUnDA	81%		30-130%
	13C2-PFDoDA	73%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	80%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	020B-R-0-2		
Lab Sample ID:	JD77742-24	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	36.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	61%		10-130%
	d3-MeFOSAA	143%		40-170%
	d5-EtFOSAA	134%		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	68%		10-130%
	13C2-4:2FTS	127%		40-200%
	13C2-6:2FTS	152%		40-200%
	13C2-8:2FTS	186%		40-300%
	13C3-HFPO-DA	71%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	020B-R-2-12		
Lab Sample ID:	JD77742-25	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5373.D	1	12/01/23 22:23	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.37	1.4	0.19	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.12	0.69	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.35	0.052	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.21	0.35	0.086	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.37	0.35	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.21	0.35	0.086	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.35	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.35	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.35	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.35	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.35	0.17	ug/kg	UJ
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.35	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.35	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.35	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.35	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.35	0.086	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.35	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.35	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.35	0.086	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.35	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.35	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.35	0.086	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	020B-R-2-12		
Lab Sample ID:	JD77742-25	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.35	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.35	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.5	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.5	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.69	0.052	ug/kg	UJ
863090-89-5	PFMBA	ND	0.69	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.69	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.45	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.69	0.052	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.6	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.6	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	68%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	84%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	020B-R-2-12		
Lab Sample ID:	JD77742-25	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	126%		40-170%
	d5-EtFOSAA	145% [a]		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	137%		40-200%
	13C2-6:2FTS	152%		40-200%
	13C2-8:2FTS	166%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	013-R-0-2		
Lab Sample ID:	JD77742-26	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5374.D	1	12/01/23 22:38	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.24	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.095	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.59	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	013-R-0-2		
Lab Sample ID:	JD77742-26	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		5-130%
	13C5-PFPeA	106%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	013-R-0-2		
Lab Sample ID:	JD77742-26	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	107%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	121%		40-170%
	d5-EtFOSAA	118%		25-135%
	d7-MeFOSE	90%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	104%		40-200%
	13C2-6:2FTS	98%		40-200%
	13C2-8:2FTS	99%		40-300%
	13C3-HFPO-DA	100%		40-130%

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	013-R-2-12		
Lab Sample ID:	JD77742-27	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5375.D	1	12/01/23 22:54	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	0.063	0.26	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.10	0.26	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.26	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.19	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.079	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.46	0.26	0.066	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	013-R-2-12		
Lab Sample ID:	JD77742-27	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.53	0.079	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	78%		5-130%
	13C5-PFPeA	89%		40-130%
	13C5-PFHxA	84%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	82%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	013-R-2-12		
Lab Sample ID:	JD77742-27	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	85%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	64%		10-130%
	d3-MeFOSAA	107%		40-170%
	d5-EtFOSAA	102%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	73%		10-130%
	13C2-4:2FTS	116%		40-200%
	13C2-6:2FTS	128%		40-200%
	13C2-8:2FTS	137%		40-300%
	13C3-HFPO-DA	90%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	013-SD-0-2		
Lab Sample ID:	JD77742-28	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5376.D	1	12/01/23 23:09	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.092	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.092	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.079	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.092	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.26	0.066	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.092	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	013-SD-0-2		
Lab Sample ID:	JD77742-28	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.96	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.24	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	
863090-89-5	PFMBA	ND	0.52	0.079	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.81	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	82%		5-130%
	13C5-PFPeA	97%		40-130%
	13C5-PFHxA	92%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	74%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	013-SD-0-2		
Lab Sample ID:	JD77742-28	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	86%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	115%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	111%		40-200%
	13C2-6:2FTS	99%		40-200%
	13C2-8:2FTS	97%		40-300%
	13C3-HFPO-DA	90%		40-130%

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	013-SD-2-12		
Lab Sample ID:	JD77742-29	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5377.D	1	12/01/23 23:24	PC	12/01/23 07:00	OP50765	T2Q96
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.081	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.23	0.058	ug/kg	
335-67-1	Perfluorooctanoic acid	0.11	0.23	0.093	ug/kg	J
375-95-1	Perfluorononanoic acid	0.088	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	013-SD-2-12		
Lab Sample ID:	JD77742-29	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	97%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	84%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	013-SD-2-12		
Lab Sample ID:	JD77742-29	**Date Sampled:**	11/28/23
Matrix:	SO - Soil	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	84.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	109%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	94%		40-200%
	13C2-6:2FTS	122%		40-200%
	13C2-8:2FTS	107%		40-300%
	13C3-HFPO-DA	96%		40-130%

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11282023		
Lab Sample ID:	JD77742-30	**Date Sampled:**	11/28/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5289.D	1	11/30/23 23:55	PC	11/30/23 03:03	OP50767	T2Q96
Run #2							

	Initial Volume	Final Volume
Run #1	533 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0075	0.00087	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0038	0.00068	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00047	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00070	ug/l	
375-95-1	Perfluorononanoic acid	0.00072	0.0019	0.00038	ug/l	J
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00058	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00052	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00072	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00074	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00071	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00062	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00095	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00092	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0075	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0075	0.00085	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0075	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00065	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00060	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00050	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11282023		
Lab Sample ID:	JD77742-30	**Date Sampled:**	11/28/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00048	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00085	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0075	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0075	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00053	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0075	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0075	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0094	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.047	0.0067	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.047	0.0058	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	98%		5-130%
	13C5-PFPeA	102%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11282023		
Lab Sample ID:	JD77742-30	**Date Sampled:**	11/28/23
Matrix:	AQ - Equipment Blank	**Date Received:**	11/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	106%		40-170%
	d5-EtFOSAA	108%		25-135%
	d7-MeFOSE	93%		10-130%
	d9-EtFOSE	97%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	103%		40-200%
	13C2-8:2FTS	125%		40-300%
	13C3-HFPO-DA	105%		40-130%

CWL 1/12/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD77883
SAMPLING DATE(S):	November 29 and 30, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD77883-1	019B-NS-0-2	X
JD77883-2	019B-NS-2-12	X
JD77883-3	019B-SD-0-2	X
JD77883-4	019B-SD-2-12	X
JD77883-5	019B-R-0-2	X
JD77883-6	019B-R-2-12	X
JD77883-7	010C-SD-0-2	X
JD77883-8	010C-SD-2-12	X
JD77883-8MS	010C-SD-2-12MS	X
JD77883-8MSD	010C-SD-2-12MSD	X
JD77883-9	010C-R-0-2	X
JD77883-10	010C-R-2-12	X
JD77883-11	017C-SD-0-2	X
JD77883-12	017C-SD-2-12	X
JD77883-13	017C-R-0-2	X
JD77883-14	017R-R-2-12	X
JD77883-15	004A-SD-0-2	X
JD77883-16	004A-SD-2-12	X

LAB ID	CLIENT ID	PFAS
JD77883-17	FD-11292023	X
JD77883-18	004A-R-0-2	X
JD77883-19	004A-R-2-12	X
JD77883-169MS	004A-R-2-12MS	X
JD77883-19MSD	004A-R-2-12MSD	X
JD77883-20	RB-11292023	X
JD77883-21	008A-NS-0-2	X
JD77883-22	008A-NS-2-12	X
JD77883-23	008A-SD-0-2	X
JD77883-24	008A-SD-2-12	X
JD77883-25	008A-R-0-2	X
JD77883-26	008A-R-2-12	X
JD77883-27	023-SD-0-2	X
JD77883-28	023-SD-2-12	X
JD77883-29	023-R-0-2	X
JD77883-30	023-R-2-12	X
JD77883-31	018-SD-0-2	X
JD77883-32	018-SD-2-12	X
JD77883-33	018-R-0-2	X
JD77883-34	018-R-212	X
JD77883-35	124C-SD-0-2	X
JD77883-36	124C-SD-2-12	X
JD77883-37	FD-11302023	X
JD77883-38	124C-R-0-2	X
JD77883-39	124C-R-2-12	X
JD77883-39MS	124C-R-2-12MS	X
JD77883-39MSD	124C-R-2-12MSD	X
JD77883-40	RB-11302023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD77883

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD77883-5	019B-R-0-2	13C4PFBA	PFBA	R
JD77883-6	019B-R-2-12	13C4PFBA	PFBA	R
JD77883-8	010C-SD-2-12	13C4PFBA	PFBA	R
JD77883-9	010C-R-0-2	13C4PFBA	PFBA	R
JD77883-10	010C-R-2-12	13C4PFBA	PFBA	R
JD77883-11	017C-SD-0-2	13C4PFBA	PFBA	R
JD77883-25	008A-R-0-2	13C4PFBA	PFBA	R
JD77883-26	008A-R-2-12	13C4PFBA	PFBA	R
JD77883-29	023-R-0-2	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-11292023 and RB-11302023, were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD76131-19/119-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD77883-8	010C-SD-2-12	RPD > 30%	6:2 FTS	UJ
		control limit of 70%	PFMPA 3:3FTCA	UJ UJ
JD77883-19	004A-R-2-12	RPD > 30%	PFMPA PFMBA 3:3FTCA	UJ UJ UJ

LAB ID	CLIENT ID	QC Failure	Analyte	Qualification
JD77883-19	004A-R-2-12	control limit of 70%	PFMPA	UJ
JD77883-39	124C-R-2-12	RPD > 30%	MeFOSA	UJ
		control limit of 70%	PFMPA 3:3FTCA	UJ UJ

VII.) Laboratory Control Samples (LCS):

LLCS, OP50852-LCS and LCS, OP50852-LCS met all criteria. No qualification was made based on this finding.

LCS, OP50889-LCS, met all criteria. No qualification was necessary.

The following LCS recoveries were outside the 70-130% limits. Qualification for recoveries < 70% are estimated "J/UJ".

LCS ID	Associated Samples	Analytes
OP50866-LLCS OP50866-LCS	JD77883-1 JD77883-2 JD77883-3 JD77883-4 JD77883-5 JD77883-6 JD77883-7 JD77883-8 JD77883-9 JD77883-10 JD77883-11 JD77883-12 JD77883-13 JD77883-14 JD77883-15 JD77883-16	PFMPA 3:3FTCA
OP50850-LLCS OP50850-LCS	JD77883-17 JD77883-18 JD77883-19 JD77883-21 JD77883-22 JD77883-23 JD77883-24 JD77883-25 JD77883-26 JD77883-27 JD77883-28 JD77883-29 JD77883-30 JD77883-31 JD77883-32 JD77883-33	PFMPA 3:3FTCA

LCS ID	Associated Samples	Analytes
OP50850-LLCS OP50850-LCS	JD77883-34 JD77883-35 JD77883-36	PFMPA 3:3FTCA
OP50889-LLCS	JD77883-37 JD77883-38 JD77883-39	PFHxA PFMPA 3:3FTCA

VIII.) Field Duplicates:

Two sets of field duplicate samples (004A-SD-2-12 / FD-11292023) and (124C-SD-2-12/FD-11302023) were identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD77883-1	019B-NS-0-2	13C4PFBA	PFBA	UJ
JD77883-2	019B-NS-2-12	13C4PFBA	PFBA	UJ
JD77883-3	019B-SD-0-2	13C4PFBA	PFBA	UJ
JD77883-4	019B-SD-2-12	13C4PFBA	PFBA	UJ
JD77883-5	019B-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77883-7	010C-SD-0-2	13C4PFBA	PFBA	UJ
JD77883-8	010C-SD-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77883-9	010C-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77883-10	010C-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77883-11	017C-SD-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD77883-12	017C-SD-2-12	13C4PFBA	PFBA	J
JD77883-13	017C-R-0-2	13C4PFBA	PFBA	UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD77883-14	017R-R-2-12	13C4PFBA	PFBA	UJ
JD77883-15	004A-SD-0-2	13C4PFBA	PFBA	UJ
JD77883-16	004A-SD-2-12	13C4PFBA	PFBA	UJ
JD77883-17	FD-11292023	13C4PFBA	PFBA	UJ
JD77883-18	004A-R-0-2	13C4PFBA	PFBA	UJ
JD77883-19	004A-R-2-12	13C4PFBA	PFBA	UJ
JD77883-21	008A-NS-0-2	13C4PFBA	PFBA	UJ
JD77883-22	008A-NS-2-12	13C4PFBA	PFBA	UJ
JD77883-24	008A-SD-2-12	13C4PFBA	PFBA	J
JD77883-25	008A-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77883-26	008A-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD77883-27	023-SD-0-2	13C4PFBA	PFBA	UJ
JD77883-28	023-SD-2-12	13C4PFBA	PFBA	UJ
JD77883-30	023-R-2-12	13C4PFBA	PFBA	UJ
JD77883-32	018-SD-2-12	13C4PFBA	PFBA	UJ
JD77883-33	018-R-0-2	13C4PFBA	PFBA	UJ
JD77883-34	018-R-212	13C4PFBA	PFBA	UJ
JD77883-35	124C-SD-0-2	13C4PFBA	PFBA	UJ
JD77883-36	124C-SD-2-12	13C4PFBA	PFBA	UJ
JD77883-37	FD-11302023	13C4PFBA	PFBA	UJ
JD77883-38	124C-R-0-2	13C4PFBA	PFBA	UJ
JD77883-39	124C-R-2-12	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	019B-NS-0-2		
Lab Sample ID:	JD77883-1	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5512.D	1	12/05/23 13:42	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.097	ug/kg	
307-24-4	Perfluorohexanoic acid	0.050	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.069	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.081	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.16	0.28	0.097	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.085	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	0.19	0.28	0.11	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.18	0.28	0.069	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-NS-0-2		
Lab Sample ID:	JD77883-1	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	78%		40-130%
	13C5-PFHxA	124%		40-130%
	13C4-PFHpA	132% [a]		40-130%
	13C8-PFOA	117%		40-130%
	13C9-PFNA	122%		40-130%
	13C6-PFDA	121%		40-130%
	13C7-PFUnDA	123%		30-130%
	13C2-PFDoDA	116%		10-130%
	13C2-PFTeDA	120%		10-130%
	13C3-PFBS	123%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-NS-0-2		
Lab Sample ID:	JD77883-1	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	140% [a]		40-130%
	13C8-FOSA	132% [a]		40-130%
	d3-MeFOSA	109%		10-130%
	d5-EtFOSA	106%		10-130%
	d3-MeFOSAA	151%		40-170%
	d5-EtFOSAA	148% [a]		25-135%
	d7-MeFOSE	112%		10-130%
	d9-EtFOSE	111%		10-130%
	13C2-4:2FTS	141%		40-200%
	13C2-6:2FTS	142%		40-200%
	13C2-8:2FTS	159%		40-300%
	13C3-HFPO-DA	139% [a]		40-130%

(a) Outside control limits due to possible matrix interference.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	019B-NS-2-12		
Lab Sample ID:	JD77883-2	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5513.D	1	12/05/23 13:57	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.25	0.062	ug/kg	
335-67-1	Perfluorooctanoic acid	0.11	0.25	0.099	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-NS-2-12		
Lab Sample ID:	JD77883-2	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	62%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	118%		40-135%
	13C3-PFHxS	115%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-NS-2-12		
Lab Sample ID:	JD77883-2	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	107%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	83%		10-130%
	13C2-4:2FTS	132%		40-200%
	13C2-6:2FTS	138%		40-200%
	13C2-8:2FTS	151%		40-300%
	13C3-HFPO-DA	103%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	019B-SD-0-2		
Lab Sample ID:	JD77883-3	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5514.D	1	12/05/23 14:12	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.15	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.10	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.55	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-SD-0-2		
Lab Sample ID:	JD77883-3	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	74%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	113%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-SD-0-2		
Lab Sample ID:	JD77883-3	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	85%		10-130%
	d5-EtFOSA	85%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	129%		25-135%
	d7-MeFOSE	87%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	125%		40-200%
	13C2-6:2FTS	126%		40-200%
	13C2-8:2FTS	147%		40-300%
	13C3-HFPO-DA	106%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	019B-SD-2-12		
Lab Sample ID:	JD77883-4	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5515.D	1	12/05/23 14:27	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.090	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.11	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.10	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-SD-2-12		
Lab Sample ID:	JD77883-4	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	72%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-SD-2-12		
Lab Sample ID:	JD77883-4	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	120%		40-170%
	d5-EtFOSAA	125%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	86%		10-130%
	13C2-4:2FTS	116%		40-200%
	13C2-6:2FTS	127%		40-200%
	13C2-8:2FTS	113%		40-300%
	13C3-HFPO-DA	104%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	019B-R-0-2		
Lab Sample ID:	JD77883-5	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5516.D	1	12/05/23 14:43	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.11	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.15	0.30	0.046	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.19	0.30	0.076	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.19	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.21	0.30	0.076	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.30	0.091	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.21	0.30	0.076	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.076	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.091	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.076	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-R-0-2		
Lab Sample ID:	JD77883-5	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.43	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.61	0.046	ug/kg	UJ
863090-89-5	PFMBA	ND	0.61	0.091	ug/kg	UJ
151772-58-6	NFDHA	ND	0.61	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.40	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.61	0.046	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.37	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.6	0.94	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.6	0.96	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	108%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	113%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-R-0-2		
Lab Sample ID:	JD77883-5	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	64.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	125%		40-170%
	d5-EtFOSAA	115%		25-135%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	119%		40-200%
	13C2-6:2FTS	146%		40-200%
	13C2-8:2FTS	172%		40-300%
	13C3-HFPO-DA	109%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	019B-R-2-12		
Lab Sample ID:	JD77883-6	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5520.D	1	12/05/23 15:44	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.14	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.098	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.27	0.067	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-R-2-12		
Lab Sample ID:	JD77883-6	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	53%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	83%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	91%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	111%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	019B-R-2-12		
Lab Sample ID:	JD77883-6	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	98%		10-130%
	d5-EtFOSA	97%		10-130%
	d3-MeFOSAA	126%		40-170%
	d5-EtFOSAA	131%		25-135%
	d7-MeFOSE	92%		10-130%
	d9-EtFOSE	89%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	135%		40-300%
	13C3-HFPO-DA	105%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	010C-SD-0-2		
Lab Sample ID:	JD77883-7	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5521.D	1	12/05/23 15:59	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.091	ug/kg	
307-24-4	Perfluorohexanoic acid	0.079	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.26	0.065	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.16	0.26	0.065	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.11	0.26	0.091	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.078	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.091	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.26	0.065	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.065	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.091	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.078	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.065	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	010C-SD-0-2		
Lab Sample ID:	JD77883-7	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.95	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.16	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.078	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.5	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.5	0.82	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	103%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	010C-SD-0-2		
Lab Sample ID:	JD77883-7	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	118%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	88%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	131%		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	89%		10-130%
	13C2-4:2FTS	113%		40-200%
	13C2-6:2FTS	128%		40-200%
	13C2-8:2FTS	111%		40-300%
	13C3-HFPO-DA	107%		40-130%

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ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	010C-SD-2-12		
Lab Sample ID:	JD77883-8	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5522.D	1	12/05/23 16:15	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.098	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.24	0.096	ug/kg	
375-95-1	Perfluorononanoic acid	0.062	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.24	0.060	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	UJ
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	010C-SD-2-12		
Lab Sample ID:	JD77883-8	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	UJ
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	41%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	010C-SD-2-12		
Lab Sample ID:	JD77883-8	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	114%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	97%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	132%		40-170%
	d5-EtFOSAA	131%		25-135%
	d7-MeFOSE	95%		10-130%
	d9-EtFOSE	98%		10-130%
	13C2-4:2FTS	98%		40-200%
	13C2-6:2FTS	109%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	108%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	010C-R-O-2		
Lab Sample ID:	JD77883-9	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5523.D	1	12/05/23 16:30	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.095	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.18	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.17	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.18	0.27	0.095	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.094	0.27	0.081	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	010C-R-O-2		
Lab Sample ID:	JD77883-9	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	UJ
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	0.043	0.54	0.041	ug/kg	J
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	33% [a]		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	88%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	010C-R-O-2		
Lab Sample ID:	JD77883-9	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	113%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	157%		40-170%
	d5-EtFOSAA	139% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	87%		10-130%
	13C2-4:2FTS	111%		40-200%
	13C2-6:2FTS	167%		40-200%
	13C2-8:2FTS	194%		40-300%
	13C3-HFPO-DA	92%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	010C-R-2-12		
Lab Sample ID:	JD77883-10	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5524.D	1	12/05/23 16:45	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.15	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.24	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	010C-R-2-12		
Lab Sample ID:	JD77883-10	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7%		5-130%
	13C5-PFPeA	37% [a]		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	85%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	010C-R-2-12		
Lab Sample ID:	JD77883-10	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	120%		40-170%
	d5-EtFOSAA	120%		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	126%		40-200%
	13C2-8:2FTS	141%		40-300%
	13C3-HFPO-DA	95%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	017C-SD-0-2		
Lab Sample ID:	JD77883-11	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5525.D	1	12/05/23 17:00	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg		R
2706-90-3	Perfluoropentanoic acid	0.40	0.55	0.096	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	ND	0.27	0.041	ug/kg		
375-85-9	Perfluoroheptanoic acid	0.11	0.27	0.068	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.16	0.27	0.11	ug/kg	J	
375-95-1	Perfluorononanoic acid	0.20	0.27	0.068	ug/kg	J	
335-76-2	Perfluorodecanoic acid	0.18	0.27	0.096	ug/kg	J	
2058-94-8	Perfluoroundecanoic acid	0.085	0.27	0.082	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.44	0.27	0.068	ug/kg		
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.27	0.096	ug/kg		
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg		
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	017C-SD-0-2		
Lab Sample ID:	JD77883-11	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	UJ
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	33% [a]		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	86%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	87%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	017C-SD-0-2		
Lab Sample ID:	JD77883-11	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	85%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	130%		40-170%
	d5-EtFOSAA	141% [a]		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	136%		40-200%
	13C2-8:2FTS	142%		40-300%
	13C3-HFPO-DA	91%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	017C-SD-2-12		
Lab Sample ID:	JD77883-12	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5526.D	1	12/05/23 17:15	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.25	1.0	0.14	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	0.058	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.25	0.088	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.11	0.25	0.075	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	017C-SD-2-12		
Lab Sample ID:	JD77883-12	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		5-130%
	13C5-PFPeA	102%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	105%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	017C-SD-2-12		
Lab Sample ID:	JD77883-12	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	116%		40-130%
	d3-MeFOSA	65%		10-130%
	d5-EtFOSA	46%		10-130%
	d3-MeFOSAA	127%		40-170%
	d5-EtFOSAA	148% [a]		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	49%		10-130%
	13C2-4:2FTS	131%		40-200%
	13C2-6:2FTS	164%		40-200%
	13C2-8:2FTS	182%		40-300%
	13C3-HFPO-DA	104%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	017C-R-0-2		
Lab Sample ID:	JD77883-13	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5527.D	1	12/05/23 17:31	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.22	0.58	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.29	0.044	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.20	0.29	0.073	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.26	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.20	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.19	0.29	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.18	0.29	0.087	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.58	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	017C-R-0-2		
Lab Sample ID:	JD77883-13	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.044	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	101%		10-130%
	13C3-PFBS	80%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	017C-R-0-2		
Lab Sample ID:	JD77883-13	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	141%		40-170%
	d5-EtFOSAA	142% [a]		25-135%
	d7-MeFOSE	93%		10-130%
	d9-EtFOSE	85%		10-130%
	13C2-4:2FTS	94%		40-200%
	13C2-6:2FTS	117%		40-200%
	13C2-8:2FTS	154%		40-300%
	13C3-HFPO-DA	93%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	017C-R-2-12		
Lab Sample ID:	JD77883-14	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5528.D	1	12/05/23 17:46	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.54	0.095	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.54	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.30	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	0.14	0.27	0.095	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.095	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.48	0.27	0.068	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.095	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	017C-R-2-12		
Lab Sample ID:	JD77883-14	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.99	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.84	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	61%		40-130%
	13C5-PFHxA	86%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	87%		40-130%
	13C6-PFDA	90%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	017C-R-2-12		
Lab Sample ID:	JD77883-14	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	138%		40-170%
	d5-EtFOSAA	150% [a]		25-135%
	d7-MeFOSE	90%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	109%		40-200%
	13C2-6:2FTS	135%		40-200%
	13C2-8:2FTS	173%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	004A-SD-0-2		
Lab Sample ID:	JD77883-15	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5529.D	1	12/05/23 18:01	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.088	ug/kg	
307-24-4	Perfluorohexanoic acid	0.057	0.25	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.12	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.10	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.088	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.088	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.25	0.063	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.088	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	004A-SD-0-2		
Lab Sample ID:	JD77883-15	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.79	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	60%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	87%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	004A-SD-0-2		
Lab Sample ID:	JD77883-15	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	115%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	137%		40-170%
	d5-EtFOSAA	140% [a]		25-135%
	d7-MeFOSE	94%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	132%		40-200%
	13C2-6:2FTS	105%		40-200%
	13C2-8:2FTS	139%		40-300%
	13C3-HFPO-DA	102%		40-130%

(a) Outside control limits due to possible matrix interference.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	004A-SD-2-12		
Lab Sample ID:	JD77883-16	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5534.D	1	12/05/23 19:18	PC	12/04/23 16:30	OP50866	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	0.063	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.25	0.062	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.075	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.075	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	004A-SD-2-12		
Lab Sample ID:	JD77883-16	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.91	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.22	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.075	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	109%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	101%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	004A-SD-2-12		
Lab Sample ID:	JD77883-16	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	119%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	93%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	138%		40-170%
	d5-EtFOSAA	154% [a]		25-135%
	d7-MeFOSE	99%		10-130%
	d9-EtFOSE	95%		10-130%
	13C2-4:2FTS	140%		40-200%
	13C2-6:2FTS	161%		40-200%
	13C2-8:2FTS	172%		40-300%
	13C3-HFPO-DA	112%		40-130%

(a) Outside in house control limits biased high. Sample ND.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11292023		
Lab Sample ID:	JD77883-17	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5474.D	1	12/05/23 05:18	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.99	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.087	ug/kg	
307-24-4	Perfluorohexanoic acid	0.054	0.25	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.13	0.25	0.062	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.12	0.25	0.099	ug/kg	J
375-95-1	Perfluorononanoic acid	0.074	0.25	0.062	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.087	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.074	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.099	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.087	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.14	0.25	0.062	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.062	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.99	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.99	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.99	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.087	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.074	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.062	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11292023		
Lab Sample ID:	JD77883-17	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.099	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.90	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.99	0.22	ug/kg	
919005-14-4	ADONA	ND	0.99	0.15	ug/kg	
377-73-1	PFMPA	ND	0.50	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.50	0.074	ug/kg	
151772-58-6	NFDHA	ND	0.50	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.99	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.99	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.50	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.2	0.77	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.2	0.78	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	34%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	87%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	87%		40-130%
	13C6-PFDA	83%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	76%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11292023		
Lab Sample ID:	JD77883-17	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	79%		10-130%
	d3-MeFOSAA	107%		40-170%
	d5-EtFOSAA	111%		25-135%
	d7-MeFOSE	75%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	112%		40-200%
	13C2-8:2FTS	122%		40-300%
	13C3-HFPO-DA	97%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	004A-R-0-2		
Lab Sample ID:	JD77883-18	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5478.D	1	12/05/23 05:33	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.099	ug/kg	
307-24-4	Perfluorohexanoic acid	0.18	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.29	0.28	0.071	ug/kg	
335-67-1	Perfluorooctanoic acid	0.63	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.40	0.28	0.071	ug/kg	
335-76-2	Perfluorodecanoic acid	0.14	0.28	0.099	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.15	0.28	0.085	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.14	0.28	0.099	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.95	0.28	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	004A-R-0-2		
Lab Sample ID:	JD77883-18	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	86%		40-130%
	13C6-PFDA	81%		40-130%
	13C7-PFUnDA	82%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	76%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	004A-R-0-2		
Lab Sample ID:	JD77883-18	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	145%		40-170%
	d5-EtFOSAA	148% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	126%		40-200%
	13C2-6:2FTS	146%		40-200%
	13C2-8:2FTS	141%		40-300%
	13C3-HFPO-DA	88%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	004A-R-2-12		
Lab Sample ID:	JD77883-19	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5479.D	1	12/05/23 05:48	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.63	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.19	0.32	0.047	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.22	0.32	0.079	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.58	0.32	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.39	0.32	0.079	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.32	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.32	0.095	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.32	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.32	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.32	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.32	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.32	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.32	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.32	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.58	0.32	0.079	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.32	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.32	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.32	0.079	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.32	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.32	0.095	ug/kg	
4151-50-2	EtFOSA	ND	0.32	0.079	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	004A-R-2-12		
Lab Sample ID:	JD77883-19	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.32	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.32	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.2	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.2	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.28	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.047	ug/kg	UJ
863090-89-5	PFMBA	ND	0.63	0.095	ug/kg	UJ
151772-58-6	NFDHA	ND	0.63	0.21	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.9	0.98	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.9	1.0	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	59%		40-130%
	13C5-PFHxA	86%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	110%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	004A-R-2-12		
Lab Sample ID:	JD77883-19	**Date Sampled:**	11/29/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	158%		40-170%
	d5-EtFOSAA	166% [a]		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	76%		10-130%
	13C2-4:2FTS	118%		40-200%
	13C2-6:2FTS	169%		40-200%
	13C2-8:2FTS	195%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11292023		
Lab Sample ID:	JD77883-20	**Date Sampled:**	11/29/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5453.D	1	12/04/23 23:58	PC	12/04/23 01:59	OP50852	T2Q97
Run #2							

	Initial Volume	Final Volume
Run #1	472 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0085	0.00099	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0042	0.00077	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0021	0.00031	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0021	0.00053	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0021	0.00079	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0021	0.00042	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0021	0.00066	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0021	0.00058	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00082	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00081	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0021	0.00070	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0021	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0021	0.0012	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0021	0.00046	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0012	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00042	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0085	0.0024	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0010	0.0085	0.00096	ug/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0085	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0021	0.00073	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00068	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00056	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11292023		
Lab Sample ID:	JD77883-20	**Date Sampled:**	11/29/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00054	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00096	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0085	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0085	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0042	0.00032	ug/l	
863090-89-5	PFMBA	ND	0.0042	0.00059	ug/l	
151772-58-6	NFDHA	ND	0.0042	0.0014	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0085	0.0026	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0085	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0042	0.00029	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.011	0.0026	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.053	0.0075	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.053	0.0065	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	97%		5-130%
	13C5-PFPeA	104%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	88%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	82%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11292023		
Lab Sample ID:	JD77883-20	**Date Sampled:**	11/29/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		40-130%
	13C8-FOSA	85%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	100%		40-170%
	d5-EtFOSAA	93%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	104%		40-200%
	13C2-6:2FTS	102%		40-200%
	13C2-8:2FTS	102%		40-300%
	13C3-HFPO-DA	116%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	008A-NS-0-2		
Lab Sample ID:	JD77883-21	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5480.D	1	12/05/23 06:03	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.086	ug/kg	
307-24-4	Perfluorohexanoic acid	0.048	0.24	0.037	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.24	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.090	0.24	0.086	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.086	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.11	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.086	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-NS-0-2		
Lab Sample ID:	JD77883-21	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	61%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	81%		40-130%
	13C7-PFUnDA	86%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-NS-0-2		
Lab Sample ID:	JD77883-21	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	96%		40-130%
	d3-MeFOSA	88%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	120%		40-200%
	13C2-6:2FTS	110%		40-200%
	13C2-8:2FTS	119%		40-300%
	13C3-HFPO-DA	109%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	008A-NS-2-12		
Lab Sample ID:	JD77883-22	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5481.D	1	12/05/23 06:19	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.088	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.15	0.24	0.060	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-NS-2-12		
Lab Sample ID:	JD77883-22	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	47%		5-130%
	13C5-PFPeA	85%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	87%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-NS-2-12		
Lab Sample ID:	JD77883-22	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	107%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	95%		10-130%
	d5-EtFOSA	96%		10-130%
	d3-MeFOSAA	126%		40-170%
	d5-EtFOSAA	130%		25-135%
	d7-MeFOSE	95%		10-130%
	d9-EtFOSE	93%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	104%		40-200%
	13C2-8:2FTS	106%		40-300%
	13C3-HFPO-DA	101%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	008A-SD-0-2		
Lab Sample ID:	JD77883-23	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5482.D	1	12/05/23 06:34	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.93	0.13	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.46	0.081	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.23	0.035	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.15	0.23	0.058	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.11	0.23	0.093	ug/kg	J
375-95-1	Perfluorononanoic acid	0.079	0.23	0.058	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.081	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.093	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.081	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.23	0.058	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.058	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.93	0.32	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.93	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.93	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.081	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.058	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-SD-0-2		
Lab Sample ID:	JD77883-23	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.093	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.32	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.85	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.93	0.21	ug/kg	
919005-14-4	ADONA	ND	0.93	0.14	ug/kg	
377-73-1	PFMPA	ND	0.46	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.46	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.46	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.93	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.93	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.46	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.8	0.72	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.8	0.73	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	73%		5-130%
	13C5-PFPeA	94%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	80%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-SD-0-2		
Lab Sample ID:	JD77883-23	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	86.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	112%		40-130%
	13C8-FOSA	117%		40-130%
	d3-MeFOSA	92%		10-130%
	d5-EtFOSA	86%		10-130%
	d3-MeFOSAA	159%		40-170%
	d5-EtFOSAA	149% [a]		25-135%
	d7-MeFOSE	92%		10-130%
	d9-EtFOSE	94%		10-130%
	13C2-4:2FTS	119%		40-200%
	13C2-6:2FTS	137%		40-200%
	13C2-8:2FTS	139%		40-300%
	13C3-HFPO-DA	101%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	008A-SD-2-12		
Lab Sample ID:	JD77883-24	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5483.D	1	12/05/23 06:49	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.36	1.1	0.15	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	0.13	0.55	0.097	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.15	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.26	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.44	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.19	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.083	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-SD-2-12		
Lab Sample ID:	JD77883-24	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	40%		5-130%
	13C5-PFPeA	80%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-SD-2-12		
Lab Sample ID:	JD77883-24	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%		40-130%
	13C8-FOSA	118%		40-130%
	d3-MeFOSA	95%		10-130%
	d5-EtFOSA	87%		10-130%
	d3-MeFOSAA	149%		40-170%
	d5-EtFOSAA	147% [a]		25-135%
	d7-MeFOSE	98%		10-130%
	d9-EtFOSE	94%		10-130%
	13C2-4:2FTS	119%		40-200%
	13C2-6:2FTS	139%		40-200%
	13C2-8:2FTS	162%		40-300%
	13C3-HFPO-DA	106%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	008A-R-0-2		
Lab Sample ID:	JD77883-25	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5487.D	1	12/05/23 07:51	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.8	0.25	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.91	0.16	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.082	0.46	0.068	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.27	0.46	0.11	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.46	0.18	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.46	0.11	ug/kg	
335-76-2	Perfluorodecanoic acid	0.35	0.46	0.16	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.20	0.46	0.14	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.46	0.18	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.46	0.21	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.46	0.23	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.46	0.16	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.46	0.23	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.46	0.25	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.46	0.23	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.54	0.46	0.11	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.46	0.32	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.46	0.25	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.46	0.11	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.8	0.64	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.8	0.23	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.8	0.43	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.46	0.16	ug/kg	
31506-32-8	MeFOSA	ND	0.46	0.14	ug/kg	
4151-50-2	EtFOSA	ND	0.46	0.11	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-R-0-2		
Lab Sample ID:	JD77883-25	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.46	0.18	ug/kg	
2991-50-6	EtFOSAA	ND	0.46	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	4.6	0.64	ug/kg	
1691-99-2	EtFOSE	ND	4.6	1.7	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.8	0.41	ug/kg	
919005-14-4	ADONA	ND	1.8	0.27	ug/kg	
377-73-1	PFMPA	ND	0.91	0.068	ug/kg	UJ
863090-89-5	PFMBA	ND	0.91	0.14	ug/kg	UJ
151772-58-6	NFDHA	ND	0.91	0.30	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.8	0.59	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.8	0.41	ug/kg	
113507-82-7	PFEESA	ND	0.91	0.068	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.3	0.55	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	11	1.4	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	11	1.4	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	28% [a]		40-130%
	13C5-PFHxA	76%		40-130%
	13C4-PFHpA	88%		40-130%
	13C8-PFOA	84%		40-130%
	13C9-PFNA	87%		40-130%
	13C6-PFDA	74%		40-130%
	13C7-PFUnDA	84%		30-130%
	13C2-PFDoDA	80%		10-130%
	13C2-PFTeDA	70%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	87%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-R-0-2		
Lab Sample ID:	JD77883-25	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	43.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	70%		10-130%
	d3-MeFOSAA	145%		40-170%
	d5-EtFOSAA	138% [a]		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	97%		40-200%
	13C2-6:2FTS	113%		40-200%
	13C2-8:2FTS	179%		40-300%
	13C3-HFPO-DA	73%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	008A-R-2-12		
Lab Sample ID:	JD77883-26	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	39.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5488.D	1	12/05/23 08:06	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	2.0	0.28	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	1.0	0.18	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.21	0.50	0.075	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.38	0.50	0.13	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.42	0.50	0.20	ug/kg	J
375-95-1	Perfluorononanoic acid	0.49	0.50	0.13	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.42	0.50	0.18	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.50	0.50	0.15	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.50	0.20	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.50	0.23	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.50	0.25	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.50	0.18	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.50	0.25	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.50	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.50	0.25	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.77	0.50	0.13	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.50	0.35	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.50	0.28	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.50	0.13	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.0	0.70	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.0	0.25	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.0	0.48	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.50	0.18	ug/kg	
31506-32-8	MeFOSA	ND	0.50	0.15	ug/kg	
4151-50-2	EtFOSA	ND	0.50	0.13	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-R-2-12		
Lab Sample ID:	JD77883-26	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	39.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.50	0.20	ug/kg	
2991-50-6	EtFOSAA	ND	0.50	0.33	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	5.0	0.70	ug/kg	
1691-99-2	EtFOSE	ND	5.0	1.8	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	2.0	0.45	ug/kg	
919005-14-4	ADONA	ND	2.0	0.30	ug/kg	
377-73-1	PFMPA	ND	1.0	0.075	ug/kg	UJ
863090-89-5	PFMBA	ND	1.0	0.15	ug/kg	UJ
151772-58-6	NFDHA	ND	1.0	0.33	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.0	0.65	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.0	0.45	ug/kg	
113507-82-7	PFEESA	ND	1.0	0.075	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.5	0.60	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	13	1.6	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	13	1.6	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	24% [a]		40-130%
	13C5-PFHxA	71%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	85%		40-130%
	13C9-PFNA	84%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	88%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	58%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	008A-R-2-12		
Lab Sample ID:	JD77883-26	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	39.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	164%		40-170%
	d5-EtFOSAA	150% [a]		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	93%		40-200%
	13C2-6:2FTS	133%		40-200%
	13C2-8:2FTS	190%		40-300%
	13C3-HFPO-DA	67%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	023-SD-0-2		
Lab Sample ID:	JD77883-27	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5489.D	1	12/05/23 08:21	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.14	0.51	0.090	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.089	0.26	0.039	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	0.20	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.23	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.26	0.090	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.45	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	023-SD-0-2		
Lab Sample ID:	JD77883-27	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	83%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	023-SD-0-2		
Lab Sample ID:	JD77883-27	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	77.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	129%		40-170%
	d5-EtFOSAA	114%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	116%		40-200%
	13C2-6:2FTS	118%		40-200%
	13C2-8:2FTS	126%		40-300%
	13C3-HFPO-DA	104%		40-130%

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	023-SD-2-12		
Lab Sample ID:	JD77883-28	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5490.D	1	12/05/23 08:37	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.94	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.47	0.082	ug/kg	
307-24-4	Perfluorohexanoic acid	0.10	0.23	0.035	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.14	0.23	0.059	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.23	0.094	ug/kg	
375-95-1	Perfluorononanoic acid	0.070	0.23	0.059	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.23	0.082	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.23	0.070	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.23	0.094	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.23	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.23	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.23	0.082	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.23	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.23	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.23	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.24	0.23	0.059	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.23	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.23	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.23	0.059	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.94	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.94	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.94	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.23	0.082	ug/kg	
31506-32-8	MeFOSA	ND	0.23	0.070	ug/kg	
4151-50-2	EtFOSA	ND	0.23	0.059	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	023-SD-2-12		
Lab Sample ID:	JD77883-28	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.23	0.094	ug/kg	
2991-50-6	EtFOSAA	ND	0.23	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.3	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.3	0.86	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.94	0.21	ug/kg	
919005-14-4	ADONA	ND	0.94	0.14	ug/kg	
377-73-1	PFMPA	ND	0.47	0.035	ug/kg	UJ
863090-89-5	PFMBA	ND	0.47	0.070	ug/kg	
151772-58-6	NFDHA	ND	0.47	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.94	0.30	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.94	0.21	ug/kg	
113507-82-7	PFEESA	ND	0.47	0.035	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.28	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.9	0.73	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.9	0.74	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	64%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	90%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	105%		10-130%
	13C3-PFBS	101%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	023-SD-2-12		
Lab Sample ID:	JD77883-28	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	116%		40-170%
	d5-EtFOSAA	110%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	76%		10-130%
	13C2-4:2FTS	128%		40-200%
	13C2-6:2FTS	128%		40-200%
	13C2-8:2FTS	139%		40-300%
	13C3-HFPO-DA	102%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	023-R-0-2		
Lab Sample ID:	JD77883-29	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5491.D	1	12/05/23 08:52	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.47	0.68	0.12	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.20	0.34	0.051	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.43	0.34	0.085	ug/kg	
335-67-1	Perfluorooctanoic acid	0.57	0.34	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.58	0.34	0.085	ug/kg	
335-76-2	Perfluorodecanoic acid	0.25	0.34	0.12	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.33	0.34	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.34	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.2	0.34	0.085	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.085	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.085	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	023-R-0-2		
Lab Sample ID:	JD77883-29	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.20	ug/kg	
377-73-1	PFMPA	ND	0.68	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.68	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.68	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.68	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	82%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	89%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	85%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	66%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	102%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	023-R-0-2		
Lab Sample ID:	JD77883-29	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	143%		40-170%
	d5-EtFOSAA	143% [a]		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	132%		40-200%
	13C2-8:2FTS	179%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	023-R-2-12		
Lab Sample ID:	JD77883-30	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5492.D	1	12/05/23 09:07	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.19	0.60	0.10	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.12	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.26	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.36	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.30	0.30	0.075	ug/kg	
335-76-2	Perfluorodecanoic acid	0.19	0.30	0.10	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.18	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.77	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	023-R-2-12		
Lab Sample ID:	JD77883-30	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	72%		40-130%
	13C5-PFHxA	92%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	84%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	91%		40-130%
	13C7-PFUnDA	88%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	72%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	023-R-2-12		
Lab Sample ID:	JD77883-30	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	70%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	142%		40-170%
	d5-EtFOSAA	140% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	76%		10-130%
	13C2-4:2FTS	121%		40-200%
	13C2-6:2FTS	132%		40-200%
	13C2-8:2FTS	147%		40-300%
	13C3-HFPO-DA	94%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	018-SD-0-2		
Lab Sample ID:	JD77883-31	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5493.D	1	12/05/23 09:22	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.52	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.13	0.55	0.097	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.17	0.28	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.21	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.33	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.22	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.28	0.097	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.085	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.59	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	018-SD-0-2		
Lab Sample ID:	JD77883-31	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	55%		5-130%
	13C5-PFPeA	95%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	90%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	106%		40-135%
	13C3-PFHxS	98%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	018-SD-0-2		
Lab Sample ID:	JD77883-31	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	92%		10-130%
	d5-EtFOSA	89%		10-130%
	d3-MeFOSAA	123%		40-170%
	d5-EtFOSAA	126%		25-135%
	d7-MeFOSE	93%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	121%		40-200%
	13C2-6:2FTS	129%		40-200%
	13C2-8:2FTS	115%		40-300%
	13C3-HFPO-DA	104%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	018-SD-2-12		
Lab Sample ID:	JD77883-32	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5494.D	1	12/05/23 09:38	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.41	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	018-SD-2-12		
Lab Sample ID:	JD77883-32	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	40%		5-130%
	13C5-PFPeA	96%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	92%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	018-SD-2-12		
Lab Sample ID:	JD77883-32	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	95%		10-130%
	d5-EtFOSA	97%		10-130%
	d3-MeFOSAA	129%		40-170%
	d5-EtFOSAA	131%		25-135%
	d7-MeFOSE	100%		10-130%
	d9-EtFOSE	103%		10-130%
	13C2-4:2FTS	111%		40-200%
	13C2-6:2FTS	126%		40-200%
	13C2-8:2FTS	147%		40-300%
	13C3-HFPO-DA	104%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	018-R-0-2		
Lab Sample ID:	JD77883-33	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5495.D	1	12/05/23 09:53	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.18	0.56	0.097	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.11	0.28	0.042	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.16	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.18	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.20	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.083	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	018-R-0-2		
Lab Sample ID:	JD77883-33	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	71%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	106%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	106%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	94%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	018-R-0-2		
Lab Sample ID:	JD77883-33	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	91%		10-130%
	d5-EtFOSA	90%		10-130%
	d3-MeFOSAA	131%		40-170%
	d5-EtFOSAA	123%		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	86%		10-130%
	13C2-4:2FTS	105%		40-200%
	13C2-6:2FTS	114%		40-200%
	13C2-8:2FTS	125%		40-300%
	13C3-HFPO-DA	102%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	018-R-2-12		
Lab Sample ID:	JD77883-34	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5496.D	1	12/05/23 10:08	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.13	0.26	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.19	0.26	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.14	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.079	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.13	0.26	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	018-R-2-12		
Lab Sample ID:	JD77883-34	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.079	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	40%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	018-R-2-12		
Lab Sample ID:	JD77883-34	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	75.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	90%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	118%		40-170%
	d5-EtFOSAA	120%		25-135%
	d7-MeFOSE	90%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	127%		40-200%
	13C2-6:2FTS	119%		40-200%
	13C2-8:2FTS	138%		40-300%
	13C3-HFPO-DA	103%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	124C-SD-0-2		
Lab Sample ID:	JD77883-35	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5500.D	1	12/05/23 11:09	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.13	0.60	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.095	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.24	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.49	0.30	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.29	0.30	0.075	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.12	0.30	0.11	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.12	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.60	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	124C-SD-0-2		
Lab Sample ID:	JD77883-35	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	
151772-58-6	NFDHA	ND	0.60	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.95	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		5-130%
	13C5-PFPeA	80%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	94%		40-130%
	13C9-PFNA	100%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	98%		40-135%
	13C3-PFHxS	83%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	124C-SD-0-2		
Lab Sample ID:	JD77883-35	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	65.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	94%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	88%		10-130%
	d3-MeFOSAA	105%		40-170%
	d5-EtFOSAA	107%		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	92%		40-200%
	13C2-6:2FTS	125%		40-200%
	13C2-8:2FTS	108%		40-300%
	13C3-HFPO-DA	117%		40-130%

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SGS North America Inc.

Report of Analysis

Client Sample ID:	124C-SD-2-12		
Lab Sample ID:	JD77883-36	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5501.D	1	12/05/23 11:25	PC	12/04/23 16:00	OP50850	T2Q97
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.15	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.29	0.073	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.50	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.23	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.087	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.58	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	124C-SD-2-12		
Lab Sample ID:	JD77883-36	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.044	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	35%		5-130%
	13C5-PFPeA	90%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	83%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	124C-SD-2-12		
Lab Sample ID:	JD77883-36	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	109%		40-170%
	d5-EtFOSAA	116%		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	100%		40-200%
	13C2-6:2FTS	113%		40-200%
	13C2-8:2FTS	119%		40-300%
	13C3-HFPO-DA	98%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-11302023		
Lab Sample ID:	JD77883-37	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2591.D	1	12/06/23 19:17	PC	12/06/23 08:05	OP50889	T1Q67
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.099	ug/kg	
307-24-4	Perfluorohexanoic acid	0.11	0.28	0.042	ug/kg	J J
375-85-9	Perfluoroheptanoic acid	0.10	0.28	0.071	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.11	0.28	0.071	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.099	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.085	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.099	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.28	0.071	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.071	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.099	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.085	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.071	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11302023		
Lab Sample ID:	JD77883-37	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.57	0.085	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.1	0.88	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.1	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	80%		40-130%
	13C5-PFHxA	103%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	114%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	115%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	107%		40-135%
	13C3-PFHxS	85%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-11302023		
Lab Sample ID:	JD77883-37	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	83%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	101%		40-170%
	d5-EtFOSAA	111%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	110%		40-200%
	13C2-6:2FTS	118%		40-200%
	13C2-8:2FTS	95%		40-300%
	13C3-HFPO-DA	102%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	124C-R-0-2		
Lab Sample ID:	JD77883-38	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2592.D	1	12/06/23 19:32	PC	12/06/23 08:05	OP50889	T1Q67
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.16	0.68	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.16	0.34	0.051	ug/kg	J J
375-85-9	Perfluoroheptanoic acid	0.26	0.34	0.085	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.56	0.34	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.33	0.34	0.085	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.34	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.16	0.34	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.34	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.86	0.34	0.085	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.085	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.085	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	124C-R-0-2		
Lab Sample ID:	JD77883-38	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.20	ug/kg	
377-73-1	PFMPA	ND	0.68	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.68	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.68	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.68	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	111%		10-130%
	13C2-PFTeDA	107%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	124C-R-0-2		
Lab Sample ID:	JD77883-38	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	123%		40-130%
	d3-MeFOSA	93%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	120%		40-170%
	d5-EtFOSAA	122%		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	136%		40-200%
	13C2-8:2FTS	100%		40-300%
	13C3-HFPO-DA	94%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	124C-R-2-12		
Lab Sample ID:	JD77883-39	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2593.D	1	12/06/23 19:48	PC	12/06/23 08:05	OP50889	T1Q67
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.63	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	0.15	0.31	0.047	ug/kg	J J
375-85-9	Perfluoroheptanoic acid	0.18	0.31	0.078	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.59	0.31	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.28	0.31	0.078	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.31	0.094	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.71	0.31	0.078	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.078	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.094	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.31	0.078	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	124C-R-2-12		
Lab Sample ID:	JD77883-39	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.28	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.047	ug/kg	UJ
863090-89-5	PFMBA	ND	0.63	0.094	ug/kg	
151772-58-6	NFDHA	ND	0.63	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.8	0.97	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.8	0.99	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	82%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	120%		30-130%
	13C2-PFDoDA	110%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	124C-R-2-12		
Lab Sample ID:	JD77883-39	**Date Sampled:**	11/30/23
Matrix:	SO - Soil	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	102%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	111%		25-135%
	d7-MeFOSE	87%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	120%		40-200%
	13C2-6:2FTS	125%		40-200%
	13C2-8:2FTS	104%		40-300%
	13C3-HFPO-DA	96%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-11302023		
Lab Sample ID:	JD77883-40	**Date Sampled:**	11/30/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5454.D	1	12/05/23 00:13	PC	12/04/23 01:59	OP50852	T2Q97
Run #2							

	Initial Volume	Final Volume
Run #1	541 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0074	0.00086	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0037	0.00067	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0018	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0018	0.00046	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0018	0.00069	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0018	0.00037	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0018	0.00057	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0018	0.00051	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0018	0.00071	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0018	0.00073	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0018	0.00070	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0018	0.00061	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0018	0.00093	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0018	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0018	0.00091	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0018	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0018	0.0013	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0018	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0018	0.00037	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0074	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0074	0.00084	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0074	0.0013	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0018	0.00064	ug/l	
31506-32-8	MeFOSA	ND	0.0018	0.00059	ug/l	
4151-50-2	EtFOSA	ND	0.0018	0.00049	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11302023		
Lab Sample ID:	JD77883-40	**Date Sampled:**	11/30/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0018	0.00047	ug/l	
2991-50-6	EtFOSAA	ND	0.0018	0.00084	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.018	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.018	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0074	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0074	0.0011	ug/l	
377-73-1	PFMPA	ND	0.0037	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0037	0.00052	ug/l	
151772-58-6	NFDHA	ND	0.0037	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0074	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0074	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0037	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0092	0.0022	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.046	0.0066	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.046	0.0057	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		5-130%
	13C5-PFPeA	101%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	88%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	83%		30-130%
	13C2-PFDoDA	88%		10-130%
	13C2-PFTeDA	75%		10-130%
	13C3-PFBS	105%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-11302023		
Lab Sample ID:	JD77883-40	**Date Sampled:**	11/30/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	93%		10-130%
	d5-EtFOSA	92%		10-130%
	d3-MeFOSAA	101%		40-170%
	d5-EtFOSAA	108%		25-135%
	d7-MeFOSE	90%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	114%		40-200%
	13C2-6:2FTS	88%		40-200%
	13C2-8:2FTS	110%		40-300%
	13C3-HFPO-DA	108%		40-130%

CWL 1/16/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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(770) 232-5082 (Fax)
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DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD78193
SAMPLING DATE(S):	December 4 and 5, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD78193-1	096C-NS-0-2	X
JD78193-1MS	096C-NS-0-2MS	X
JD78193-1MSD	096C-NS-0-2MSD	X
JD78193-2	096C-NS-2-12	X
JD78193-3	096-SD-0-2	X
JD78193-4	096-SD-2-12	X
JD78193-5	096-R-0-2	X
JD78193-6	096-R-2-12	X
JD78193-7	009-SD-0-2	X
JD78193-8	009-SD-2-12	X
JD78193-9	009-R-0-2	X
JD78193-10	009-R-2-12	X
JD78193-11	RE-12042023	X
JD78193-12	110C-SD-0-2	X
JD78193-13	110C-SD-2-12	X
JD78193-14	110C-R-0-2	X
JD78193-15	110C-R-2-12	X
JD78193-16	118-SD-0-2	X

LAB ID	CLIENT ID	PFAS
JD78193-17	118-SD-2-12	X
JD78193-18	118-R-0-2	X
JD78193-19	118-R-2-12	X
JD78193-20	120-NS-0-2	X
JD78193-21	120-NS-2-12	X
JD78193-22	120-SD-0-2	X
JD78193-23	120-SD-2-12	X
JD78193-24	120-R-0-2	X
JD78193-25	120-R-2-12	X
JD78193-26	RB-12052023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD78193

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

The following Extracted Internal Standards (EIS) reported recoveries less than the expanded lower control limit of 10%. The results are unusable and have been qualified "R".

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD78193-2	096C-NS-2-12	13C4PFBA	PFBA	R
JD78193-5	096-R-0-2	13C4PFBA	PFBA	R
JD78193-6	096-R-2-12	13C4PFBA	PFBA	R
JD78193-7	009-SD-0-2	13C4PFBA	PFBA	R
JD78193-9	009-R-0-2	13C4PFBA	PFBA	R
JD78193-18	118-R-0-2	13C4PFBA	PFBA	R
JD78193-19	118-R-2-12	13C4PFBA	PFBA	R
JD78193-22	120-SD-0-2	13C4PFBA	PFBA	R
JD78193-24	120-R-0-2	13C4PFBA	PFBA	R

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-12042023 and RB-12052023, were free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample JD78193-1/096-NS-0-2. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD78193-1	0966-NS-0-2	Recovery < lower control limit of 70%	PFMPA 3:3FTCA	UJ UJ

VII.) Laboratory Control Samples (LCS):

LCS, OP050943-LCS, met all criteria. No qualification was made based on this finding.

LLCS, OP50943-LCS, met all criteria, except EtFOSAA reported a recovery > the upper control limit. This analyte was non-detect in the associated samples. No qualification was necessary.

The following LCS recoveries were outside the 70-130% limits. Qualification for recoveries < 70% are estimated "J/UJ".

LCS ID	Associated Samples	Analytes
OP50942-LLCS OP50942-LCS	JD78941-12 JD78941-13 JD78941-14 JD78941-15 JD78941-16 JD78941-17 JD78941-18 JD78941-19 JD78941-20 JD78941-21 JD78941-22 JD78941-23 JD78941-24 JD78941-25	PFMPA 3:3FTCA
OP50941-LLCS OP50941-LCS	JD78941-1 JD78941-2 JD78941-3 JD78941-4 JD78941-5 JD78941-6 JD78941-7 JD78941-8 JD78941-9 JD78941-10	MeFOSA PFMPA 3:3FTCA

VIII.) Field Duplicates:

There was no identified Field Duplicate set in this SDG. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD78193-1	096C-NS-0-2	*SeeFootnote		
JD78193-2	096C-NS-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD78193-3	096-SD-0-2	13C4PFBA	PFBA	UJ
JD78193-4	096-SD-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD78193-5	096-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD78193-6	096-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD78193-7	009-SD-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD78193-8	009-SD-2-12	13C4PFBA	PFBA	UJ
JD78193-9	009-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD78193-10	009-R-2-12	13C4PFBA	PFBA	UJ
JD78193-12	110C-SD-0-2	13C4PFBA	PFBA	UJ
JD78193-13	110C-SD-2-12	13C4PFBA 13C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ J UJ UJ UJ
JD78193-14	110C-R-0-2	13C4PFBA	PFBA	UJ
JD78193-15	110C-R-2-12	13C4PFBA	PFBA	UJ
JD78193-16	118-SD-0-2	13C4PFBA	PFBA	UJ
JD78193-17	118-SD-2-12	13C4PFBA	PFBA	UJ
JD78193-18	118-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD78193-19	118-R-2-12	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD78193-20	120-NS-0-2	13C4PFBA	PFBA	UJ
JD78193-21	120-NS-2-12	13C4PFBA 3C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ

LAB ID	CLIENT ID	EIS Analyte	Associated Analyte	Qualification
JD78193-22	120-SD-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ
JD78193-23	120-SD-2-12	13C4PFBA	PFBA	UJ
JD78193-24	120-R-0-2	13C5PFPeA	PFPeA 3:3FTCA PFMPA PFMBA	J UJ UJ UJ
JD78193-25	120-R-2-12	13C4PFBA 3C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ J UJ UJ UJ

*All EIS recoveries were < the 50% lower control limit,(16 of 24) except;13C6PFDA, 13C7PFUnDA,13C2PFDoDA, d3MeFOSAA, d5EtFOSAA, 13C24:2FTS, 13C26:2FTS, and 13C28:2FTS. Positive results are estimated "J", and non-detects estimated "UJ".

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	096C-NS-0-2		
Lab Sample ID:	JD78193-1	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2626.D	1	12/07/23 21:02	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg		UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg		UJ
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg		UJ
375-85-9	Perfluoroheptanoic acid	0.14	0.25	0.064	ug/kg	J	J
335-67-1	Perfluorooctanoic acid	0.14	0.25	0.10	ug/kg	J	J
375-95-1	Perfluorononanoic acid	0.18	0.25	0.064	ug/kg	J	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg		UJ
2058-94-8	Perfluoroundecanoic acid	0.094	0.25	0.076	ug/kg	J	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg		UJ
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg		UJ
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	UJ	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	UJ	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	UJ	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	UJ	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.25	0.064	ug/kg	J	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	UJ	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	UJ	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.064	ug/kg	UJ	
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	UJ	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	UJ	
4151-50-2	EtFOSA	ND	0.25	0.064	ug/kg	UJ	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-NS-0-2		
Lab Sample ID:	JD78193-1	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.36	ug/kg	UJ
1691-99-2	EtFOSE	ND	2.5	0.93	ug/kg	UJ
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	UJ
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	UJ
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	UJ
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	UJ
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	UJ
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	UJ
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	UJ
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	UJ
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	UJ

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	43%		40-130%
	13C4-PFHpA	44%		40-130%
	13C8-PFOA	46%		40-130%
	13C9-PFNA	49%		40-130%
	13C6-PFDA	52%		40-130%
	13C7-PFUnDA	51%		30-130%
	13C2-PFDoDA	50%		10-130%
	13C2-PFTeDA	45%		10-130%
	13C3-PFBS	43%		40-135%
	13C3-PFHxS	46%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-NS-0-2		
Lab Sample ID:	JD78193-1	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	38% [b]		40-130%
	13C8-FOSA	45%		40-130%
	d3-MeFOSA	39%		10-130%
	d5-EtFOSA	36%		10-130%
	d3-MeFOSAA	60%		40-170%
	d5-EtFOSAA	53%		25-135%
	d7-MeFOSE	40%		10-130%
	d9-EtFOSE	42%		10-130%
	13C2-4:2FTS	52%		40-200%
	13C2-6:2FTS	58%		40-200%
	13C2-8:2FTS	62%		40-300%
	13C3-HFPO-DA	42%		40-130%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.
(b) Outside of control limits, but within reasonable method recovery limits.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	096C-NS-2-12		
Lab Sample ID:	JD78193-2	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2630.D	1	12/07/23 22:03	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.075	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.076	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.24	0.096	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.24	0.060	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-NS-2-12		
Lab Sample ID:	JD78193-2	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	UJ
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	39% [a]		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-NS-2-12		
Lab Sample ID:	JD78193-2	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	90%		10-130%
	d5-EtFOSA	89%		10-130%
	d3-MeFOSAA	139%		40-170%
	d5-EtFOSAA	141% [a]		25-135%
	d7-MeFOSE	95%		10-130%
	d9-EtFOSE	99%		10-130%
	13C2-4:2FTS	110%		40-200%
	13C2-6:2FTS	142%		40-200%
	13C2-8:2FTS	134%		40-300%
	13C3-HFPO-DA	96%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	096C-SD-0-2		
Lab Sample ID:	JD78193-3	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2631.D	1	12/07/23 22:18	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	0.057	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.068	ug/kg	
335-67-1	Perfluorooctanoic acid	0.12	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.085	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.18	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-SD-0-2		
Lab Sample ID:	JD78193-3	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	97%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	104%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-SD-0-2		
Lab Sample ID:	JD78193-3	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	91%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	114%		40-170%
	d5-EtFOSAA	109%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	112%		40-200%
	13C2-6:2FTS	139%		40-200%
	13C2-8:2FTS	136%		40-300%
	13C3-HFPO-DA	87%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	096C-SD-2-12		
Lab Sample ID:	JD78193-4	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2632.D	1	12/07/23 22:33	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.090	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	0.15	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.070	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-SD-2-12		
Lab Sample ID:	JD78193-4	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.077	ug/kg	UJ
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	104%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	97%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	88%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-SD-2-12		
Lab Sample ID:	JD78193-4	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	82%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	112%		40-170%
	d5-EtFOSAA	112%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	93%		10-130%
	13C2-4:2FTS	100%		40-200%
	13C2-6:2FTS	123%		40-200%
	13C2-8:2FTS	121%		40-300%
	13C3-HFPO-DA	91%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	096C-R-0-2		
Lab Sample ID:	JD78193-5	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2633.D	1	12/07/23 22:49	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.10	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.11	0.30	0.045	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.20	0.30	0.075	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.26	0.30	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.19	0.30	0.075	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.30	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.30	0.090	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.30	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.30	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.30	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.30	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.30	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.30	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.30	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.52	0.30	0.075	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.30	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.30	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.30	0.075	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.42	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.30	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.30	0.090	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.30	0.075	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-R-0-2		
Lab Sample ID:	JD78193-5	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.30	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.30	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.0	0.42	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.27	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.60	0.045	ug/kg	UJ
863090-89-5	PFMBA	ND	0.60	0.090	ug/kg	UJ
151772-58-6	NFDHA	ND	0.60	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.27	ug/kg	
113507-82-7	PFEESA	ND	0.60	0.045	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.36	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.5	0.93	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.5	0.94	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	33% [a]		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	105%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	113%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	101%		10-130%
	13C2-PFTeDA	93%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	106%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-R-0-2		
Lab Sample ID:	JD78193-5	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	69%		10-130%
	d3-MeFOSAA	151%		40-170%
	d5-EtFOSAA	156% [b]		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	77%		10-130%
	13C2-4:2FTS	138%		40-200%
	13C2-6:2FTS	195%		40-200%
	13C2-8:2FTS	230%		40-300%
	13C3-HFPO-DA	89%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.
(b) Outside control limits due to possible matrix interference.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	096C-R-2-12		
Lab Sample ID:	JD78193-6	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2634.D	1	12/07/23 23:04	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.092	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.10	0.26	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.26	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.26	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.10	0.26	0.066	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.092	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.079	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.092	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.32	0.26	0.066	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.092	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-R-2-12		
Lab Sample ID:	JD78193-6	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.96	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.53	0.079	ug/kg	UJ
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	42%		40-130%
	13C5-PFHxA	110%		40-130%
	13C4-PFHpA	110%		40-130%
	13C8-PFOA	107%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	109%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	85%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	096C-R-2-12		
Lab Sample ID:	JD78193-6	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	85%		10-130%
	d5-EtFOSA	82%		10-130%
	d3-MeFOSAA	165%		40-170%
	d5-EtFOSAA	170% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	134%		40-200%
	13C2-6:2FTS	172%		40-200%
	13C2-8:2FTS	199%		40-300%
	13C3-HFPO-DA	97%		40-130%

(a) Outside control limits due to possible matrix interference.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	009D-SD-0-2		
Lab Sample ID:	JD78193-7	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	22.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2635.D	1	12/07/23 23:19	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.5	0.48	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.62	1.7	0.30	ug/kg	J J
307-24-4	Perfluorohexanoic acid	ND	0.87	0.13	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.32	0.87	0.22	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.87	0.35	ug/kg	
375-95-1	Perfluorononanoic acid	0.38	0.87	0.22	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.87	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.87	0.26	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.87	0.35	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.87	0.39	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.87	0.43	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.87	0.30	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.87	0.43	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.87	0.48	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.87	0.43	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.55	0.87	0.22	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.87	0.61	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.87	0.48	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.87	0.22	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	3.5	1.2	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	3.5	0.43	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	3.5	0.82	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.87	0.30	ug/kg	
31506-32-8	MeFOSA	ND	0.87	0.26	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.87	0.22	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	009D-SD-0-2		
Lab Sample ID:	JD78193-7	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	22.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.87	0.35	ug/kg	
2991-50-6	EtFOSAA	ND	0.87	0.56	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	8.7	1.2	ug/kg	
1691-99-2	EtFOSE	ND	8.7	3.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	3.5	0.78	ug/kg	
919005-14-4	ADONA	ND	3.5	0.52	ug/kg	
377-73-1	PFMPA	ND	1.7	0.13	ug/kg	UJ
863090-89-5	PFMBA	ND	1.7	0.26	ug/kg	UJ
151772-58-6	NFDHA	ND	1.7	0.56	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	3.5	1.1	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	3.5	0.78	ug/kg	
113507-82-7	PFEESA	ND	1.7	0.13	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	4.3	1.0	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	22	2.7	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	22	2.7	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	42%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	102%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	96%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	93%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	009D-SD-0-2		
Lab Sample ID:	JD78193-7	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	22.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	85%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	137%		40-170%
	d5-EtFOSAA	136% [a]		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	93%		10-130%
	13C2-4:2FTS	106%		40-200%
	13C2-6:2FTS	146%		40-200%
	13C2-8:2FTS	164%		40-300%
	13C3-HFPO-DA	88%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	009D-SD-2-12		
Lab Sample ID:	JD78193-8	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2636.D	1	12/07/23 23:34	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.5	0.21	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.28	0.75	0.13	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.18	0.37	0.056	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.30	0.37	0.093	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.79	0.37	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	0.23	0.37	0.093	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.37	0.13	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.37	0.11	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.37	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.37	0.17	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.37	0.19	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.37	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.37	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.37	0.21	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.37	0.19	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.68	0.37	0.093	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.37	0.26	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.37	0.21	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.37	0.093	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.52	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.19	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.36	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.37	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.37	0.11	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.37	0.093	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	009D-SD-2-12		
Lab Sample ID:	JD78193-8	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.37	0.15	ug/kg	
2991-50-6	EtFOSAA	ND	0.37	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.7	0.52	ug/kg	
1691-99-2	EtFOSE	ND	3.7	1.4	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.34	ug/kg	
919005-14-4	ADONA	ND	1.5	0.22	ug/kg	
377-73-1	PFMPA	ND	0.75	0.056	ug/kg	UJ
863090-89-5	PFMBA	ND	0.75	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.75	0.24	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.49	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.34	ug/kg	
113507-82-7	PFEESA	ND	0.75	0.056	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.9	0.45	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.3	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.3	1.2	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	58%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	110%		30-130%
	13C2-PFDoDA	109%		10-130%
	13C2-PFTeDA	96%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	009D-SD-2-12		
Lab Sample ID:	JD78193-8	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	167%		40-170%
	d5-EtFOSAA	184% [a]		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	170%		40-200%
	13C2-6:2FTS	219% [a]		40-200%
	13C2-8:2FTS	224%		40-300%
	13C3-HFPO-DA	81%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	009D-R-0-2		
Lab Sample ID:	JD78193-9	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	24.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2637.D	1	12/07/23 23:50	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.3	0.45	ug/kg	R
2706-90-3	Perfluoropentanoic acid	2.5	1.6	0.29	ug/kg	J
307-24-4	Perfluorohexanoic acid	1.1	0.82	0.12	ug/kg	
375-85-9	Perfluoroheptanoic acid	1.5	0.82	0.20	ug/kg	
335-67-1	Perfluorooctanoic acid	3.5	0.82	0.33	ug/kg	
375-95-1	Perfluorononanoic acid	2.4	0.82	0.20	ug/kg	
335-76-2	Perfluorodecanoic acid	0.90	0.82	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	1.0	0.82	0.24	ug/kg	
307-55-1	Perfluorododecanoic acid	0.55	0.82	0.33	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.43	0.82	0.37	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.82	0.41	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.53	0.82	0.29	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.82	0.41	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.82	0.45	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.82	0.41	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	6.2	0.82	0.20	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.82	0.57	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.82	0.45	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.82	0.20	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	3.3	1.1	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	3.3	0.41	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	3.3	0.78	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.82	0.29	ug/kg	
31506-32-8	MeFOSA	ND	0.82	0.24	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.82	0.20	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	009D-R-0-2		
Lab Sample ID:	JD78193-9	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	24.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.82	0.33	ug/kg	
2991-50-6	EtFOSAA	ND	0.82	0.53	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	8.2	1.1	ug/kg	
1691-99-2	EtFOSE	ND	8.2	3.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	3.3	0.73	ug/kg	
919005-14-4	ADONA	ND	3.3	0.49	ug/kg	
377-73-1	PFMPA	ND	1.6	0.12	ug/kg	UJ
863090-89-5	PFMBA	ND	1.6	0.24	ug/kg	UJ
151772-58-6	NFDHA	ND	1.6	0.53	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	3.3	1.1	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	3.3	0.73	ug/kg	
113507-82-7	PFEESA	ND	1.6	0.12	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	4.1	0.98	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	20	2.5	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	20	2.6	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5%		5-130%
	13C5-PFPeA	26% [a]		40-130%
	13C5-PFHxA	86%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	109%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	83%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	68%		10-130%
	13C3-PFBS	81%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	009D-R-0-2		
Lab Sample ID:	JD78193-9	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	24.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	172% [b]		40-170%
	d5-EtFOSAA	175% [a]		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	65%		10-130%
	13C2-4:2FTS	140%		40-200%
	13C2-6:2FTS	225% [a]		40-200%
	13C2-8:2FTS	248%		40-300%
	13C3-HFPO-DA	65%		40-130%

(a) Outside control limits due to possible matrix interference.
(b) Outside of control limits, but within reasonable method recovery limits.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	009D-R-2-12		
Lab Sample ID:	JD78193-10	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2638.D	1	12/08/23 00:05	PC	12/07/23 15:47	OP50941	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.20	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.30	0.71	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	ND	0.36	0.053	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.26	0.36	0.089	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.52	0.36	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.14	0.36	0.089	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.36	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.36	0.11	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.36	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.36	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.36	0.18	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.36	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.36	0.18	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.36	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.36	0.18	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.50	0.36	0.089	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.36	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.36	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.36	0.089	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.50	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.18	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.34	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.36	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.36	0.11	ug/kg	UJ
4151-50-2	EtFOSA	ND	0.36	0.089	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	009D-R-2-12		
Lab Sample ID:	JD78193-10	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.36	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.36	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.6	0.50	ug/kg	
1691-99-2	EtFOSE	ND	3.6	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.32	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.71	0.053	ug/kg	UJ
863090-89-5	PFMBA	ND	0.71	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.71	0.23	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.46	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.32	ug/kg	
113507-82-7	PFEESA	ND	0.71	0.053	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.8	0.43	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.9	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.9	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	53%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	108%		40-130%
	13C8-PFOA	111%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	113%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	107%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	104%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	009D-R-2-12		
Lab Sample ID:	JD78193-10	**Date Sampled:**	12/04/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	55.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	190% [a]		40-170%
	d5-EtFOSAA	193% [a]		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	81%		10-130%
	13C2-4:2FTS	187%		40-200%
	13C2-6:2FTS	239% [a]		40-200%
	13C2-8:2FTS	264%		40-300%
	13C3-HFPO-DA	79%		40-130%

(a) Outside control limits due to possible matrix interference.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	RB-12042023		
Lab Sample ID:	JD78193-11	**Date Sampled:**	12/04/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2613.D	1	12/07/23 17:44	PC	12/07/23 14:00	OP50943	T1Q68
Run #2							

	Initial Volume	Final Volume
Run #1	539 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0074	0.00086	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0037	0.00068	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00027	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00046	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00070	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00037	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00058	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00051	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00071	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00073	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00071	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00061	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00094	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00091	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00040	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0013	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00037	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0074	0.0021	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0074	0.00084	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0074	0.0013	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00064	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00059	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00049	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-12042023		
Lab Sample ID:	JD78193-11	**Date Sampled:**	12/04/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00047	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00084	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0026	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0035	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0074	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0074	0.0011	ug/l	
377-73-1	PFMPA	ND	0.0037	0.00028	ug/l	
863090-89-5	PFMBA	ND	0.0037	0.00052	ug/l	
151772-58-6	NFDHA	ND	0.0037	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0074	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0074	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0037	0.00025	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0093	0.0022	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.046	0.0066	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.046	0.0057	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		5-130%
	13C5-PFPeA	95%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	94%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	102%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-12042023		
Lab Sample ID:	JD78193-11	**Date Sampled:**	12/04/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	91%		40-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	104%		40-170%
	d5-EtFOSAA	101%		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	93%		10-130%
	13C2-4:2FTS	118%		40-200%
	13C2-6:2FTS	136%		40-200%
	13C2-8:2FTS	131%		40-300%
	13C3-HFPO-DA	83%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	110C-SD-0-2		
Lab Sample ID:	JD78193-12	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2644.D	1	12/08/23 01:36	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.097	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.087	0.28	0.069	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.10	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.10	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.28	0.069	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	110C-SD-0-2		
Lab Sample ID:	JD78193-12	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	79%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	81%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	110C-SD-0-2		
Lab Sample ID:	JD78193-12	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	132%		40-170%
	d5-EtFOSAA	139% [a]		25-135%
	d7-MeFOSE	79%		10-130%
	d9-EtFOSE	78%		10-130%
	13C2-4:2FTS	108%		40-200%
	13C2-6:2FTS	177%		40-200%
	13C2-8:2FTS	164%		40-300%
	13C3-HFPO-DA	86%		40-130%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	110C-SD-2-12		
Lab Sample ID:	JD78193-13	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2648.D	1	12/08/23 02:37	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.12	0.54	0.094	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.12	0.27	0.040	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.10	0.27	0.067	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.33	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.27	0.067	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.37	0.27	0.067	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	110C-SD-2-12		
Lab Sample ID:	JD78193-13	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.080	ug/kg	UJ
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	104%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	89%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	91%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	110C-SD-2-12		
Lab Sample ID:	JD78193-13	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	84%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	153%		40-170%
	d5-EtFOSAA	165% [a]		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	92%		10-130%
	13C2-4:2FTS	120%		40-200%
	13C2-6:2FTS	153%		40-200%
	13C2-8:2FTS	181%		40-300%
	13C3-HFPO-DA	84%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	110C-R-0-2		
Lab Sample ID:	JD78193-14	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	44.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2649.D	1	12/08/23 02:52	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.8	0.25	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.89	0.16	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.45	0.067	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.45	0.11	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.45	0.18	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.45	0.11	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.45	0.16	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.45	0.13	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.45	0.18	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.45	0.20	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.45	0.22	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.45	0.16	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.45	0.22	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.45	0.25	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.45	0.22	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.28	0.45	0.11	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.45	0.31	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.45	0.25	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.45	0.11	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.8	0.62	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.8	0.22	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.8	0.42	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.45	0.16	ug/kg	
31506-32-8	MeFOSA	ND	0.45	0.13	ug/kg	
4151-50-2	EtFOSA	ND	0.45	0.11	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	110C-R-0-2		
Lab Sample ID:	JD78193-14	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	44.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.45	0.18	ug/kg	
2991-50-6	EtFOSAA	ND	0.45	0.29	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	4.5	0.62	ug/kg	
1691-99-2	EtFOSE	ND	4.5	1.6	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.8	0.40	ug/kg	
919005-14-4	ADONA	ND	1.8	0.27	ug/kg	
377-73-1	PFMPA	ND	0.89	0.067	ug/kg	UJ
863090-89-5	PFMBA	ND	0.89	0.13	ug/kg	
151772-58-6	NFDHA	ND	0.89	0.29	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.8	0.58	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.8	0.40	ug/kg	
113507-82-7	PFEESA	ND	0.89	0.067	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.2	0.54	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	11	1.4	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	11	1.4	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	50%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	110C-R-0-2		
Lab Sample ID:	JD78193-14	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	44.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	133%		40-170%
	d5-EtFOSAA	134%		25-135%
	d7-MeFOSE	87%		10-130%
	d9-EtFOSE	84%		10-130%
	13C2-4:2FTS	138%		40-200%
	13C2-6:2FTS	166%		40-200%
	13C2-8:2FTS	178%		40-300%
	13C3-HFPO-DA	86%		40-130%

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	110C-R-2-12		
Lab Sample ID:	JD78193-15	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2650.D	1	12/08/23 03:08	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.26	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.26	0.064	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.26	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.074	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	110C-R-2-12		
Lab Sample ID:	JD78193-15	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	34%		5-130%
	13C5-PFPeA	85%		40-130%
	13C5-PFHxA	99%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	105%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	107%		30-130%
	13C2-PFDoDA	103%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	110C-R-2-12		
Lab Sample ID:	JD78193-15	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	78.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	76%		10-130%
	d3-MeFOSAA	125%		40-170%
	d5-EtFOSAA	124%		25-135%
	d7-MeFOSE	85%		10-130%
	d9-EtFOSE	89%		10-130%
	13C2-4:2FTS	116%		40-200%
	13C2-6:2FTS	144%		40-200%
	13C2-8:2FTS	143%		40-300%
	13C3-HFPO-DA	92%		40-130%

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ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	118-SD-0-2		
Lab Sample ID:	JD78193-16	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2651.D	1	12/08/23 03:23	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.98	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.098	ug/kg	
375-95-1	Perfluorononanoic acid	0.088	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.098	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.095	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.98	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.98	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.98	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	118-SD-0-2		
Lab Sample ID:	JD78193-16	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.098	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.98	0.22	ug/kg	
919005-14-4	ADONA	ND	0.98	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.98	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.98	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	105%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	118-SD-0-2		
Lab Sample ID:	JD78193-16	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	122%		40-170%
	d5-EtFOSAA	129%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	121%		40-200%
	13C2-6:2FTS	148%		40-200%
	13C2-8:2FTS	150%		40-300%
	13C3-HFPO-DA	89%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	118-SD-2-12		
Lab Sample ID:	JD78193-17	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2652.D	1	12/08/23 03:38	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.090	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.039	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.064	ug/kg	
335-67-1	Perfluorooctanoic acid	0.13	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.26	0.064	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.26	0.090	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.090	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.25	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.090	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	118-SD-2-12		
Lab Sample ID:	JD78193-17	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.94	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.52	0.039	ug/kg	UJ
863090-89-5	PFMBA	ND	0.52	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.52	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.52	0.039	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.81	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	28%		5-130%
	13C5-PFPeA	69%		40-130%
	13C5-PFHxA	101%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	92%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	82%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	118-SD-2-12		
Lab Sample ID:	JD78193-17	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		40-130%
	13C8-FOSA	106%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	141%		40-170%
	d5-EtFOSAA	150% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	91%		10-130%
	13C2-4:2FTS	135%		40-200%
	13C2-6:2FTS	169%		40-200%
	13C2-8:2FTS	171%		40-300%
	13C3-HFPO-DA	96%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	118-R-0-2		
Lab Sample ID:	JD78193-18	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2653.D	1	12/08/23 03:53	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.5	0.20	ug/kg	R
2706-90-3	Perfluoropentanoic acid	1.0	0.73	0.13	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.31	0.36	0.055	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.78	0.36	0.091	ug/kg	
335-67-1	Perfluorooctanoic acid	1.6	0.36	0.15	ug/kg	
375-95-1	Perfluorononanoic acid	0.99	0.36	0.091	ug/kg	
335-76-2	Perfluorodecanoic acid	0.35	0.36	0.13	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	0.33	0.36	0.11	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.36	0.15	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.36	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.36	0.18	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.36	0.13	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.36	0.18	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.36	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.36	0.18	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	3.3	0.36	0.091	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.36	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.36	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.36	0.091	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.5	0.51	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.5	0.18	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.5	0.35	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.36	0.13	ug/kg	
31506-32-8	MeFOSA	ND	0.36	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.36	0.091	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	118-R-0-2		
Lab Sample ID:	JD78193-18	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.36	0.15	ug/kg	
2991-50-6	EtFOSAA	ND	0.36	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.6	0.51	ug/kg	
1691-99-2	EtFOSE	ND	3.6	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.5	0.33	ug/kg	
919005-14-4	ADONA	ND	1.5	0.22	ug/kg	
377-73-1	PFMPA	ND	0.73	0.055	ug/kg	UJ
863090-89-5	PFMBA	ND	0.73	0.11	ug/kg	UJ
151772-58-6	NFDHA	ND	0.73	0.24	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.5	0.47	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.5	0.33	ug/kg	
113507-82-7	PFEESA	ND	0.73	0.055	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.8	0.44	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	9.1	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	9.1	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6%		5-130%
	13C5-PFPeA	36% [a]		40-130%
	13C5-PFHxA	83%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	78%		10-130%
	13C3-PFBS	80%		40-135%
	13C3-PFHxS	92%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	118-R-0-2		
Lab Sample ID:	JD78193-18	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	53.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		40-130%
	13C8-FOSA	101%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	171% b		40-170%
	d5-EtFOSAA	175% b		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	146%		40-200%
	13C2-6:2FTS	234% b		40-200%
	13C2-8:2FTS	257%		40-300%
	13C3-HFPO-DA	61%		40-130%

(a) Outside of control limits, but within reasonable method recovery limits.
(b) Outside control limits biased high. Sample ND.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	118-R-2-12		
Lab Sample ID:	JD78193-19	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2654.D	1	12/08/23 04:08	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.19	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.68	0.12	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	0.12	0.34	0.051	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.21	0.34	0.085	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.38	0.34	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	0.10	0.34	0.085	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.34	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.34	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.34	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.51	0.34	0.085	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.085	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.085	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	118-R-2-12		
Lab Sample ID:	JD78193-19	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.48	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.31	ug/kg	
919005-14-4	ADONA	ND	1.4	0.20	ug/kg	
377-73-1	PFMPA	ND	0.68	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.68	0.10	ug/kg	UJ
151772-58-6	NFDHA	ND	0.68	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.31	ug/kg	
113507-82-7	PFEESA	ND	0.68	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.41	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.5	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	48%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	108%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	106%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	118-R-2-12		
Lab Sample ID:	JD78193-19	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	57.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	108%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	68%		10-130%
	d3-MeFOSAA	170%		40-170%
	d5-EtFOSAA	187% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	86%		10-130%
	13C2-4:2FTS	136%		40-200%
	13C2-6:2FTS	196%		40-200%
	13C2-8:2FTS	196%		40-300%
	13C3-HFPO-DA	78%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	120-NS-0-2		
Lab Sample ID:	JD78193-20	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2655.D	1	12/08/23 04:24	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.18	0.27	0.067	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-NS-0-2		
Lab Sample ID:	JD78193-20	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	UJ
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	53%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	106%		40-130%
	13C7-PFUnDA	114%		30-130%
	13C2-PFDoDA	115%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	100%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-NS-0-2		
Lab Sample ID:	JD78193-20	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	74%		10-130%
	d3-MeFOSAA	122%		40-170%
	d5-EtFOSAA	129%		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	113%		40-200%
	13C2-6:2FTS	151%		40-200%
	13C2-8:2FTS	166%		40-300%
	13C3-HFPO-DA	88%		40-130%

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	120-NS-2-12		
Lab Sample ID:	JD78193-21	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2656.D	1	12/08/23 04:39	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.24	0.036	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.060	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.060	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.14	0.24	0.073	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.17	0.24	0.060	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-NS-2-12		
Lab Sample ID:	JD78193-21	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	UJ
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	45%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	98%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	103%		30-130%
	13C2-PFDoDA	102%		10-130%
	13C2-PFTeDA	100%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-NS-2-12		
Lab Sample ID:	JD78193-21	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	81.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	104%		40-130%
	d3-MeFOSA	91%		10-130%
	d5-EtFOSA	84%		10-130%
	d3-MeFOSAA	126%		40-170%
	d5-EtFOSAA	128%		25-135%
	d7-MeFOSE	91%		10-130%
	d9-EtFOSE	92%		10-130%
	13C2-4:2FTS	125%		40-200%
	13C2-6:2FTS	148%		40-200%
	13C2-8:2FTS	162%		40-300%
	13C3-HFPO-DA	91%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	120-SD-0-2		
Lab Sample ID:	JD78193-22	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2657.D	1	12/08/23 04:54	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	R
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.097	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.069	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.28	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.28	0.069	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.097	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.28	0.083	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.097	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.58	0.28	0.069	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.069	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.097	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.083	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.069	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-SD-0-2		
Lab Sample ID:	JD78193-22	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.55	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.083	ug/kg	UJ
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.9	0.86	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.9	0.87	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	101%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	106%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	90%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-SD-0-2		
Lab Sample ID:	JD78193-22	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	75%		10-130%
	d3-MeFOSAA	149%		40-170%
	d5-EtFOSAA	151% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	89%		10-130%
	13C2-4:2FTS	119%		40-200%
	13C2-6:2FTS	148%		40-200%
	13C2-8:2FTS	179%		40-300%
	13C3-HFPO-DA	78%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	120-SD-2-12		
Lab Sample ID:	JD78193-23	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2661.D	1	12/08/23 05:56	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.25	0.038	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.10	0.25	0.063	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.17	0.25	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.096	0.25	0.063	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.25	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.25	0.076	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.25	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.25	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.25	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.25	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.25	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.25	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.25	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.25	0.063	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.25	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.25	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.25	0.063	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.35	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.25	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.25	0.076	ug/kg	
4151-50-2	EtFOSA	ND	0.25	0.063	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-SD-2-12		
Lab Sample ID:	JD78193-23	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.25	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.25	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.5	0.35	ug/kg	
1691-99-2	EtFOSE	ND	2.5	0.92	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.076	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.30	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.3	0.78	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.3	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13%		5-130%
	13C5-PFPeA	61%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	102%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	101%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	108%		30-130%
	13C2-PFDoDA	98%		10-130%
	13C2-PFTeDA	94%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-SD-2-12		
Lab Sample ID:	JD78193-23	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	79.0
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	105%		40-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	170%		40-170%
	d5-EtFOSAA	163% [a]		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	92%		10-130%
	13C2-4:2FTS	149%		40-200%
	13C2-6:2FTS	186%		40-200%
	13C2-8:2FTS	212%		40-300%
	13C3-HFPO-DA	81%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	120-R-0-2		
Lab Sample ID:	JD78193-24	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2662.D	1	12/08/23 06:11	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	R
2706-90-3	Perfluoropentanoic acid	0.25	0.59	0.10	ug/kg	J J
307-24-4	Perfluorohexanoic acid	0.25	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.31	0.29	0.073	ug/kg	
335-67-1	Perfluorooctanoic acid	1.1	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.37	0.29	0.073	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.13	0.29	0.088	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.11	0.29	0.10	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.4	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.088	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-R-0-2		
Lab Sample ID:	JD78193-24	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.044	ug/kg	UJ
863090-89-5	PFMBA	ND	0.59	0.088	ug/kg	UJ
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.91	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.93	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8%		5-130%
	13C5-PFPeA	44%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	98%		40-130%
	13C6-PFDA	116%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	96%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	94%		40-135%
	13C3-PFHxS	94%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-R-0-2		
Lab Sample ID:	JD78193-24	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	103%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	69%		10-130%
	d3-MeFOSAA	154%		40-170%
	d5-EtFOSAA	161% [a]		25-135%
	d7-MeFOSE	84%		10-130%
	d9-EtFOSE	83%		10-130%
	13C2-4:2FTS	146%		40-200%
	13C2-6:2FTS	196%		40-200%
	13C2-8:2FTS	231%		40-300%
	13C3-HFPO-DA	72%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	120-R-2-12		
Lab Sample ID:	JD78193-25	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2663.D	1	12/08/23 06:26	PC	12/07/23 03:30	OP50942	T1Q68
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q	
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg		UJ
2706-90-3	Perfluoropentanoic acid	0.11	0.56	0.098	ug/kg	J	J
307-24-4	Perfluorohexanoic acid	0.077	0.28	0.042	ug/kg	J	
375-85-9	Perfluoroheptanoic acid	0.13	0.28	0.070	ug/kg	J	
335-67-1	Perfluorooctanoic acid	0.28	0.28	0.11	ug/kg		
375-95-1	Perfluorononanoic acid	ND	0.28	0.070	ug/kg		
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg		
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.084	ug/kg		
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg		
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg		
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg		
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg		
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg		
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg		
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg		
1763-23-1	Perfluorooctanesulfonic acid	0.19	0.28	0.070	ug/kg	J	
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg		
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg		
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg		
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg		
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg		
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg		
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	ND	0.28	0.098	ug/kg		
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg		
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-R-2-12		
Lab Sample ID:	JD78193-25	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	UJ
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	UJ
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.89	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%		5-130%
	13C5-PFPeA	49%		40-130%
	13C5-PFHxA	97%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	101%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	95%		10-130%
	13C3-PFBS	82%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	120-R-2-12		
Lab Sample ID:	JD78193-25	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	69.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	112%		40-130%
	13C8-FOSA	113%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	147%		40-170%
	d5-EtFOSAA	163% [a]		25-135%
	d7-MeFOSE	88%		10-130%
	d9-EtFOSE	90%		10-130%
	13C2-4:2FTS	150%		40-200%
	13C2-6:2FTS	177%		40-200%
	13C2-8:2FTS	188%		40-300%
	13C3-HFPO-DA	76%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-12052023		
Lab Sample ID:	JD78193-26	**Date Sampled:**	12/05/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2614.D	1	12/07/23 17:59	PC	12/07/23 14:00	OP50943	T1Q68
Run #2							

	Initial Volume	Final Volume
Run #1	521 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0077	0.00089	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0038	0.00070	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0019	0.00028	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0019	0.00048	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0019	0.00072	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0019	0.00038	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0019	0.00060	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0019	0.00053	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0019	0.00074	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0019	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0019	0.00073	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0019	0.00063	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0019	0.00097	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0019	0.0011	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0019	0.00094	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0019	0.00041	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0019	0.0014	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0019	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0019	0.00038	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0077	0.0022	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0077	0.00087	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0077	0.0014	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0019	0.00066	ug/l	
31506-32-8	MeFOSA	ND	0.0019	0.00061	ug/l	
4151-50-2	EtFOSA	ND	0.0019	0.00051	ug/l	

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-12052023		
Lab Sample ID:	JD78193-26	**Date Sampled:**	12/05/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0019	0.00049	ug/l	
2991-50-6	EtFOSAA	ND	0.0019	0.00087	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.019	0.0027	ug/l	
1691-99-2	EtFOSE	ND	0.019	0.0036	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0077	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0077	0.0012	ug/l	
377-73-1	PFMPA	ND	0.0038	0.00029	ug/l	
863090-89-5	PFMBA	ND	0.0038	0.00054	ug/l	
151772-58-6	NFDHA	ND	0.0038	0.0012	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0077	0.0023	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0077	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0038	0.00026	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0096	0.0023	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.048	0.0068	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.048	0.0059	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	98%		5-130%
	13C5-PFPeA	97%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	92%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	90%		40-135%
	13C3-PFHxS	88%		40-130%

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-12052023		
Lab Sample ID:	JD78193-26	**Date Sampled:**	12/05/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/06/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	117%		40-170%
	d5-EtFOSAA	113%		25-135%
	d7-MeFOSE	98%		10-130%
	d9-EtFOSE	103%		10-130%
	13C2-4:2FTS	115%		40-200%
	13C2-6:2FTS	130%		40-200%
	13C2-8:2FTS	117%		40-300%
	13C3-HFPO-DA	90%		40-130%

CWL 1/7/23

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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N = Indicates presumptive evidence of a compound

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.validatausa.com

DATA USABILITY SUMMARY REPORT

COMPANY:	AECOM Technical Services Northeast, Inc.
PROJECT NAME/#:	WAA44 Rural Background Project #60679961
CONTRACTED LAB:	SGS North America
QA/QC LEVEL:	DUSR
ANALYTICAL METHOD(S):	EPA Draft Method 1633
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* 2020; NYSDEC *Guidelines for Sampling and Analysis of PFAS* 2023 Professional Judgment
SAMPLE MATRIX:	Water and Soil
TYPES OF ANALYSES:	Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S):	Cathi Lesher
SDG NUMBER:	JD78296
SAMPLING DATE(S):	December 5 and 6, 2023

SAMPLES:

LAB ID	CLIENT ID	PFAS
JD78296-1	091B-SD-0-2	X
JD78296-2	091B-SD-2-12	X
JD78296-3	FD-12052023	X
JD78296-4	091B-R-0-2	X
JD78296-5	091B-R-2-12	X
JD78296-5MS	091B-R-2-12MS	X
JD78296-5MSD	091B-R-2-12MSD	X
JD78296-6	040G-NS-0-2	X
JD78296-7	040G-NS-2-12	X
JD78296-8	FD-12062023	X
JD78296-9	040G-SD-0-2	X
JD78296-10	040G-SD-2-12	X
JD78296-10MS	040G-SD-2-12M	X
JD78296-10MSD	040G-SD-2-12MSD	X
JD78296-11	040G-R-0-2	X
JD78296-12	040G-R-2-12	X
JD78296-13	045F-NS-0-2	X
JD78296-14	045F-NS-2-12	X

LAB ID	CLIENT ID	PFAS
JD78296-15	045F-SD-0-2	X
JD78296-16	045F-SD-2-12	X
JD78296-17	045F-R-0-2	X
JD78296-18	045F-R-2-12	X
JD78296-19	049E-SD-0-2	X
JD78296-20	049E-SD-2-12	X
JD78296-21	049E-R-0-2	X
JD78296-22	049E-R-2-12	X
JD78296-23	RB-12062023	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
R	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

SGS North America – JD76131

PERFLOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 1633 Draft.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

There were no major issues with the data in this set. No qualification was needed based on this finding.

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete case narrative in the data package. The data package contains results for all samples listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration and Initial Calibration Verification criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No qualification was necessary.

V.) Blanks:

Blank results were evaluated based on project guidelines in the following table:

Blank Result	Sample Result	Qualification
Any detection	< Reporting Limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting Limit	>Reporting limit and	J+ biased high

Instrument Blank (IB):

All instrument blanks were free from contamination. No qualification was made based on this finding.:

Method Blank (MB):

All method blanks were free from contamination. No data were qualified based on method blank contamination.

Field Blank (FB):

There were no Field Blanks identified in this SDG. No data qualification was necessary.

Equipment Blank:

Equipment Blanks, RB-12062023, was free from contamination. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using samples JD78296-10/040G-SD-2-12, and JD78296-5/091B-R-2-12. All criteria were met, with the following exceptions. Qualification is applied to the parent sample only.

LAB ID	**CLIENT ID**	**QC Failure**	**Analyte**	**Qualification**
JD78296-5	091B-R-2-12	Recovery < lower control limit of 70%	PFDoS PFMPA 3:3FTCA	UJ

VII.) Laboratory Control Samples (LCS):

LLCS, OP050988-LLCS, and LCS, OP50988-LCS met all criteria. No qualification was made based on this finding.

LCS, OP51050-LCS, and LCS, OP51050-LCS, met all criteria. No qualification was necessary.

The following LCS recoveries were outside the 70-130% limits. Qualification for recoveries < 70% are estimated "J/UJ".

LCS ID	**Associated Samples**	**Analytes**
OP51054-LCS	JD78296-5 JD78296-13 JD78296-14 JD78296-15 JD78296-16	PFMPA 3:3FTCA
LCS ID	**Associated Samples**	**Analytes**

OP51054-LCS	JD78296-17 JD78296-18 JD78296-19 JD78296-20 JD78296-21 JD78296-22	PFMPA 3:3FTCA
OP51050-LLCS	JD78296-23	PFHxA

VIII.) Field Duplicates:

One set of field duplicate samples (091B-SD-2-12 / FD-12052023) and (040G-NS-2-12/FD-12062023) were identified as part of this SDG. The 30% Relative Percent Difference criteria were met. No qualification was made.

IX.) Extracted Internal Standards (EIS):

EIS recoveries (%R) were within the lower control criteria of 50%, with the following exceptions:

LAB ID	**CLIENT ID**	**EIS Analyte**	**Associated Analyte**	**Qualification**
JD78296-1	091B-SD-0-2	13C4PFBA	PFBA	UJ
JD78296-2	091B-SD-2-12	13C4PFBA	PFBA	UJ
JD78296-3	FD-12052023	13C4PFBA	PFBA	UJ
JD78296-4	091B-R-0-2	13C4PFBA	PFBA	UJ
JD78296-5	091B-R-2-12	13C4PFBA	PFBA	UJ
JD78296-6	040G-NS-0-2	13C4PFBA	PFBA	UJ
JD78296-9	040G-SD-0-2	13C4PFBA	PFBA	UJ
JD78296-11	040G-R-0-2	13C4PFBA	PFBA	J
JD78296-12	040G-R-2-12	13C4PFBA	PFBA	J
JD78296-13	045F-NS-0-2	13C4PFBA	PFBA	UJ
JD78296-14	045F-NS-2-12	13C4PFBA 3C5PFPeA	PFBA PFPeA 3:3FTCA PFMPA PFMBA	UJ UJ UJ UJ UJ
JD78296-15	045F-SD-0-2	13C4PFBA	PFBA	UJ
JD78296-16	045F-SD-2-12	13C4PFBA	PFBA	UJ
JD78296-17	045F-R-0-2	13C4PFBA	PFBA	J
JD78296-18	045F-R-2-12	13C4PFBA	PFBA	J
JD78296-19	049E-SD-0-2	13C4PFBA	PFBA	J
JD78296-20	049E-SD-2-12	13C4PFBA	PFBA	UJ
JD78296-21	049E-R-0-2	13C4PFBA	PFBA	UJ
JD78296-22	049E-R-2-12	13C4PFBA	PFBA	UJ

For EIS recoveries greater than the upper control limit all associated sample results were non-detect and required no qualification

X.) Ion Transitions:

All ion Transition criteria were within laboratory limits. No qualification was needed.

XI.) Reporting limits (RLs):

All reporting limit criteria were met.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

SGS North America Inc.

Report of Analysis

Client Sample ID:	091B-SD-0-2		
Lab Sample ID:	JD78296-1	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2808.D	1	12/11/23 20:14	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.17	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.23	0.63	0.11	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.048	0.31	0.047	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.31	0.078	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.31	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.13	0.31	0.078	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.31	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.31	0.094	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.31	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.31	0.14	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.31	0.16	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.31	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.31	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.31	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.31	0.16	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.31	0.078	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.31	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.31	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.31	0.078	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.44	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.16	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.30	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.31	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.31	0.094	ug/kg	
4151-50-2	EtFOSA	ND	0.31	0.078	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	091B-SD-0-2		
Lab Sample ID:	JD78296-1	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.31	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.31	0.20	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.1	0.44	ug/kg	
1691-99-2	EtFOSE	ND	3.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.28	ug/kg	
919005-14-4	ADONA	ND	1.3	0.19	ug/kg	
377-73-1	PFMPA	ND	0.63	0.047	ug/kg	
863090-89-5	PFMBA	ND	0.63	0.094	ug/kg	
151772-58-6	NFDHA	ND	0.63	0.20	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.41	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.28	ug/kg	
113507-82-7	PFEESA	ND	0.63	0.047	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.6	0.38	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.8	0.97	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.8	0.99	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	30%		5-130%
	13C5-PFPeA	57%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	99%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	85%		10-130%
	13C3-PFBS	81%		40-135%
	13C3-PFHxS	79%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	091B-SD-0-2		
Lab Sample ID:	JD78296-1	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	63.7
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	63%		10-130%
	d3-MeFOSAA	140%		40-170%
	d5-EtFOSAA	143% [a]		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	68%		10-130%
	13C2-4:2FTS	93%		40-200%
	13C2-6:2FTS	135%		40-200%
	13C2-8:2FTS	155%		40-300%
	13C3-HFPO-DA	77%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/17/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	091B-SD-2-12		
Lab Sample ID:	JD78296-2	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2809.D	1	12/11/23 20:29	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.29	0.044	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.073	ug/kg	
335-67-1	Perfluorooctanoic acid	0.15	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.088	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.37	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.088	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	091B-SD-2-12		
Lab Sample ID:	JD78296-2	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.59	0.044	ug/kg	
863090-89-5	PFMBA	ND	0.59	0.088	ug/kg	
151772-58-6	NFDHA	ND	0.59	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.59	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.91	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	28%		5-130%
	13C5-PFPeA	56%		40-130%
	13C5-PFHxA	88%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	97%		40-130%
	13C7-PFUnDA	93%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	77%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	091B-SD-2-12		
Lab Sample ID:	JD78296-2	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	98%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	128%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	101%		40-200%
	13C2-6:2FTS	134%		40-200%
	13C2-8:2FTS	138%		40-300%
	13C3-HFPO-DA	73%		40-130%

CWL 1/17/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-12052023		
Lab Sample ID:	JD78296-3	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2810.D	1	12/11/23 20:44	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.098	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.28	0.042	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.28	0.070	ug/kg	
335-67-1	Perfluorooctanoic acid	0.16	0.28	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.098	0.28	0.070	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.28	0.098	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.28	0.084	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.28	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.28	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.28	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.28	0.098	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.28	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.28	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.28	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.28	0.070	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.28	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.28	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.28	0.070	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.39	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.28	0.098	ug/kg	
31506-32-8	MeFOSA	ND	0.28	0.084	ug/kg	
4151-50-2	EtFOSA	ND	0.28	0.070	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-12052023		
Lab Sample ID:	JD78296-3	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.28	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.28	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.8	0.39	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.56	0.042	ug/kg	
863090-89-5	PFMBA	ND	0.56	0.084	ug/kg	
151772-58-6	NFDHA	ND	0.56	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.56	0.042	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.0	0.87	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.0	0.88	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	36%		5-130%
	13C5-PFPeA	81%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	90%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	89%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	77%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	93%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-12052023		
Lab Sample ID:	JD78296-3	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	70.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	94%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	128%		40-170%
	d5-EtFOSAA	121%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	80%		10-130%
	13C2-4:2FTS	86%		40-200%
	13C2-6:2FTS	135%		40-200%
	13C2-8:2FTS	149%		40-300%
	13C3-HFPO-DA	80%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	091B-R-0-2		
Lab Sample ID:	JD78296-4	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2811.D	1	12/11/23 21:00	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.057	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.091	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.15	0.29	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.12	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.091	0.29	0.086	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	091B-R-0-2		
Lab Sample ID:	JD78296-4	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.26	ug/kg	
919005-14-4	ADONA	ND	1.1	0.17	ug/kg	
377-73-1	PFMPA	ND	0.57	0.043	ug/kg	
863090-89-5	PFMBA	ND	0.57	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.57	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.57	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.34	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	26%		5-130%
	13C5-PFPeA	51%		40-130%
	13C5-PFHxA	82%		40-130%
	13C4-PFHpA	94%		40-130%
	13C8-PFOA	93%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	80%		10-130%
	13C3-PFBS	78%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	091B-R-0-2		
Lab Sample ID:	JD78296-4	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	66.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	99%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	110%		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	74%		40-200%
	13C2-6:2FTS	121%		40-200%
	13C2-8:2FTS	154%		40-300%
	13C3-HFPO-DA	76%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	091B-R-2-12		
Lab Sample ID:	JD78296-5	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5643.D	1	12/12/23 18:21	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.90	0.12	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.45	0.079	ug/kg	
307-24-4	Perfluorohexanoic acid	0.060	0.22	0.034	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.10	0.22	0.056	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.22	0.090	ug/kg	J
375-95-1	Perfluorononanoic acid	0.067	0.22	0.056	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.22	0.079	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.22	0.067	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.22	0.090	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.22	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.22	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.22	0.079	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.22	0.11	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.22	0.12	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.22	0.11	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.22	0.056	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.22	0.16	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.22	0.12	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.22	0.056	ug/kg	UJ
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.90	0.31	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.90	0.11	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.90	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.22	0.079	ug/kg	
31506-32-8	MeFOSA	ND	0.22	0.067	ug/kg	
4151-50-2	EtFOSA	ND	0.22	0.056	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	091B-R-2-12		
Lab Sample ID:	JD78296-5	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.22	0.090	ug/kg	
2991-50-6	EtFOSAA	ND	0.22	0.15	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.2	0.31	ug/kg	
1691-99-2	EtFOSE	ND	2.2	0.82	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.90	0.20	ug/kg	
919005-14-4	ADONA	ND	0.90	0.13	ug/kg	
377-73-1	PFMPA	ND	0.45	0.034	ug/kg	UJ
863090-89-5	PFMBA	ND	0.45	0.067	ug/kg	
151772-58-6	NFDHA	ND	0.45	0.15	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.90	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.90	0.20	ug/kg	
113507-82-7	PFEESA	ND	0.45	0.034	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.6	0.70	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.6	0.71	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	35%		5-130%
	13C5-PFPeA	77%		40-130%
	13C5-PFHxA	86%		40-130%
	13C4-PFHpA	87%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	89%		40-130%
	13C7-PFUnDA	88%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	76%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	95%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	091B-R-2-12		
Lab Sample ID:	JD78296-5	**Date Sampled:**	12/05/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	88.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	61%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	106%		40-170%
	d5-EtFOSAA	103%		25-135%
	d7-MeFOSE	67%		10-130%
	d9-EtFOSE	62%		10-130%
	13C2-4:2FTS	98%		40-200%
	13C2-6:2FTS	123%		40-200%
	13C2-8:2FTS	129%		40-300%
	13C3-HFPO-DA	86%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	040G-NS-0-2		
Lab Sample ID:	JD78296-6	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2812.D	1	12/11/23 21:15	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.26	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.26	0.066	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.26	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.26	0.066	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.26	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.079	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.10	0.26	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.079	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-NS-0-2		
Lab Sample ID:	JD78296-6	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.53	0.079	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.83	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15%		5-130%
	13C5-PFPeA	69%		40-130%
	13C5-PFHxA	94%		40-130%
	13C4-PFHpA	93%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	103%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	95%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	89%		40-135%
	13C3-PFHxS	89%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-NS-0-2		
Lab Sample ID:	JD78296-6	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	74.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	95%		40-130%
	d3-MeFOSA	74%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	108%		40-170%
	d5-EtFOSAA	109%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	78%		10-130%
	13C2-4:2FTS	103%		40-200%
	13C2-6:2FTS	118%		40-200%
	13C2-8:2FTS	123%		40-300%
	13C3-HFPO-DA	86%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	040G-NS-2-12		
Lab Sample ID:	JD78296-7	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2813.D	1	12/11/23 21:30	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.093	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	0.12	0.27	0.066	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.16	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.27	0.066	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.093	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.080	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.093	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.12	0.27	0.066	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.066	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.37	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.25	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.093	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.080	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.066	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-NS-2-12		
Lab Sample ID:	JD78296-7	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.37	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.97	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.53	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.53	0.080	ug/kg	
151772-58-6	NFDHA	ND	0.53	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.53	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.6	0.82	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.6	0.84	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	83%		5-130%
	13C5-PFPeA	86%		40-130%
	13C5-PFHxA	87%		40-130%
	13C4-PFHpA	82%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	88%		40-130%
	13C7-PFUnDA	87%		30-130%
	13C2-PFDoDA	83%		10-130%
	13C2-PFTeDA	73%		10-130%
	13C3-PFBS	74%		40-135%
	13C3-PFHxS	80%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-NS-2-12		
Lab Sample ID:	JD78296-7	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	73.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	90%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	110%		25-135%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	78%		10-130%
	13C2-4:2FTS	83%		40-200%
	13C2-6:2FTS	97%		40-200%
	13C2-8:2FTS	110%		40-300%
	13C3-HFPO-DA	74%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-12062023		
Lab Sample ID:	JD78296-8	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2814.D	1	12/11/23 21:45	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.17	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.094	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.27	0.040	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.27	0.067	ug/kg	
335-67-1	Perfluorooctanoic acid	0.15	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	0.27	0.067	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.094	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.081	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.094	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	0.21	0.27	0.13	ug/kg	J
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.12	0.27	0.067	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.067	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.094	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.081	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.067	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-12062023		
Lab Sample ID:	JD78296-8	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	0.98	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.24	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.54	0.040	ug/kg	
863090-89-5	PFMBA	ND	0.54	0.081	ug/kg	
151772-58-6	NFDHA	ND	0.54	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.35	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.24	ug/kg	
113507-82-7	PFEESA	ND	0.54	0.040	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.32	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.7	0.83	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.7	0.85	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	79%		5-130%
	13C5-PFPeA	94%		40-130%
	13C5-PFHxA	102%		40-130%
	13C4-PFHpA	50%		40-130%
	13C8-PFOA	100%		40-130%
	13C9-PFNA	103%		40-130%
	13C6-PFDA	96%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	99%		10-130%
	13C2-PFTeDA	81%		10-130%
	13C3-PFBS	88%		40-135%
	13C3-PFHxS	111%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-12062023		
Lab Sample ID:	JD78296-8	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	72.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		40-130%
	13C8-FOSA	93%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	63%		10-130%
	d3-MeFOSAA	119%		40-170%
	d5-EtFOSAA	119%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	82%		10-130%
	13C2-4:2FTS	95%		40-200%
	13C2-6:2FTS	149%		40-200%
	13C2-8:2FTS	151%		40-300%
	13C3-HFPO-DA	95%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	040G-SD-0-2		
Lab Sample ID:	JD78296-9	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2815.D	1	12/11/23 22:00	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.089	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.29	0.073	ug/kg	
335-67-1	Perfluorooctanoic acid	0.18	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.20	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.15	0.29	0.088	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.36	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.088	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-SD-0-2		
Lab Sample ID:	JD78296-9	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.18	ug/kg	
377-73-1	PFMPA	ND	0.58	0.044	ug/kg	
863090-89-5	PFMBA	ND	0.58	0.088	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.91	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	36%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	81%		40-130%
	13C4-PFHpA	81%		40-130%
	13C8-PFOA	84%		40-130%
	13C9-PFNA	81%		40-130%
	13C6-PFDA	87%		40-130%
	13C7-PFUnDA	82%		30-130%
	13C2-PFDoDA	84%		10-130%
	13C2-PFTeDA	67%		10-130%
	13C3-PFBS	75%		40-135%
	13C3-PFHxS	78%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-SD-0-2		
Lab Sample ID:	JD78296-9	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		40-130%
	13C8-FOSA	94%		40-130%
	d3-MeFOSA	59%		10-130%
	d5-EtFOSA	59%		10-130%
	d3-MeFOSAA	121%		40-170%
	d5-EtFOSAA	141% [a]		25-135%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	106%		40-200%
	13C2-6:2FTS	160%		40-200%
	13C2-8:2FTS	170%		40-300%
	13C3-HFPO-DA	68%		40-130%

(a) Outside control limits biased high. Sample ND.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	040G-SD-2-12		
Lab Sample ID:	JD78296-10	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2816.D	1	12/11/23 22:16	PC	12/08/23 12:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.32	1.0	0.14	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	0.063	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.090	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.19	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.097	0.26	0.077	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.34	0.26	0.064	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-SD-2-12		
Lab Sample ID:	JD78296-10	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	57%		5-130%
	13C5-PFPeA	83%		40-130%
	13C5-PFHxA	87%		40-130%
	13C4-PFHpA	84%		40-130%
	13C8-PFOA	91%		40-130%
	13C9-PFNA	90%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	79%		40-135%
	13C3-PFHxS	79%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-SD-2-12		
Lab Sample ID:	JD78296-10	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		40-130%
	13C8-FOSA	92%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	63%		10-130%
	d3-MeFOSAA	126%		40-170%
	d5-EtFOSAA	129%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	90%		40-200%
	13C2-6:2FTS	128%		40-200%
	13C2-8:2FTS	149%		40-300%
	13C3-HFPO-DA	80%		40-130%

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	040G-R-0-2		
Lab Sample ID:	JD78296-11	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2817.D	1	12/11/23 22:31	PC	12/11/23 14:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.43	1.2	0.16	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.068	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.090	0.29	0.073	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.15	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.11	0.29	0.087	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-R-0-2		
Lab Sample ID:	JD78296-11	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.044	ug/kg	
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		5-130%
	13C5-PFPeA	70%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	86%		40-130%
	13C8-PFOA	92%		40-130%
	13C9-PFNA	96%		40-130%
	13C6-PFDA	93%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	83%		40-135%
	13C3-PFHxS	88%		40-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-R-0-2		
Lab Sample ID:	JD78296-11	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.3
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		40-130%
	13C8-FOSA	94%		40-130%
	d3-MeFOSA	69%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	119%		40-170%
	d5-EtFOSAA	117%		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	74%		10-130%
	13C2-4:2FTS	93%		40-200%
	13C2-6:2FTS	138%		40-200%
	13C2-8:2FTS	149%		40-300%
	13C3-HFPO-DA	75%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	040G-R-2-12		
Lab Sample ID:	JD78296-12	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1Q2821.D	1	12/11/23 23:32	PC	12/08/23 12:00	OP50968	T1Q70
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.22	0.97	0.13	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.085	ug/kg	
307-24-4	Perfluorohexanoic acid	0.064	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.080	0.24	0.061	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.25	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	0.078	0.24	0.061	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-R-2-12		
Lab Sample ID:	JD78296-12	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.88	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	
863090-89-5	PFMBA	ND	0.48	0.073	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.75	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	43%		5-130%
	13C5-PFPeA	68%		40-130%
	13C5-PFHxA	90%		40-130%
	13C4-PFHpA	92%		40-130%
	13C8-PFOA	96%		40-130%
	13C9-PFNA	93%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	86%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	040G-R-2-12		
Lab Sample ID:	JD78296-12	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.9
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	89%		40-130%
	d3-MeFOSA	67%		10-130%
	d5-EtFOSA	62%		10-130%
	d3-MeFOSAA	111%		40-170%
	d5-EtFOSAA	113%		25-135%
	d7-MeFOSE	71%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	85%		40-200%
	13C2-6:2FTS	115%		40-200%
	13C2-8:2FTS	134%		40-300%
	13C3-HFPO-DA	83%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	045F-NS-0-2		
Lab Sample ID:	JD78296-13	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5644.D	1	12/12/23 18:36	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.4	0.20	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	0.19	0.71	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.099	0.35	0.053	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	0.35	0.089	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.35	0.14	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.35	0.089	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.35	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.35	0.11	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.35	0.14	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.35	0.16	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.35	0.18	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.35	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.35	0.18	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.35	0.20	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.35	0.18	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.35	0.089	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.35	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.35	0.20	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.35	0.089	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.4	0.50	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.18	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.34	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.35	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.35	0.11	ug/kg	
4151-50-2	EtFOSA	ND	0.35	0.089	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-NS-0-2		
Lab Sample ID:	JD78296-13	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.35	0.14	ug/kg	
2991-50-6	EtFOSAA	ND	0.35	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.5	0.50	ug/kg	
1691-99-2	EtFOSE	ND	3.5	1.3	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.4	0.32	ug/kg	
919005-14-4	ADONA	ND	1.4	0.21	ug/kg	
377-73-1	PFMPA	ND	0.71	0.053	ug/kg	UJ
863090-89-5	PFMBA	ND	0.71	0.11	ug/kg	
151772-58-6	NFDHA	ND	0.71	0.23	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.4	0.46	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.4	0.32	ug/kg	
113507-82-7	PFEESA	ND	0.71	0.053	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.8	0.43	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.9	1.1	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.9	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16%		5-130%
	13C5-PFPeA	82%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	100%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	107%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	98%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	105%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-NS-0-2		
Lab Sample ID:	JD78296-13	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	56.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%		40-130%
	13C8-FOSA	119%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	67%		10-130%
	d3-MeFOSAA	169%		40-170%
	d5-EtFOSAA	156% [a]		25-135%
	d7-MeFOSE	80%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	128%		40-200%
	13C2-6:2FTS	159%		40-200%
	13C2-8:2FTS	188%		40-300%
	13C3-HFPO-DA	98%		40-130%

(a) Outside control limits biased high. Sample ND.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	045F-NS-2-12		
Lab Sample ID:	JD78296-14	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5645.D	1	12/12/23 18:51	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.97	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.49	0.085	ug/kg	UJ
307-24-4	Perfluorohexanoic acid	ND	0.24	0.037	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.061	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.097	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.061	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.085	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.073	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.097	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.085	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.094	0.24	0.061	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.061	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.97	0.34	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.97	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.97	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.085	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.073	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.061	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-NS-2-12		
Lab Sample ID:	JD78296-14	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.097	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.34	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.89	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.97	0.22	ug/kg	
919005-14-4	ADONA	ND	0.97	0.15	ug/kg	
377-73-1	PFMPA	ND	0.49	0.037	ug/kg	UJ
863090-89-5	PFMBA	ND	0.49	0.073	ug/kg	UJ
151772-58-6	NFDHA	ND	0.49	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.97	0.32	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.97	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.49	0.037	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.1	0.76	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.1	0.77	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	46%		40-130%
	13C5-PFHxA	96%		40-130%
	13C4-PFHpA	91%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	104%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	100%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	100%		40-135%
	13C3-PFHxS	114%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-NS-2-12		
Lab Sample ID:	JD78296-14	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	82.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	136%		40-170%
	d5-EtFOSAA	139% [a]		25-135%
	d7-MeFOSE	82%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	102%		40-200%
	13C2-6:2FTS	127%		40-200%
	13C2-8:2FTS	198%		40-300%
	13C3-HFPO-DA	99%		40-130%

(a) Outside control limits biased high. Sample ND.

CWL 1/17/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	045F-SD-0-2		
Lab Sample ID:	JD78296-15	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5646.D	1	12/12/23 19:06	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.066	0.29	0.043	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.29	0.072	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.14	0.29	0.12	ug/kg	J
375-95-1	Perfluorononanoic acid	0.13	0.29	0.072	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.086	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.40	0.29	0.072	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.072	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.27	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.086	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.072	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-SD-0-2		
Lab Sample ID:	JD78296-15	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.40	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.043	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.086	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.37	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.043	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.2	0.89	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.2	0.91	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	22%		5-130%
	13C5-PFPeA	84%		40-130%
	13C5-PFHxA	104%		40-130%
	13C4-PFHpA	103%		40-130%
	13C8-PFOA	103%		40-130%
	13C9-PFNA	102%		40-130%
	13C6-PFDA	102%		40-130%
	13C7-PFUnDA	102%		30-130%
	13C2-PFDoDA	89%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	92%		40-135%
	13C3-PFHxS	99%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-SD-0-2		
Lab Sample ID:	JD78296-15	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	68.1
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		40-130%
	13C8-FOSA	112%		40-130%
	d3-MeFOSA	72%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	134%		40-170%
	d5-EtFOSAA	124%		25-135%
	d7-MeFOSE	83%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	120%		40-200%
	13C2-6:2FTS	130%		40-200%
	13C2-8:2FTS	137%		40-300%
	13C3-HFPO-DA	108%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	045F-SD-2-12		
Lab Sample ID:	JD78296-16	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5647.D	1	12/12/23 19:22	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.13	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.084	ug/kg	
307-24-4	Perfluorohexanoic acid	0.070	0.24	0.036	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.24	0.060	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.15	0.24	0.096	ug/kg	J
375-95-1	Perfluorononanoic acid	0.073	0.24	0.060	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.24	0.084	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.072	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.24	0.096	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.084	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.12	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.13	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.12	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.23	0.24	0.060	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.17	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.13	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.060	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.12	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.23	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.084	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.072	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.060	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-SD-2-12		
Lab Sample ID:	JD78296-16	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.096	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.16	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	0.33	ug/kg	
1691-99-2	EtFOSE	ND	2.4	0.87	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.22	ug/kg	
919005-14-4	ADONA	ND	0.96	0.14	ug/kg	
377-73-1	PFMPA	ND	0.48	0.036	ug/kg	UJ
863090-89-5	PFMBA	ND	0.48	0.072	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.16	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.22	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.036	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.29	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	0.74	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	0.75	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	39%		5-130%
	13C5-PFPeA	92%		40-130%
	13C5-PFHxA	98%		40-130%
	13C4-PFHpA	99%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	109%		40-130%
	13C7-PFUnDA	98%		30-130%
	13C2-PFDoDA	90%		10-130%
	13C2-PFTeDA	84%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	90%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-SD-2-12		
Lab Sample ID:	JD78296-16	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	80.4
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		40-130%
	13C8-FOSA	97%		40-130%
	d3-MeFOSA	62%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	113%		40-170%
	d5-EtFOSAA	107%		25-135%
	d7-MeFOSE	73%		10-130%
	d9-EtFOSE	65%		10-130%
	13C2-4:2FTS	109%		40-200%
	13C2-6:2FTS	93%		40-200%
	13C2-8:2FTS	148%		40-300%
	13C3-HFPO-DA	106%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	045F-R-0-2		
Lab Sample ID:	JD78296-17	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5651.D	1	12/12/23 20:23	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	1.4	1.3	0.19	ug/kg	J
2706-90-3	Perfluoropentanoic acid	0.48	0.67	0.12	ug/kg	J
307-24-4	Perfluorohexanoic acid	0.29	0.34	0.051	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.45	0.34	0.084	ug/kg	
335-67-1	Perfluorooctanoic acid	0.88	0.34	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.36	0.34	0.084	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.34	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.13	0.34	0.10	ug/kg	J
307-55-1	Perfluorododecanoic acid	ND	0.34	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.13	0.34	0.12	ug/kg	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.80	0.34	0.084	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.19	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.084	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.084	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-R-0-2		
Lab Sample ID:	JD78296-17	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.051	ug/kg	UJ
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.051	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.4	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.4	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	66%		40-130%
	13C5-PFHxA	93%		40-130%
	13C4-PFHpA	95%		40-130%
	13C8-PFOA	97%		40-130%
	13C9-PFNA	95%		40-130%
	13C6-PFDA	98%		40-130%
	13C7-PFUnDA	97%		30-130%
	13C2-PFDoDA	85%		10-130%
	13C2-PFTeDA	83%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	110%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-R-0-2		
Lab Sample ID:	JD78296-17	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	58.2
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		40-130%
	13C8-FOSA	109%		40-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	58%		10-130%
	d3-MeFOSAA	151%		40-170%
	d5-EtFOSAA	155% [a]		25-135%
	d7-MeFOSE	70%		10-130%
	d9-EtFOSE	58%		10-130%
	13C2-4:2FTS	136%		40-200%
	13C2-6:2FTS	149%		40-200%
	13C2-8:2FTS	177%		40-300%
	13C3-HFPO-DA	87%		40-130%

(a) Outside control limits due to possible matrix interference.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	045F-R-2-12		
Lab Sample ID:	JD78296-18	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5652.D	1	12/12/23 20:38	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.25	1.1	0.15	ug/kg	J
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	0.062	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.11	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	ND	0.27	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.27	0.068	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.27	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.10	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-R-2-12		
Lab Sample ID:	JD78296-18	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	31%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	96%		40-130%
	13C8-PFOA	99%		40-130%
	13C9-PFNA	94%		40-130%
	13C6-PFDA	101%		40-130%
	13C7-PFUnDA	95%		30-130%
	13C2-PFDoDA	94%		10-130%
	13C2-PFTeDA	99%		10-130%
	13C3-PFBS	96%		40-135%
	13C3-PFHxS	107%		40-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	045F-R-2-12		
Lab Sample ID:	JD78296-18	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.6
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		40-130%
	13C8-FOSA	119%		40-130%
	d3-MeFOSA	81%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	151%		40-170%
	d5-EtFOSAA	146% [a]		25-135%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	132%		40-200%
	13C2-6:2FTS	154%		40-200%
	13C2-8:2FTS	159%		40-300%
	13C3-HFPO-DA	100%		40-130%

(a) Outside control limits due to possible matrix interference.

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	049E-SD-0-2		
Lab Sample ID:	JD78296-19	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5653.D	1	12/12/23 20:53	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.21	1.3	0.18	ug/kg	J J
2706-90-3	Perfluoropentanoic acid	ND	0.67	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	0.10	0.34	0.050	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.18	0.34	0.084	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.35	0.34	0.13	ug/kg	
375-95-1	Perfluorononanoic acid	0.15	0.34	0.084	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.34	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.34	0.10	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.34	0.13	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.34	0.15	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.34	0.17	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.34	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.34	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.34	0.18	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.34	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.34	0.34	0.084	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.34	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.34	0.18	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.34	0.084	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.47	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.17	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.34	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.34	0.10	ug/kg	
4151-50-2	EtFOSA	ND	0.34	0.084	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	049E-SD-0-2		
Lab Sample ID:	JD78296-19	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.34	0.13	ug/kg	
2991-50-6	EtFOSAA	ND	0.34	0.22	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	3.4	0.47	ug/kg	
1691-99-2	EtFOSE	ND	3.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.30	ug/kg	
919005-14-4	ADONA	ND	1.3	0.20	ug/kg	
377-73-1	PFMPA	ND	0.67	0.050	ug/kg	UJ
863090-89-5	PFMBA	ND	0.67	0.10	ug/kg	
151772-58-6	NFDHA	ND	0.67	0.22	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.3	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.3	0.30	ug/kg	
113507-82-7	PFEESA	ND	0.67	0.050	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.7	0.40	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	8.4	1.0	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	8.4	1.1	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	59%		5-130%
	13C5-PFPeA	87%		40-130%
	13C5-PFHxA	89%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	87%		40-130%
	13C9-PFNA	91%		40-130%
	13C6-PFDA	95%		40-130%
	13C7-PFUnDA	91%		30-130%
	13C2-PFDoDA	87%		10-130%
	13C2-PFTeDA	82%		10-130%
	13C3-PFBS	84%		40-135%
	13C3-PFHxS	76%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	049E-SD-0-2		
Lab Sample ID:	JD78296-19	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	59.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		40-130%
	13C8-FOSA	100%		40-130%
	d3-MeFOSA	71%		10-130%
	d5-EtFOSA	65%		10-130%
	d3-MeFOSAA	116%		40-170%
	d5-EtFOSAA	116%		25-135%
	d7-MeFOSE	74%		10-130%
	d9-EtFOSE	66%		10-130%
	13C2-4:2FTS	96%		40-200%
	13C2-6:2FTS	123%		40-200%
	13C2-8:2FTS	128%		40-300%
	13C3-HFPO-DA	92%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	049E-SD-2-12		
Lab Sample ID:	JD78296-20	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5654.D	1	12/12/23 21:09	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.15	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.096	ug/kg	
307-24-4	Perfluorohexanoic acid	0.049	0.27	0.041	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.12	0.27	0.068	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.23	0.27	0.11	ug/kg	J
375-95-1	Perfluorononanoic acid	0.080	0.27	0.068	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.27	0.096	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.27	0.082	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.27	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.27	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.27	0.14	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.27	0.096	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.27	0.14	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.27	0.15	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.27	0.14	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.15	0.27	0.068	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.27	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.27	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.27	0.068	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.38	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.14	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.27	0.096	ug/kg	
31506-32-8	MeFOSA	ND	0.27	0.082	ug/kg	
4151-50-2	EtFOSA	ND	0.27	0.068	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	049E-SD-2-12		
Lab Sample ID:	JD78296-20	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.27	0.11	ug/kg	
2991-50-6	EtFOSAA	ND	0.27	0.18	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.7	0.38	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.0	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.25	ug/kg	
919005-14-4	ADONA	ND	1.1	0.16	ug/kg	
377-73-1	PFMPA	ND	0.55	0.041	ug/kg	UJ
863090-89-5	PFMBA	ND	0.55	0.082	ug/kg	
151772-58-6	NFDHA	ND	0.55	0.18	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.1	0.36	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.1	0.25	ug/kg	
113507-82-7	PFEESA	ND	0.55	0.041	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.4	0.33	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.8	0.85	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.8	0.86	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14%		5-130%
	13C5-PFPeA	76%		40-130%
	13C5-PFHxA	100%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	101%		40-130%
	13C9-PFNA	92%		40-130%
	13C6-PFDA	100%		40-130%
	13C7-PFUnDA	88%		30-130%
	13C2-PFDoDA	86%		10-130%
	13C2-PFTeDA	86%		10-130%
	13C3-PFBS	97%		40-135%
	13C3-PFHxS	97%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	049E-SD-2-12		
Lab Sample ID:	JD78296-20	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	71.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		40-130%
	13C8-FOSA	107%		40-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	77%		10-130%
	d3-MeFOSAA	115%		40-170%
	d5-EtFOSAA	117%		25-135%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	72%		10-130%
	13C2-4:2FTS	117%		40-200%
	13C2-6:2FTS	108%		40-200%
	13C2-8:2FTS	136%		40-300%
	13C3-HFPO-DA	102%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	049E-R-0-2		
Lab Sample ID:	JD78296-21	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5655.D	1	12/12/23 21:24	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.16	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	0.10	0.29	0.044	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.17	0.29	0.073	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.34	0.29	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	0.16	0.29	0.073	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.29	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.29	0.087	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.29	0.12	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.29	0.13	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.29	0.15	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.29	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.29	0.15	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.29	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.29	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.67	0.29	0.073	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.29	0.20	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.29	0.16	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.29	0.073	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.41	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.15	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.28	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.29	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.29	0.087	ug/kg	
4151-50-2	EtFOSA	ND	0.29	0.073	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	049E-R-0-2		
Lab Sample ID:	JD78296-21	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.29	0.12	ug/kg	
2991-50-6	EtFOSAA	ND	0.29	0.19	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.9	0.41	ug/kg	
1691-99-2	EtFOSE	ND	2.9	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.26	ug/kg	
919005-14-4	ADONA	ND	1.2	0.17	ug/kg	
377-73-1	PFMPA	ND	0.58	0.044	ug/kg	UJ
863090-89-5	PFMBA	ND	0.58	0.087	ug/kg	
151772-58-6	NFDHA	ND	0.58	0.19	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.2	0.38	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.2	0.26	ug/kg	
113507-82-7	PFEESA	ND	0.58	0.044	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.5	0.35	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	7.3	0.90	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	7.3	0.92	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11%		5-130%
	13C5-PFPeA	63%		40-130%
	13C5-PFHxA	91%		40-130%
	13C4-PFHpA	97%		40-130%
	13C8-PFOA	95%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	117%		40-130%
	13C7-PFUnDA	89%		30-130%
	13C2-PFDoDA	81%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	96%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	049E-R-0-2		
Lab Sample ID:	JD78296-21	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	67.5
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	80%		10-130%
	d5-EtFOSA	80%		10-130%
	d3-MeFOSAA	132%		40-170%
	d5-EtFOSAA	133%		25-135%
	d7-MeFOSE	76%		10-130%
	d9-EtFOSE	68%		10-130%
	13C2-4:2FTS	93%		40-200%
	13C2-6:2FTS	165%		40-200%
	13C2-8:2FTS	167%		40-300%
	13C3-HFPO-DA	93%		40-130%

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ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	049E-R-2-12		
Lab Sample ID:	JD78296-22	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5656.D	1	12/12/23 21:39	PC	12/12/23 10:15	OP51054	T2Q98
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.14	ug/kg	UJ
2706-90-3	Perfluoropentanoic acid	ND	0.51	0.089	ug/kg	
307-24-4	Perfluorohexanoic acid	0.048	0.26	0.038	ug/kg	J
375-85-9	Perfluoroheptanoic acid	0.094	0.26	0.064	ug/kg	J
335-67-1	Perfluorooctanoic acid	0.13	0.26	0.10	ug/kg	J
375-95-1	Perfluorononanoic acid	0.097	0.26	0.064	ug/kg	J
335-76-2	Perfluorodecanoic acid	ND	0.26	0.089	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.26	0.077	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.26	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.26	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.26	0.13	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.26	0.089	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.26	0.13	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.26	0.14	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.26	0.13	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.20	0.26	0.064	ug/kg	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.26	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.26	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.26	0.064	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.36	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.13	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.26	0.089	ug/kg	
31506-32-8	MeFOSA	ND	0.26	0.077	ug/kg	
4151-50-2	EtFOSA	ND	0.26	0.064	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	049E-R-2-12		
Lab Sample ID:	JD78296-22	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.26	0.10	ug/kg	
2991-50-6	EtFOSAA	ND	0.26	0.17	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.6	0.36	ug/kg	
1691-99-2	EtFOSE	ND	2.6	0.93	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.23	ug/kg	
919005-14-4	ADONA	ND	1.0	0.15	ug/kg	
377-73-1	PFMPA	ND	0.51	0.038	ug/kg	UJ
863090-89-5	PFMBA	ND	0.51	0.077	ug/kg	
151772-58-6	NFDHA	ND	0.51	0.17	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	1.0	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	1.0	0.23	ug/kg	
113507-82-7	PFEESA	ND	0.51	0.038	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.31	ug/kg	UJ
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.4	0.79	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.4	0.80	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17%		5-130%
	13C5-PFPeA	75%		40-130%
	13C5-PFHxA	95%		40-130%
	13C4-PFHpA	89%		40-130%
	13C8-PFOA	98%		40-130%
	13C9-PFNA	99%		40-130%
	13C6-PFDA	105%		40-130%
	13C7-PFUnDA	100%		30-130%
	13C2-PFDoDA	93%		10-130%
	13C2-PFTeDA	88%		10-130%
	13C3-PFBS	91%		40-135%
	13C3-PFHxS	109%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	049E-R-2-12		
Lab Sample ID:	JD78296-22	**Date Sampled:**	12/06/23
Matrix:	SO - Soil	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	76.8
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		40-130%
	13C8-FOSA	111%		40-130%
	d3-MeFOSA	73%		10-130%
	d5-EtFOSA	72%		10-130%
	d3-MeFOSAA	121%		40-170%
	d5-EtFOSAA	114%		25-135%
	d7-MeFOSE	75%		10-130%
	d9-EtFOSE	71%		10-130%
	13C2-4:2FTS	104%		40-200%
	13C2-6:2FTS	126%		40-200%
	13C2-8:2FTS	148%		40-300%
	13C3-HFPO-DA	105%		40-130%

CWL 1/17/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	RB-12062023		
Lab Sample ID:	JD78296-23	**Date Sampled:**	12/06/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q5608.D	1	12/12/23 08:08	PC	12/11/23 16:00	OP51050	T2Q98
Run #2							

	Initial Volume	Final Volume
Run #1	484 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0083	0.00096	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0041	0.00075	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0021	0.00030	ug/l	
375-85-9	Perfluoroheptanoic acid	0.00061	0.0021	0.00052	ug/l	J
335-67-1	Perfluorooctanoic acid	ND	0.0021	0.00077	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0021	0.00041	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0021	0.00064	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0021	0.00057	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0021	0.00080	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0021	0.00082	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0021	0.00079	ug/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0021	0.00068	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0021	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0021	0.0011	ug/l	UJ
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0021	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0021	0.00044	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0021	0.0015	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0021	0.0011	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0021	0.00041	ug/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0083	0.0023	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0083	0.00094	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0083	0.0015	ug/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.0021	0.00071	ug/l	
31506-32-8	MeFOSA	ND	0.0021	0.00066	ug/l	
4151-50-2	EtFOSA	ND	0.0021	0.00055	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-12062023		
Lab Sample ID:	JD78296-23	**Date Sampled:**	12/06/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0021	0.00053	ug/l	
2991-50-6	EtFOSAA	ND	0.0021	0.00094	ug/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	0.021	0.0029	ug/l	
1691-99-2	EtFOSE	ND	0.021	0.0039	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.0083	0.0019	ug/l	
919005-14-4	ADONA	ND	0.0083	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0041	0.00031	ug/l	
863090-89-5	PFMBA	ND	0.0041	0.00058	ug/l	
151772-58-6	NFDHA	ND	0.0041	0.0013	ug/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0083	0.0025	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0083	0.0019	ug/l	
113507-82-7	PFEESA	ND	0.0041	0.00028	ug/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0025	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.052	0.0074	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.052	0.0064	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	104%		5-130%
	13C5-PFPeA	103%		40-130%
	13C5-PFHxA	105%		40-130%
	13C4-PFHpA	104%		40-130%
	13C8-PFOA	104%		40-130%
	13C9-PFNA	107%		40-130%
	13C6-PFDA	114%		40-130%
	13C7-PFUnDA	119%		30-130%
	13C2-PFDoDA	92%		10-130%
	13C2-PFTeDA	91%		10-130%
	13C3-PFBS	99%		40-135%
	13C3-PFHxS	119%		40-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-12062023		
Lab Sample ID:	JD78296-23	**Date Sampled:**	12/06/23
Matrix:	AQ - Equipment Blank	**Date Received:**	12/07/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	NYSDEC WAA44 Rural Background PFAs Project, NY		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		40-130%
	13C8-FOSA	117%		40-130%
	d3-MeFOSA	77%		10-130%
	d5-EtFOSA	81%		10-130%
	d3-MeFOSAA	110%		40-170%
	d5-EtFOSAA	111%		25-135%
	d7-MeFOSE	96%		10-130%
	d9-EtFOSE	86%		10-130%
	13C2-4:2FTS	106%		40-200%
	13C2-6:2FTS	117%		40-200%
	13C2-8:2FTS	140%		40-300%
	13C3-HFPO-DA	84%		40-130%

CWL 1/17/24

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Appendix B Review of Northeast Regional PFAS Studies Summary Letter

AECOM
50 Lakefront Boulevard, Suite 111
Buffalo, NY 14202
aecom.com

March 6, 2025

NYSDEC Reference
WA D009803.44.1

AECOM Reference
60679961

Elliot Baird, Project Manager
New York State Department of
Environmental Conservation
625 Broadway
Albany, NY 12233

NYSDEC Background Study for Per- and Polyfluoroalkyl Substances (PFAS) in Soil

Task 4 - Review of Northeast Regional Studies

Dear Elliot Baird,

AECOM USA, Inc. (AECOM) is pleased to provide the New York State Department of Environmental Conservation (NYSDEC) with this letter summarizing our review of northeast regional studies that have been conducted for per- and polyfluoroalkyl substances (PFAS) in background soil.

The objective of this portion of the Work Assignment (WA) issued by NYSDEC under contract D009803-44.1 was to review and analyze background studies on PFAS from several states to support the calculation of representative anthropogenic levels of PFAS concentrations in rural New York State background soils.

1. Review of Northeast Regional Studies

AECOM reviewed available PFAS background studies from several states in the northeast region, including Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. An overview of each study is provided in the following subsections. The calculated soil background threshold values (BTVs) for perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) from each state are presented in the following table:

	Soil Background Threshold Value (ppb, ng/g)					
	Connecticut	**Maine**	**Massachusetts**	**New Hampshire**	**Rhode Island**	**Vermont**
PFOS	-	3.036 (urban) 0.551 (non-urban)	3.07	3	0.842	3.4
PFOA	-	2.18	2.03	3	0.639	1.6

Notes: ppb = parts per billion

A summary of each study is provided in attached **Table 1**, outlining the study purpose and the methodology utilized to:

- Identify sample number and locations (including sampling goals and strategy);
- Analyze the soil PFAS data obtained (i.e., laboratory analytical methods);
- Select the statistical analysis based on appropriate thresholds for conducting the analysis, including screen for outliers, incorporate samples with non-detect concentrations, handle duplicate samples, create or update soil background levels, and create or update soil cleanup objectives (and what their classes/categories were), as applicable;

- Analyze any leaching testing performed, as applicable; and
- Limitations and any “lessons learned”, as applicable.

AECOM also attempted to obtain the data spreadsheets from the PFAS background studies for Connecticut, Maine, Massachusetts, Rhode Island, and Vermont from each state agency.

1.1 Review of Connecticut PFAS Study

The Connecticut PFAS Background Study (Pagano, et al., 2022) was completed by students at the University of Connecticut, who collected shallow soil background concentrations of PFAS throughout the state, to aid the Connecticut Department of Energy and Environmental Protection (CT DEEP) in determining PFAS standards. Shallow (0-6”) and deep (18-24”) soil samples (n=110) were collected from 16 state forests and parks, in 8 counties. Laboratory analysis included 18 PFAS compounds using EPA Method 8327, completed by Complete Environmental Testing Labs (CET Labs).

Statistical analysis was not completed on the soil data, and therefore soil background values were not calculated as part of this study. There are no background soil values for PFAS available from the CT DEEP. There are clean up alternative criteria for the sum of five PFAS compounds, based on exposure. CT DEEP has indicated that they will be working with the U.S. Geological Survey (USGS) to complete a formal anthropogenic background study of PFAS in soils statewide in 2025.

1.2 Review of Maine PFAS Study

The Maine PFAS Background Study (Sanborn Head, 2022) was completed by environmental consultants, Sanborn, Head & Associates Inc. (Sanborn Head), who collected samples and quantified background concentrations (urban and non-urban) of PFAS and polycyclic aromatic hydrocarbons (PAHs) in shallow soils throughout the state, on behalf of the Maine Department of Environmental Protection (ME DEP). The study also determined if there are significant correlations between PFAS, PAHs, and soil parameters. Shallow (0-6”) soil samples (n=64) were collected from 16 counties throughout the state, at urban (n=32) and non-urban (n=32) properties. Laboratory analysis included 28 PFAS compounds using modified EPA Method 537.1; 19 PAHs using EPA Method 8270D; total organic carbon (TOC) using Lloyd Kahn Method; and various parameters to assess agricultural soils for fertility, completed by Alpha Analytical Laboratories Inc. Select laboratory analysis was also completed by the University of Maine Soil Testing Services.

Statistical analysis was completed on the soil data, using USEPA ProUCL version 5.1. Initially, nonparametric two-sample tests were completed to test for significant differences between urban and non-urban concentrations. Subsequent statistical analyses including calculation of background values were performed separately for urban and non-urban settings if statistically significant differences were identified (PFOS and perfluorodecanoic acid [PFDA]). Potential outliers were identified, and one obvious outlier (urban sample WL-02) was removed due to high concentrations. Non-detect concentrations were evaluated using Kaplan-Meier estimation methods when at least four detected concentrations were present. If two to four detected concentrations were present, nonparametric methods were used to calculate BTVs; if only one detected concentration was present, the detected concentration was selected for the BTV and if no detected concentrations were present the maximum method detection limit (MDL) was selected. Soil interim BTVs and interim upper bound of the mean concentrations were established.

The study concluded that the most frequently detected PFAS were PFOS, and perfluoroalkyl carboxylic acids (PFCAs) with 3-10 carbon alkyl chains (Sanborn Head, 2022). The strongest and most consistent correlations were among PFAS (i.e., PFAS concentrations tend to increase together). PAHs had weak or no correlations with PFAS; sulfur had strong positive correlations with PFAS; and soil organic content was strongly correlated with PFAS. PFAS had strong negative correlations with sand, and strong positive correlations with silt and clay. Greater moisture content in soil samples was associated with higher PFAS concentrations (Sanborn Head, 2022).

The Maine PFAS Background Study also collected 33 soil samples for Synthetic Precipitation Leaching Procedure (SPLP) using EPA Method 1312. The study indicated that PFCAs and perfluoroalkyl sulfonic acids (PFSAs) were commonly detected in the SPLP leachate (Sanborn Head, 2022). PFOA was detected in 31 of 33 SPLP samples, and PFOS was detected in 30 of 33 SPLP samples. Detection rates for PFOA, PFOS, and some other PFAS were greater

for SPLP than for the regular soil analyses, which was at least partially attributed to the relatively low detection limits achieved for aqueous matrices (Sanborn Head, 2022).

The ME DEP established screening level remedial action guidelines (RAGs) for seven PFAS parameters in November 2023, based on land use and exposure. ME DEP indicated that they do factor background data into remedial decisions as part of the RAGs; and, the PFAS background study was incorporated into the development of the PFAS RAGs, by including the BTVs as a column in the list of RAGs.

1.3 Review of Massachusetts PFAS Studies

The Massachusetts PFAS Background Study (Woodard and Curran, 2024) was completed by environmental consultants, Woodard and Curran, who collected shallow soil background concentrations of PFAS through the state, to broaden the understanding of the levels and distribution in MA and inform the Massachusetts Department of Environmental Protection (MassDEP) and/or calibrate the Massachusetts Contingency Plan (MCP) soil standards for PFAS. The study also determined if there are significant correlations between PFAS and TOC. Shallow (0-6") soil samples (n=100) were collected from 25 undeveloped conservation areas, largely in mature forest or meadow, in four geographical regions throughout the state. Laboratory analysis included 36 PFAS compounds using modified EPA Method 537.1 and TOC using EPA Method 9060 completed by Alpha Analytical Laboratories Inc. There were limitations identified with the soil type of the samples – 88% of samples were loam, consistent with most locations occurring in mature forests.

Statistical analysis was completed on the soil data, using USEPA ProUCL version 5.2. Potential outliers were identified based on box and whisker plots. Non-detect concentrations were evaluated using Kaplan-Meier estimation methods. Soil background values were calculated based on 95% upper tolerance limits (UTL95).

The study concluded that PFOS and PFOA were detected at the highest frequencies and at the overall highest concentrations (Woodard and Curran, 2024). Findings suggest that atmospheric deposition, either via dry and/or wet depositional processes, likely plays a key role in both the localized and widespread distribution of PFAS in both the atmosphere and the ground (Woodard and Curran, 2024).

The MassDEP established MCP clean up soil standards for six PFAS parameters on December 13, 2019, based on land use and exposure. MassDEP indicated that they are currently considering several PFAS soil background studies conducted in New England to inform any changes to their soil standards. They are currently using the Vermont background study conducted in 2019 to obtain PFAS soil background values.

1.4 Review of New Hampshire PFAS Study

The New Hampshire Department of Environmental Services (NHDES, 2023) prepared a Technical Background Report for the proposed soil remediation standards (SRS) for four PFAS compounds – PFOA, PFOS, perfluorohexane sulfonic acid (PFHxS), and perfluorononanoic acid (PFNA). The NHDES did not consider background values for SRS derivation, because PFAS are anthropogenic contaminants and therefore are not naturally occurring in the environment, and because although certain PFAS were detected in soil sampling locations across the state, the presence of PFAS was generally limited to shallow soil (i.e., not distributed throughout the soil column) and the reported concentrations varied by location (i.e., were not spatially consistent) (NHDES, 2023).

Nevertheless, NHDES did develop BTVs for the four PFAS for shallow soil that can be considered by responsible parties during their initial screening of PFAS data to evaluate whether soils are impacted solely due to anthropogenic ambient background conditions, as presented in Attachment C of NHDES (2023).

The NH PFAS information was based on background studies completed by the USGS in 2021 (Santangelo et al., 2022) and in 2022 (Santangelo et al., 2023), with the data sets available online. The 2021 data were utilized by NHDES to calculate BTVs. USGS collected shallow (0-6") soil samples (n=100), intermediate (6-12") soil samples (n=50), and deep (up to 36") soil samples (n=6), from undisturbed areas (forested, shrubland, scrubland, grassland, herbaceous, wetlands, or barren land) throughout the state. Laboratory analysis included 36 PFAS compounds using liquid chromatography/mass spectrometry (LC-MS/MS); and, total oxidizable precursor assay (TOPA), TOC, moisture, pH and extractable protein, completed by Eurofins.

Statistical analysis was completed by NHDES on the soil data, using USEPA ProUCL versions 5.1 and 5.2. Potential outliers were screened using Rosner's Outlier Test and by reviewing boxplots and Q-Q plots; some outliers were removed from the statistical analysis. Non-detect concentrations were evaluated using both regression on order statistics (ROS) and Kaplan-Meier estimation methods; substitution methods were not used; and the statistical analysis was run both with and without non-detects. Soil BTVs were calculated for four PFAS compounds based on 95% upper tolerance limits (UTL95-95).

Although not discussed by NHDES, a USGS summary presentation of the PFAS soil data (Tokranov, 2023) discussed Spearman rho correlation of PFAS concentrations with protein (positive), pH (negative), latitude (negative), TOC (positive), percent organic layer/humus (%O) in the soil horizon (positive), and percent subsoil/deposited minerals and metal salts (%B) in the soil horizon (negative).

The NHDES established screening level soil standards for four PFAS parameters on December 11, 2019, for direct contact exposure. NHDES indicated that they did not identify ambient background values for PFAS that are applicable to the entire state since PFAS are anthropogenic, their presence was limited to shallow soil, and reported concentrations varied by location; however, remediation sites in NH are able to propose site-specific background values to derive site-specific remediation standards.

1.5 Review of Rhode Island PFAS Study

The Rhode Island PFAS Background Study was completed by the State of Rhode Island Department of Environmental Management (RIDEM, 2023), who provided background information and discussion on PFAS in RI, including groundwater studies, pre-remedial areas, Superfund sites, Department of Defense (DOD) sites, landfills, wastewater treatment plants (WWTPs), textile mills, fire training, and others.

Section 11 of the RIDEM (2023) report discusses regulations and a soil background study completed for six PFAS compounds. Soil samples (0-24", n=50) were collected from 50 undisturbed State-owned properties, excluding wetlands, throughout the state. Laboratory analysis included 24 PFAS compounds using LC-MS/MS completed by Alpha Analytical Laboratories Inc.

Statistical analysis was completed on the soil data, using USEPA ProUCL version 5.2. Potential outliers were identified, and one obvious outlier with several maximum detections was removed from the analyses. The method for handling non-detect concentrations was not specified. Soil background values were calculated based on 95% upper tolerance limits (UTL95-95). Since no concentrations were detected for PFHxS, the soil background value was set as the maximum MDL.

The RIDEM has not established soil standards for PFAS at this time. No feedback was obtained from RIDEM at this time.

1.6 Review of Vermont PFAS Study

The Vermont PFAS Background Study (Zhu et al., 2019) was completed by the University of Vermont for the Vermont Department of Environmental Conservation (VTDEC). Soil samples were collected in 2018 to determine the background concentrations of a number of PFAS in Vermont shallow soils. The study also determined if there are significant correlations between PFAS and TOC, percent solids, and the sum of PFAS compounds. Shallow (0-6") soil samples (n=66) were collected from 66 properties consisting of municipal or state lands, parks, forests, green lands, or building or school lawns throughout the state. Laboratory analysis included 17 PFAS compounds and the sum of PFAS compounds using LC-MS/MS; TOC using ASTM Method 2000; and percent solids using ASTM Method D2216-10, completed by Alpha Analytical Laboratories Inc. There were limitations identified with the variation in soil data due to PFAS releases and time; samples limited to publicly owned properties; and analysis on only 17 PFAS parameters.

Statistical analysis was completed on the soil data, using USEPA ProUCL version 5.1. Potential outliers were identified. One sample location (sample J6) with obviously high outlier concentrations was identified; statistics were run with and without the outlying concentration for each affected analyte. Based on the large effects observed on summary statistics when including the J6 sample, the decision was made to exclude the J6 data from background calculations. Non-detect concentrations were evaluated using Kaplan-Meier estimation methods. Soil background values were calculated based on 95% upper tolerance limits (UTL95).

The study concluded that PFOS was quantitively detected at the highest frequency and was observed in all soil samples (Zhu et al., 2019). At a majority of locations, PFOA and PFOS were the greatest contributors of total PFAS. No significant correlation was observed between TOC and individual or total PFAS (Zhu et al., 2019).

The VTDEC established screening level soil guidance values for five PFAS parameters in January 2023, for direct contact exposure. VTDEC indicated that since the regulatory soil standard is for direct contact and the standard is well over the background numbers, the PFAS soil background data are not utilized in the development of soil standards. They do use the PFAS background information for site specific decision making and also when looking at possible soil to groundwater guidance values where the soil numbers would be near or below the background soil values determined in the study.

2. References

EGLE, 2023. Concept Validation: Collecting Soil Samples to Understand the Presence and Concentrations of Per- and Polyfluoroalkyl Substances (PFAS) in Michigan Forested Areas via Composite Sampling. Michigan Department of Environment, Great Lakes, and Energy (EGLE). April 2023.

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NHDES. 2023. Technical Summary Report, Proposed Soil Remediation Standards (SRS) for Perfluorooctanoic Acid (PFOA), Perfluorooctane Sulfonic Acid (PFOS), Perfluorohexane Sulfonic Acid (PFHxS), and Perfluorononanoic Acid (PFNA). Prepared by the New Hampshire Department of Environmental Services. October 6, 2023. 41 pp.

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Sanborn Head. 2022. Background Levels of PFAS and PAHs in Maine Shallow Soils, Study Report. Sanborn, Head & Associates, Inc. (Sanborn Head). Prepared for the Maine Department of Environmental Protection. April 2022. 1033 pp.

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Santangelo, L.M., Tokranov, A.K., Welch, S.M., Schlosser, K.E.A., Marts, J.M., Drouin, A.F., Ayotte, J.D., Rousseau, A.E., and Harfmann, J.L., 2022, Statewide survey of shallow soil concentrations of per- and polyfluoroalkyl substances (PFAS) and related chemical and physical data across New Hampshire, 2021: U.S. Geological Survey data release, https://doi.org/10.5066/P9KG38B5.

Santangelo, L.M., Welch, S.M., Tokranov, A.K., Schlosser, K.E., Marts, J.M., Lincoln, T.A., and Deyette, N.A. 2023. Confirmatory sampling for per- and polyfluoroalkyl Substances (PFAS) in shallow soils across New Hampshire. U.S. Geological Survey data release, https://doi.org/10.5066/P9C0FAHD.

Schroeder, T, Bond, D, Foley, J, 2021. PFAS soil and groundwater contamination via industrial airborne emission and land deposition in SW Vermont and Eastern New York State, USA. Environmental Science: Processes & Impacts, 23(2), pp.291-301.

Tokranov, A. 2022. Assessing PFAS Occurrence and Background Concentrations in New Hampshire Soils. U.S. Geological Survey presentation.

Woodard and Curran. 2024. PFAS in Massachusetts Background Soils. A White Paper Published by Woodard and Curran. February 2024. 33 pp.

Zhu, W., Roakes, H., Zemba, S.G. and Badireddy, A.R. 2019. PFAS Background in Vermont Shallow Soils. February 8, 2019. 95 pp.

3. Closure

We trust that the information provided is satisfactory for your purposes. Should you require further information please do not hesitate to contact the undersigned.

Yours sincerely,

Edyta Chorostkowska
Senior Scientist
AECOM
T: 845-248-4099
E: edyta.chorostkowska@aecom.com

Robert J. Murphy, P.G.
Senior Geologist / Project Manager
AECOM
T: 716-903-1346
E: rob.murphy@aecom.com

ec: Fabio Iwashita, NYSDEC
Michael Spera, AECOM

AECOM

Summary Table

Table 1 - Summary of PFAS Background Studies in Northeastern United States

State	CT	ME	MA	NH	RI	VT
Year	Pagano et al., 2022	Sanborn Head, 2022	Woodard and Curran, 2024	NHDES, 2023 - Attachment C	RIDEM, 2023	Zhu et al., 2019
State Agency	Connecticut Department of Energy and Environmental Protection (CT DEEP)	Maine Department of Environmental Protection (Maine DEP)	Private study	New Hampshire Department of Environmental Services (NHDES)	State of Rhode Island Department of Environmental Management (RIDEM)	Vermont Department of Environmental Conservation (VTDEC)
Study Purpose	Collect shallow soil background concentrations of PFAS, to aid in determining standards	Collect and quantify background concentrations (urban and non-urban) of PFAS and PAHs in shallow soils. Determine if there are significant correlations between PFAS, PAHs, and soil parameters.	Collect shallow soil background concentrations of PFAS, to broaden understanding of the levels and distribution in MA and inform the establishment and/or calibration of MCP soil standards.	Main Report = Summary of soil remediation standards for PFOA, PFOS, PFHxS and PFNA. Attachment C = recommended background threshold values (BTVs), to be used as initial screening to evaluate background, using 2021 USGS data (did not use 2022 USGS data to calculate BTVs)	Significant discussion on background of PFAS in RI, groundwater studies, pre-remedial areas, superfund sites, DOD sites, landfills, WWTPs, textile mills, fire training, etc. Section 11 (PDF pg. 170) discusses regulations and soil background study for 6 PFAS.	Soil samples were collected from June through August 2018 to determine the background concentrations of a number of PFAS in Vermont shallow soils.
Sample Number	110	64 + 5 dups	100	100 + 15 dups (2021 USGS data)	50 + 3 dups	66 + 2 dups
Sample Locations	16 State forests and parks 8 counties in CT	32 urban + 32 non-urban 16 counties in ME (4 locations per county)	25 undeveloped conservation areas (largely in mature forest or meadow) 4 geographical regions	Undisturbed areas (forested, shrubland, scrubland, grassland, herbaceous, wetlands, or barren land)	50 locations Undisturbed State-owned properties (no wetlands)	66 properties Municipal or state lands, parks, forests, greens, or building or school lawns. Subset of properties sampled in recent Background Study for PAHs, As + Pb
Sample Depths	0-6" 18-24"	0-6"	0-6"	0-6" 6-12" (only 50 locations) up to 36" (only 6 locations)	0-24"	0-6"
Discrete or Multi Incremental Sampling?	Discrete	Discrete	Discrete	Composited spatially: Samples at the target depth intervals were collected from 3 separate nearby locations, and homogenized	Discrete	Discrete
Sample Goals	Shallow = direct human contact Deep = potential transport	Determine atmospheric deposition	Determine atmospheric deposition over past few decades.		Determine ambient anthropogenic background and serve as lower limit of future soil standards. Represent minimum depth of direct contact exposure.	
Tools Used	ArcGIS Online - potential PFAS sources, lab results	GIS, ProUCL	GIS		ArcGIS	
Laboratory	Complete Environmental Testing Labs (CET Labs)	Alpha Analytical Laboratories Inc. (Alpha) and University of Maine Soil Testing Services (UMaine Soil Lab)	Alpha Analytical Laboratories	Eurofins	Alpha Analytical Laboratories	Alpha Analytical Laboratories
PFAS Lab Methods	18 PFAS using EPA Method 8327	28 PFAS using Modified EPA Method 537.1	36 PFAS using modified EPA Method 537.1	36 PFAS using LC-MS/MS	24 PFAS	17 PFAS; sum of PFCAs, PFSAs and PFAS using extraction method by LC-MS/MS
Other Lab Analysis		19 PAHs using EPA Method 8270D TOC using Lloyd Khan Method Various parameters assessing agricultural soils for fertility	TOC using EPA Method 9060	TOPA, TOC, moisture, pH, extractable protein	No	TOC using ASTM 2000 method % solids using ATSM D2216-10 Method

Table 1 - Summary of PFAS Background Studies in Northeastern United States

State	CT	ME	MA	NH	RI	VT
Statistics Completed?	No	Yes	Yes	Yes	Yes	Yes
Statistical Analysis	-	USEPA ProUCL Version 5.1 Gehan Test and Tarone-Ware (T-W) Test for urban vs. non-urban data. Separate background levels were calculated if urban and non-urban results were significantly different. Background levels calculated using UPL90, UTL90-95, UTL95-95, and UCL95. See Study Table 9 (PDF pg. 42)	USEPA ProUCL Version 5.2 to calculate summary stats, data distribution, outlier tests, UTLs, and correlation w/ PFAS and TOC. Background levels calculated using 95% UTLs	USEPA ProUCL Version 5.1/5.2, with and without non-detects Calculated UP95, UPL95, USL95, and UTL95-95, chose UTL95-95 for BTVs.	USEPA ProUCL Version 5.2 UTL95-95 selected as BTV	USEPA ProUCL Version 5.1 using various UTLs, chose 95% UTL No BTVs for PFAS detected <10%
Threshold for statistics? How many detects were needed	-	At least 10 observations	Not discussed	Enough to achieve selected confidence of 95%.	Enough detections to run ProUCL	>10% detection frequency
Outliers	-	15 potential outliers were identified at 6 samples, based on visual screening of Q-Q plots. Removed 1 obvious outlier (urban WL-02) w/ high concentrations.	Looked at outliers based on box and whisker plots. No information if outliers were removed.	Outlier screening using Rosner's Outlier Test in ProUCL and by reviewing boxplots and Q-Q plots. Outliers were individually assessed by reviewing multiple factors, some were removed from stats.	1 sample was statistical outlier (had several max PFCA detections) and was removed from analyses based on statistics.	Stats run with and without 1 obvious outlier w/ high concentrations (sample J6). Value was excluded due to large impact on summary statistics. No other outliers identified, and no outlier stats were performed.
Non-Detects	-	Kaplan-Meier (KM) estimation methods. If <4 detects, nonparametric methods selected. If 1 detect, max detected value used. If no detects, max ND MDL was used.	Kaplan-Meier method	Ran both regression on order statistics (ROS) and Kaplan-Meier (KM) estimation methods, but selected KM estimates. Did not use substitution methods.	Method for handling non-detects was not specified. PFHxS did not have enough detections to perform statistics, so used max MDLs.	Kaplan-Meier (KM) estimation
Duplicates	-	5 field duplicates were only for QAQC (not included in stats).	8 laboratory duplicates, included in stats. Max detected concentration, or the lowest RDL if non-detect, was used as representative concentration for that sample.	15 field duplicates and 3 field triplicates were only for QAQC (not included in stats). 1 sample w/ high RPD was reanalyzed, and resample was within limit.	3 field duplicates only used for QAQC (not included in stats).	2 field duplicates included in stats. Arithmetic average of concentrations were applied.
Other Stats / Correlations	-	Mann-Kendall (MK) analysis for correlation testing between PFAS, PAHs, and soil parameters.	ProUCL for correlation between PFAS and TOC.	Not included in NH summary. USGS summary discussed Spearman rho correlation w/ protein (positive), pH (negative), latitude (negative), TOC (positive), %O in soil horizon (positive), and %B in soil horizon (negative)	No	Pearson correlation coefficients between TOC, % solids and PFAS. Pearson correlation coefficients between individual PFAS and sum PFAS.
Leachate Testing	-	33 samples for Synthetic Precipitation Leaching Procedure (SPLP) using EPA Method 1312. PFCAs and PFSAs were commonly detected in the SPLP leachate. PFOA was detected in 31 of 33 SPLP samples, and PFOS was detected in 30 of 33 SPLP samples. Detection rates for PFOA, PFOS, and some other PFAS were greater for SPLP than for the regular soil analyses, which is at least partially attributed to the relatively low detection limits achieved for aqueous matrices. TOP Assay was also performed.	-	-	-	-
Limitations (Identified by Report Author)	Low resolution / # of samples Not peer-reviewed	-	88% of samples were loam, consistent with most locations occurring in mature forests; limitation re: soil type. Could collect from urban vs. non-urban	-	-	Variation in data due to PFAS releases and time; samples limited to publicly owned properties; analysis only for 17 PFAS
Other Notes	MI and VT are at forefront of regulating PFAS	Study was adapted from, and compared to, the VT study.	White paper includes more detailed information on stats.	Reviewed MN, ME and VT studies	-	-

Table 1 - Summary of PFAS Background Studies in Northeastern United States

State	CT	ME	MA	NH	RI	VT
Conclusions	-	Most frequently detected were PFOS and PFCAs with 3-10 carbon alkyl chains. The strongest and most consistent correlations were among PFAS (i.e. PFAS concentrations tend to increase together). PAHs had weak or no correlations w/ PFAS. Sulfur had strong positive correlations w/ PFAS. Soil organic content were strongly correlated with PFAS. PFAS had strong negative correlations with sand, and strong positive correlations with silt and clay. Greater moisture content in soil samples was associated with higher PFAS concentrations.	PFOS and PFOA were detected at the highest frequencies and at the overall highest concentrations. Findings suggest that atmospheric deposition, either via dry and/or wet depositional processes, likely plays a key role in both the localized and widespread distribution of PFAS in both the atmosphere and the ground.	PFAS detected in every 0 to 6 inch and 6 to 12 inch soil sample; soil represents a "reservoir" of PFAS; PFAS concentrations typically decreased with depth in the soil, suggesting PFAS are, to some extent, retained by the soil; TOPA results indicate low concentrations of precursors in shallow soil in NH; Many variables correlate with PFAS	The maximum detection was a sample collected at Jerimoth Hill, coincidentally the highest point in RI. This sample was determined to be an outlier and removed from subsequent analyses.	PFOS was quantitively detected at the highest frequency and was observed in all soil samples. At a majority of locations, PFOA and PFOS were the greatest contributors of total PFAS. No significant correlation was observed between TOC and individual or total PFAS. Higher total PFAA levels in northern Vermont.
Soil Background Established?	No	Yes - Interim Background Threshold Value (BTV) and Interim Upper Bound of the Mean	Yes - UTL95	Yes - background threshold values (BTVs) for PFOA, PFNA, PFHxS and PFOS	Yes - background threshold values (BTVs) for PFHpA, PFOA, PFNA, PFDA, PFHxS and PFOS	Yes - background threshold values (BTVs)
PFOS + PFOA Background Levels (1 ppb = 1 ug/kg = 1 ng/g)	-	PFOS (urban) = 3.036 ng/g PFOS (non-urban) = 0.551 ng/g PFOA = 2.18 ng/g	PFOS = 3.07 ug/kg PFOA = 2.03 ug/kg	PFOS = 3 ng/g PFOA = 3 ng/g	PFOS = 0.842 ug/kg PFOA = 0.639 ug/kg	PFOS = 3.4 ng/g PFOA = 1.6 ng/g
Rural background values released?	No	Yes - via PFAS Background Study	No	Yes - via PFAS Background Study	Yes - via PFAS Background Study	Yes - via PFAS Background Study
Soil Cleanup Objectives Established?	Yes - Additional Polluting Substances (APS) Alternative Criteria	Yes - PFAS Screening Levels (December 2023)	Yes - MCP Soil Standards (December 2019)	Yes - Direct Contact Soil Standards (December 2019)	No - but standards are being developed	Yes - Residential and Commercial Soil Values (January 2023)
If yes, was there a public comment period and what were the comments?	-	Not for BTVs. Comment period for updated RAGs, some people were concerned that the standards were not low enough, but b/c study was external there were not main concerns.	Yes - Sanborn and Head provided formal comments. S-1 soil standards were too conservative and did not consider background. MassDEP updated the standards incorporating the comments.	Yes - NHDES Public announcement in May 2024 proposing to revise various sections of Env-Or 600 Contaminated Site Management Rules (Env-Or 600) to include PFAS. Comments were due May 31, 2024. Comments were not released.	-	No
Did SCOs incorporate BTVs?	No	No - most BTVs are lower than RAGs, and RAGs driver is exposure	No - most BTVs are lower than soil standards, and the driver is exposure; however, individual SCOs were added for 6 PFAS, instead of sum PFAS criteria as initially presented	No - PFAS are anthropogenic, presence was generally limited to shallow soil, and reported concentrations varied by location	No - but standards are being developed	No - not added to soil standards table
Were there leaching standards established?	-	Yes	Yes	Yes	-	No
How were soil standards presented?	-	Screening Levels on 1 pager	Part of MCP standards tables	-	-	Screening Levels on 1 pager

Notes:
(1) - Link to CT study: https://portal.ct.gov/-/media/deep/site_clean_up/contaminants_of_emerging_concern/pfas_documents/academiccollaborations/2022-uconnenve-pfassoilsamplingproject-finaldesignreport.pdf
(2) - Link to ME study: https://www11.maine.gov/dep/spills/topics/pfas/Maine_Background_PFAS_Study_Report.pdf
(3) - Link to MA study: https://www.woodardcurran.com/pfas-in-massachusetts-background-soils/
(4) - Link to NH study: https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/r-wmd-23-03.pdf
(5) - Link to RI study: https://dem.ri.gov/sites/g/files/xkgbur861/files/2023-11/pfas-source-investigation-plan_0.pdf
(6) - Link to VT study: https://anrweb.vt.gov/PubDocs/DEC/PFOA/Soil-Background/PFAS-Background-Vermont-Shallow-Soils-03-24-19.pdf

Appendix C-1 Outlier Testing Figures – 0-2 inches

NYSDEC Background Study for Per- and Polyfluoroalkyl Substances (PFAS) in Soil, 0-2 inches

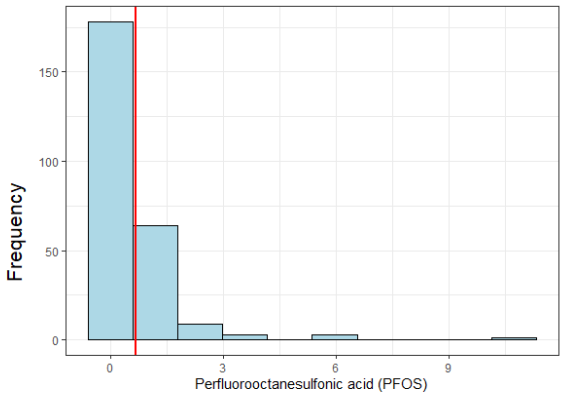
Task 5 – Data Analysis

2025-01-31

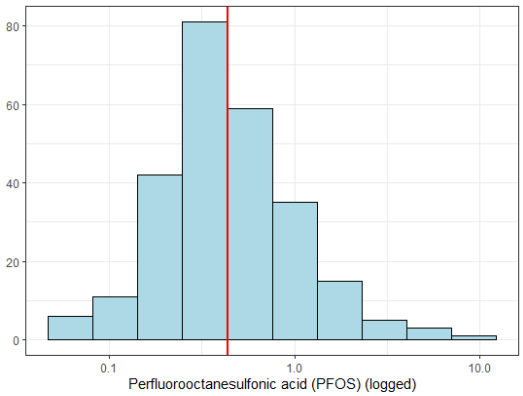
Perfluorooctanesulfonic acid (PFOS)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



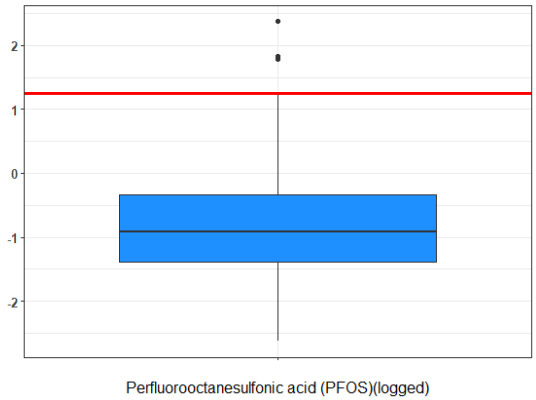
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 258
Number of non-detects: 6.



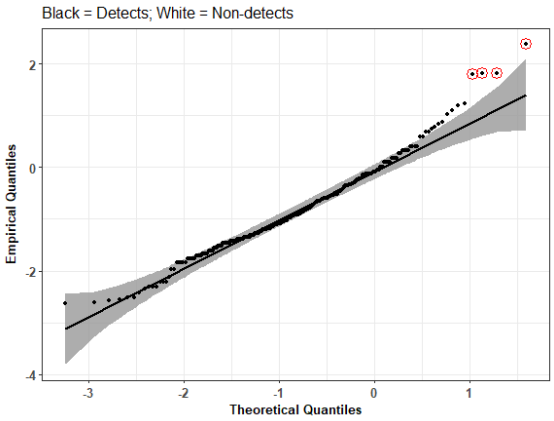
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

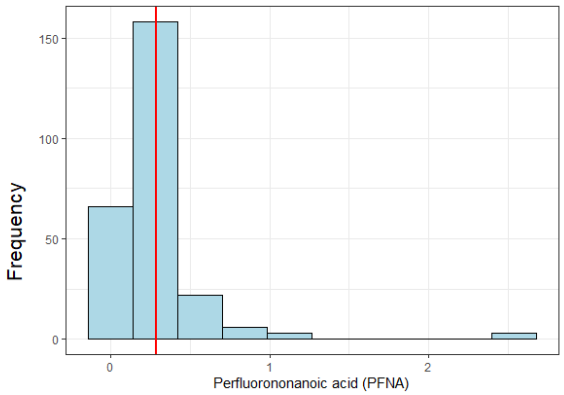
Rosner Test Results

Rosner test confirmed 1 outlier.

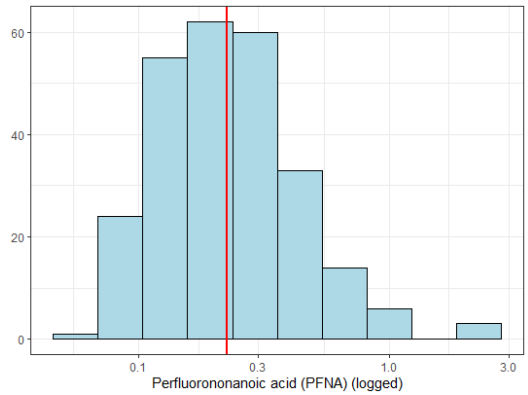
Perfluorononanoic acid (PFNA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



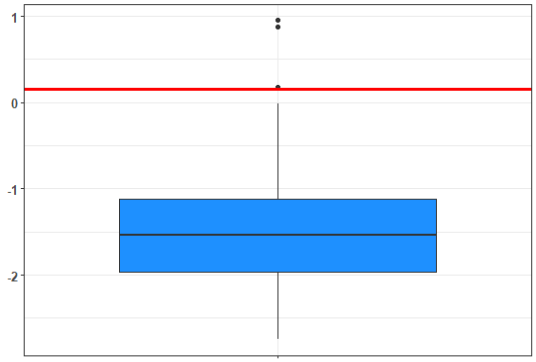
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 258
Number of non-detects: 30.



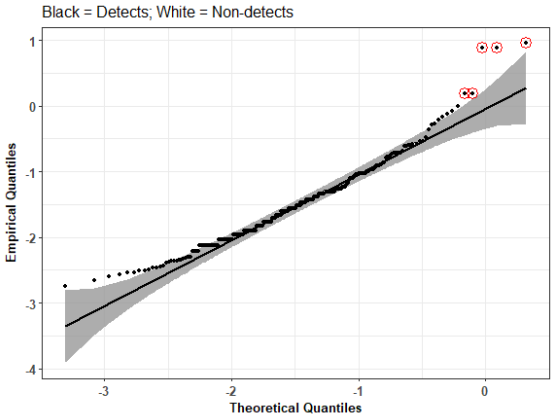
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

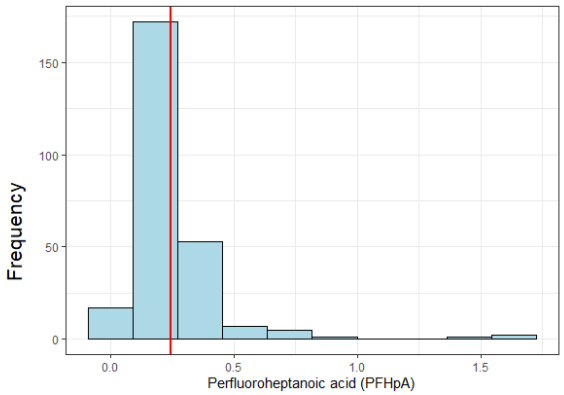
Rosner Test Results

Rosner test confirmed 3 outliers.

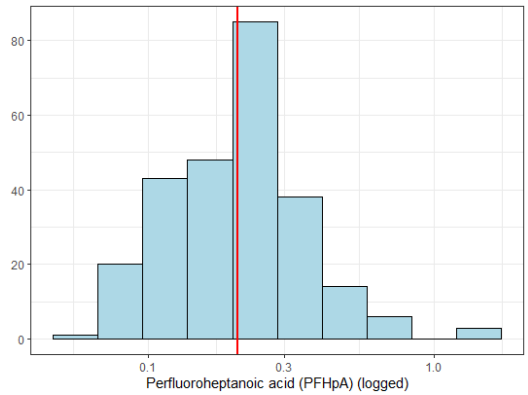
Perfluoroheptanoic acid (PFHpA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



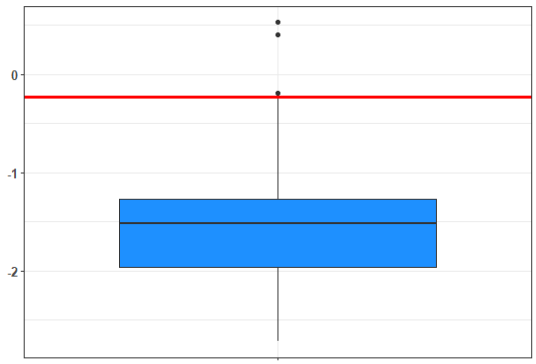
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 258
Number of non-detects: 62.



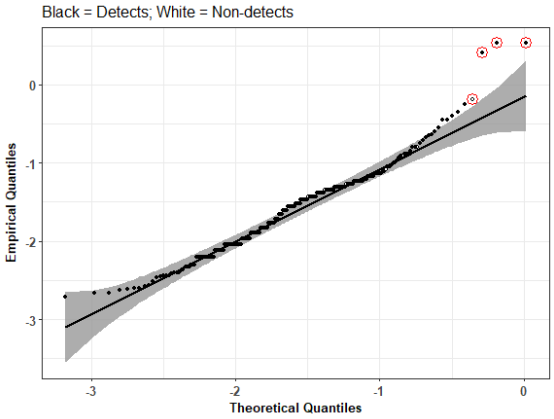
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

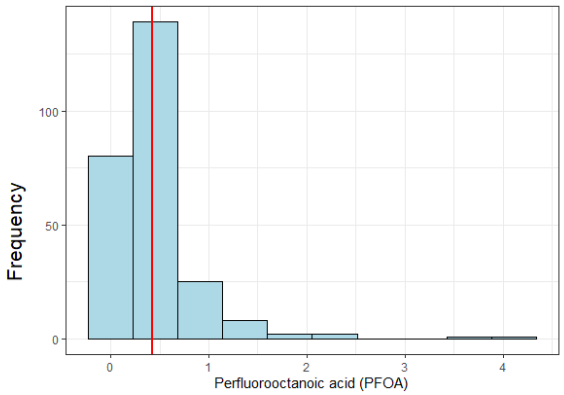
Rosner Test Results

Rosner test confirmed 3 outliers.

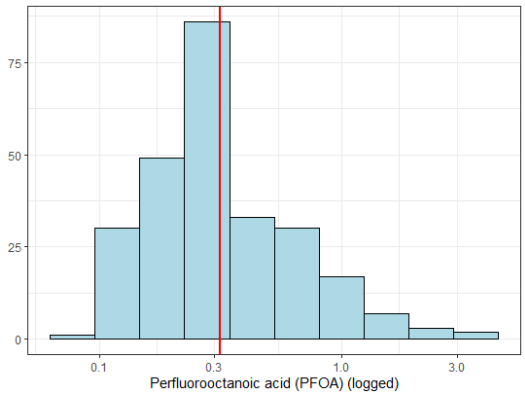
Perfluorooctanoic acid (PFOA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



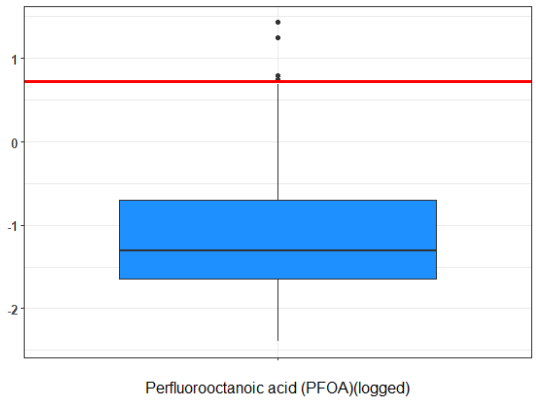
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 258
Number of non-detects: 62.



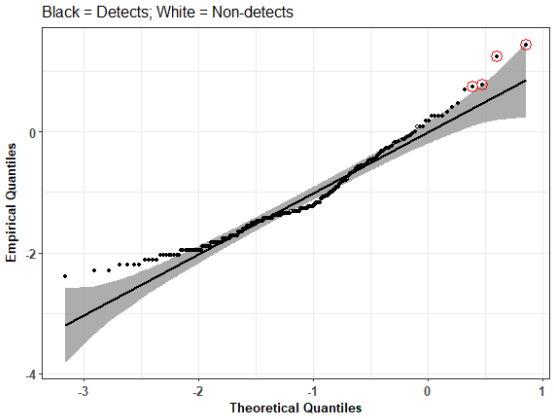
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

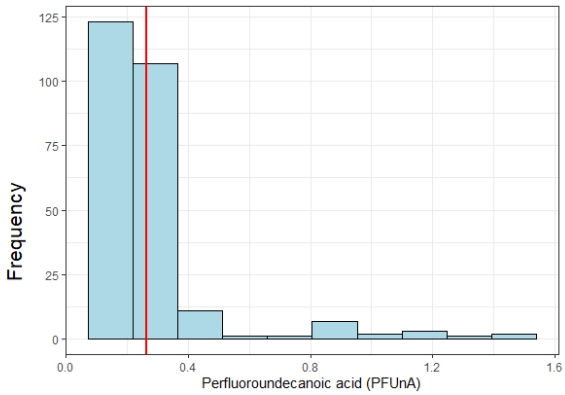
Rosner Test Results

Rosner test confirmed 1 outlier.

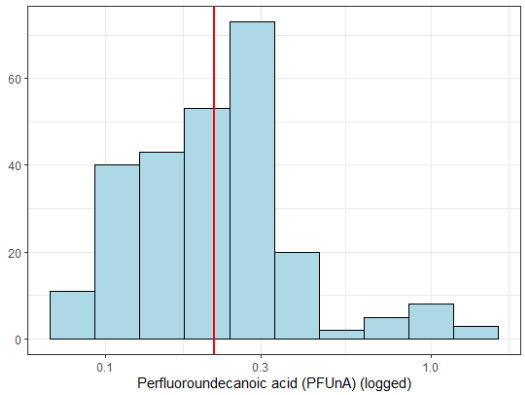
Perfluoroundecanoic acid (PFUnA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



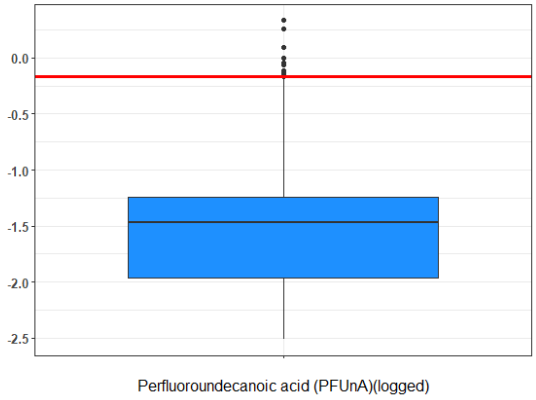
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 258
Number of non-detects: 82.



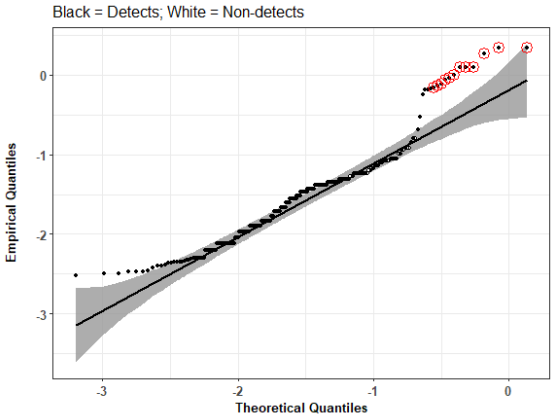
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

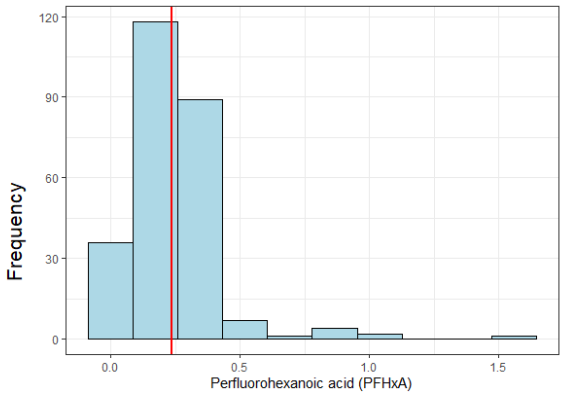
Rosner Test Results

Rosner test confirmed no outliers.

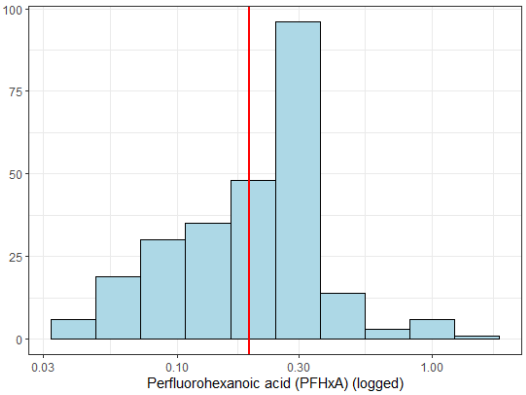
Perfluorohexanoic acid (PFHxA)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



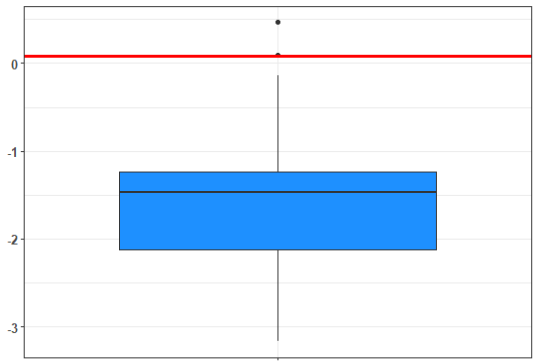
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 258
Number of non-detects: 108.



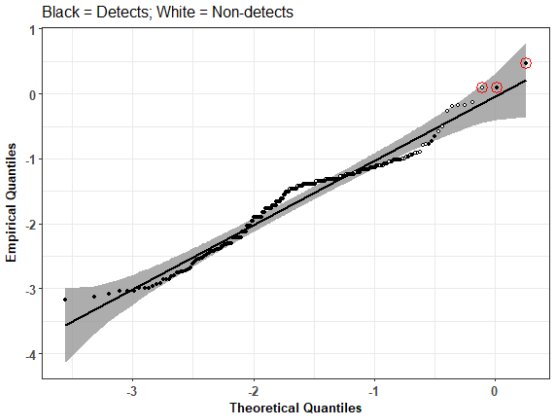
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

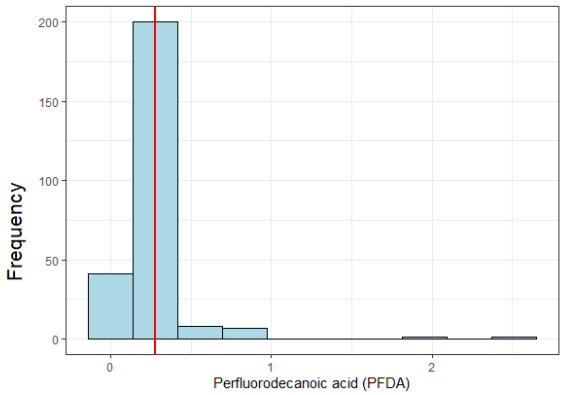
Rosner Test Results

Rosner test confirmed no outliers.

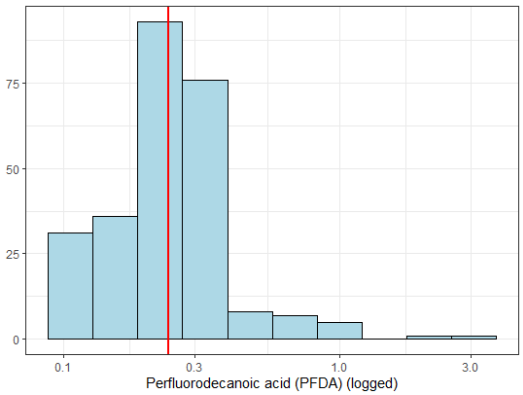
Perfluorodecanoic acid (PFDA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



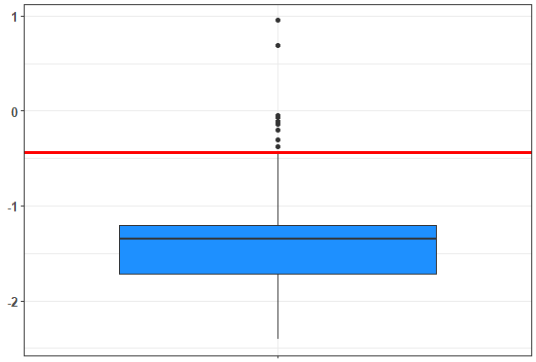
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 258
Number of non-detects: 142.



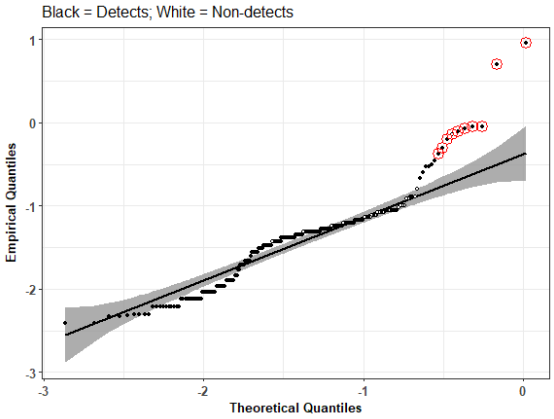
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

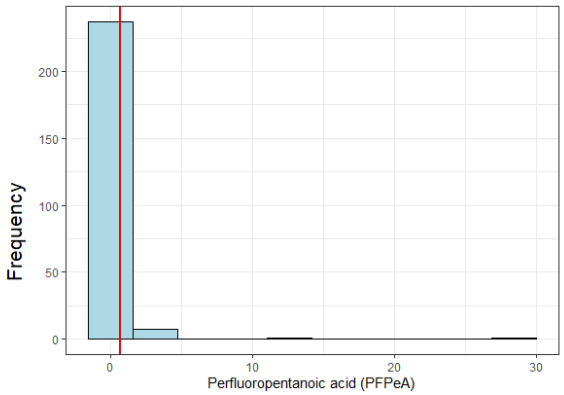
Rosner Test Results

Rosner test confirmed 2 outliers.

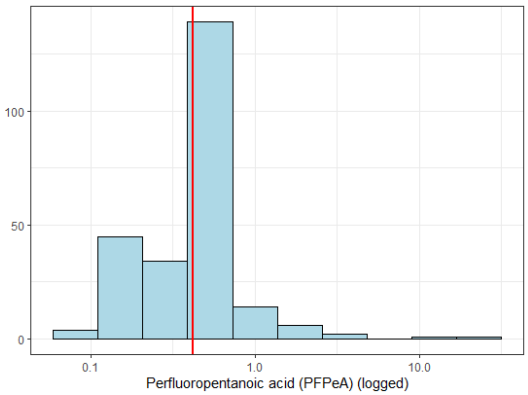
Perfluoropentanoic acid (PFPeA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



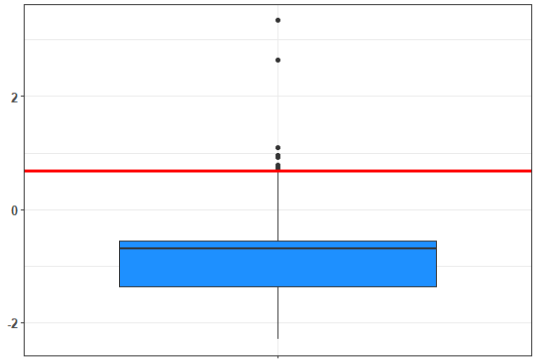
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 246
Number of non-detects: 136.



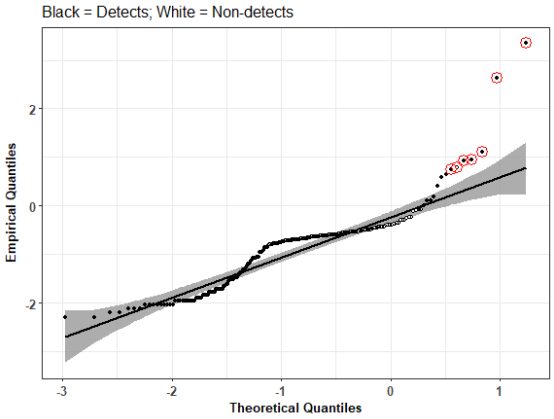
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

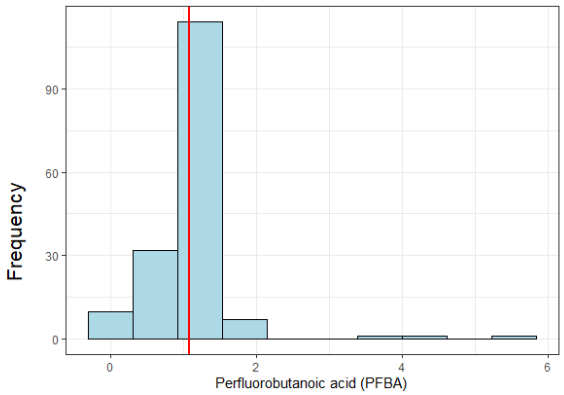
Rosner Test Results

Rosner test confirmed 2 outliers.

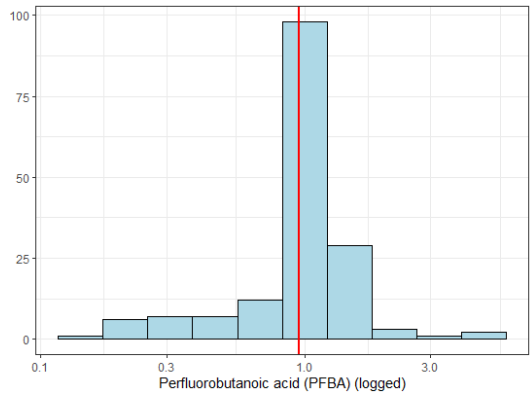
Perfluorobutanoic acid (PFBA)

Distribution

The identified distribution is Gamma. A gamma-transform will be applied for outlier testing.



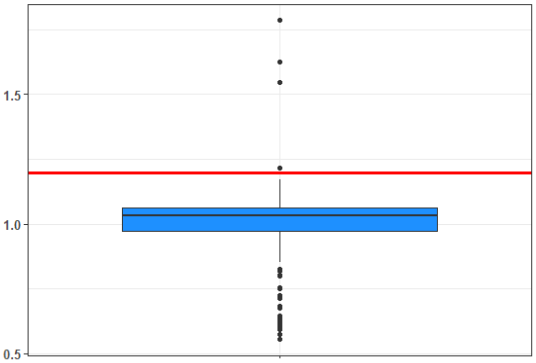
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 166
Number of non-detects: 118.



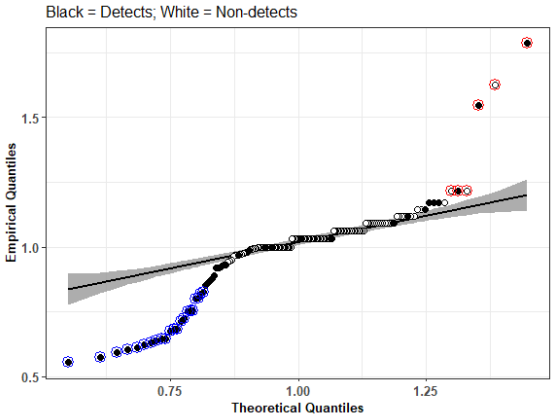
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were gamma-transformed

Rosner Test Results

Rosner test confirmed 3 outliers.

Appendix C-2 Outlier Testing Figures – 2-12 inches

NYSDEC Background Study for Per- and Polyfluoroalkyl Substances (PFAS) in Soil, 2-12 inches

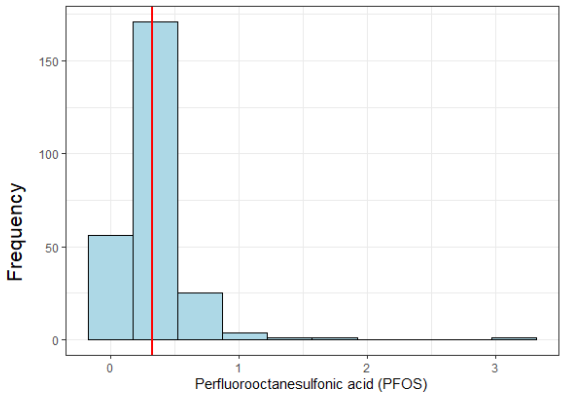
Task 5 – Data Analysis

2025-01-31

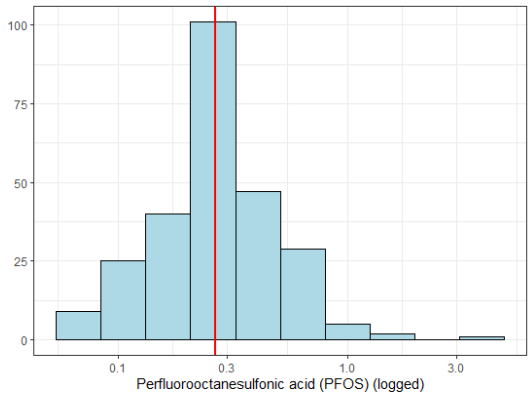
Perfluorooctanesulfonic acid (PFOS)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



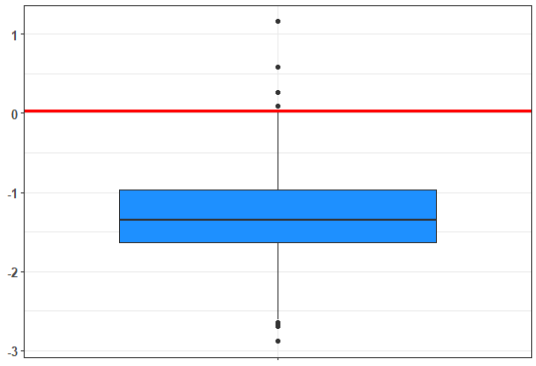
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 259
Number of non-detects: 19.



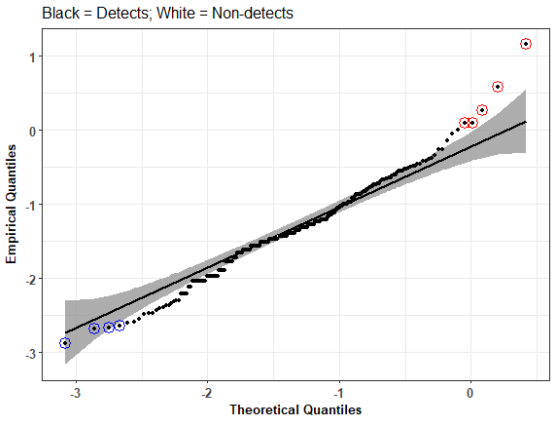
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

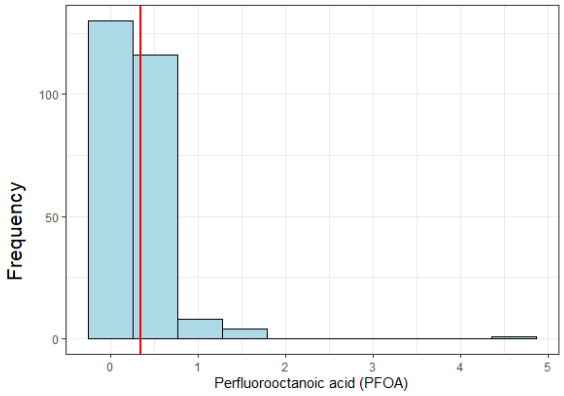
Rosner Test Results

Rosner test confirmed 1 outlier.

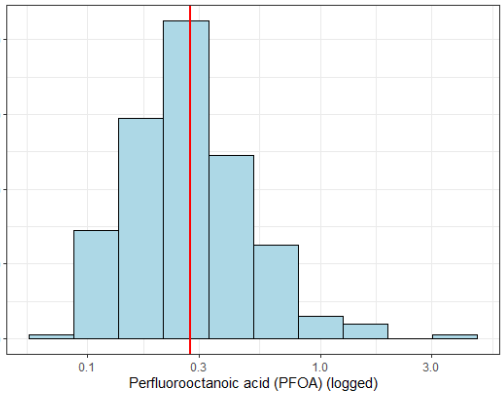
Perfluorooctanoic acid (PFOA)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



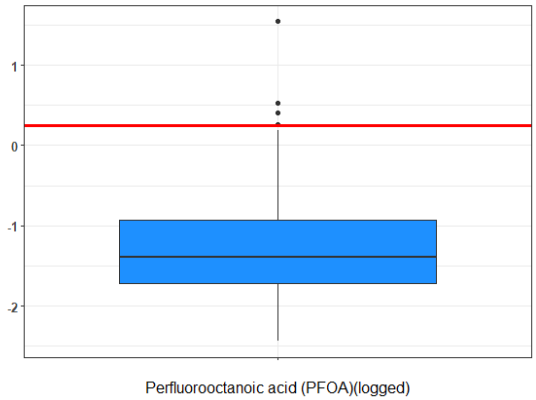
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 259
Number of non-detects: 33.



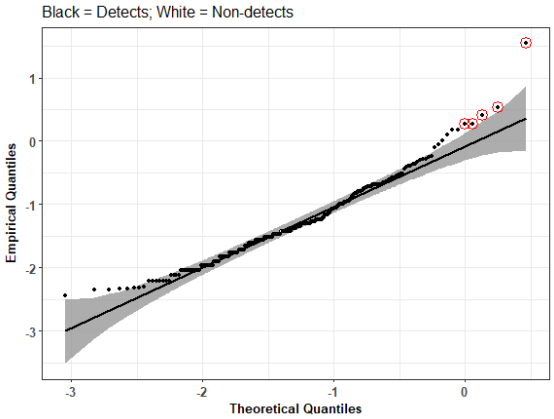
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

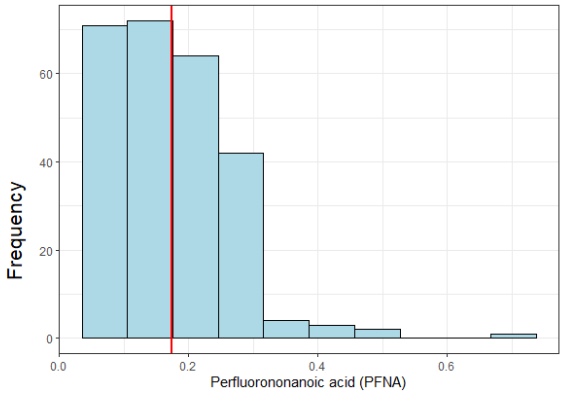
Rosner Test Results

Rosner test confirmed 1 outlier.

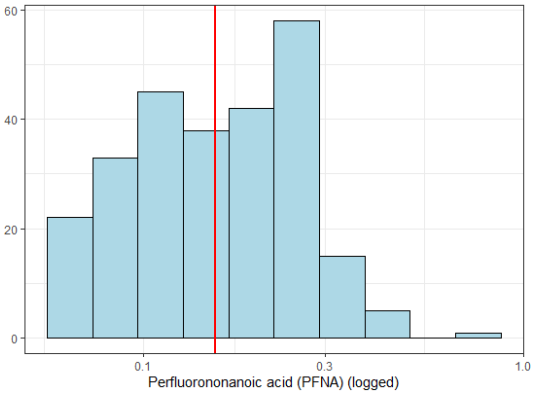
Perfluorononanoic acid (PFNA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



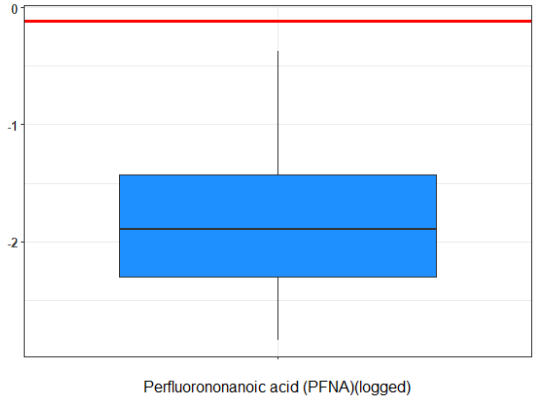
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 259
Number of non-detects: 61.



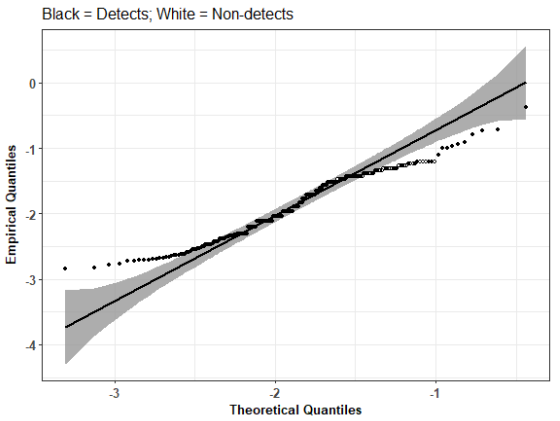
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

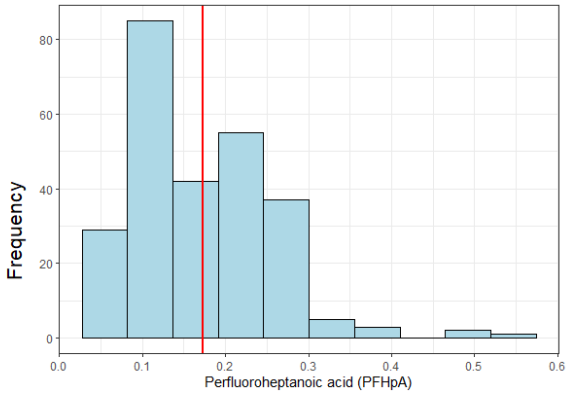
Rosner Test Results

Rosner test was not performed, there were no potential outliers.

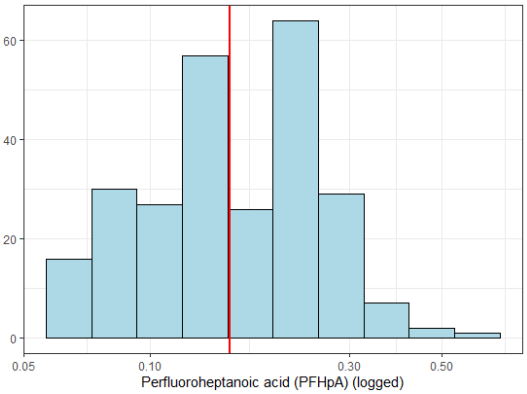
Perfluoroheptanoic acid (PFHpA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



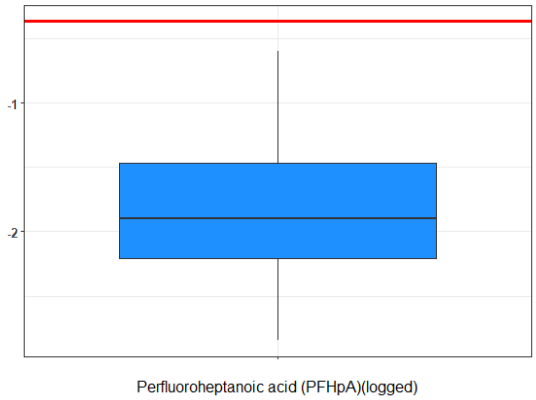
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 259
Number of non-detects: 66.



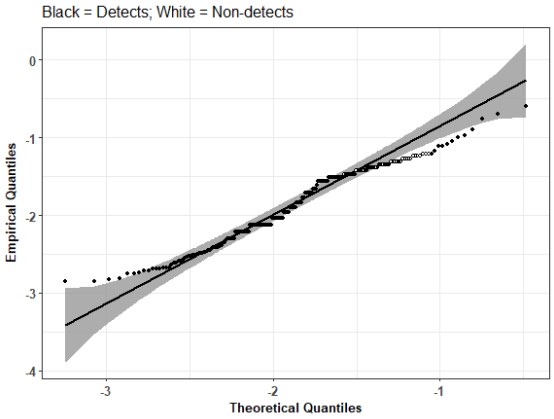
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

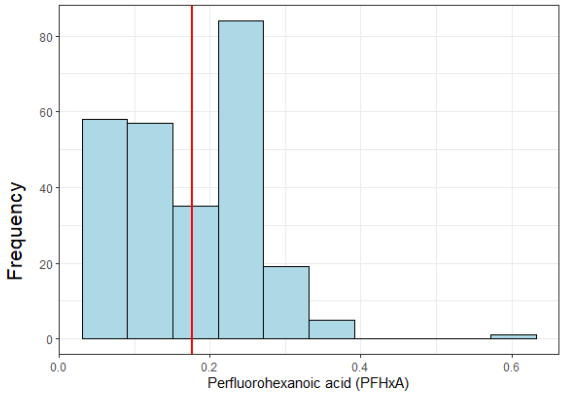
Rosner Test Results

Rosner test was not performed, there were no potential outliers.

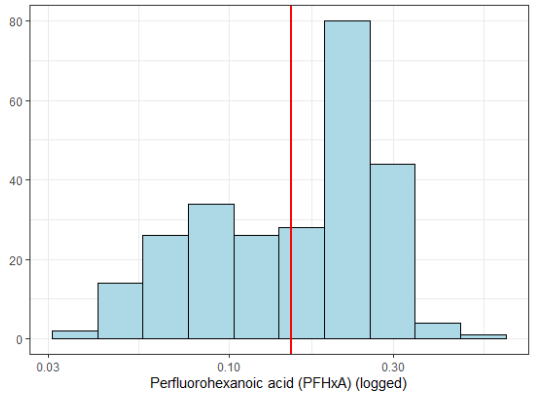
Perfluorohexanoic acid (PFHxA)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



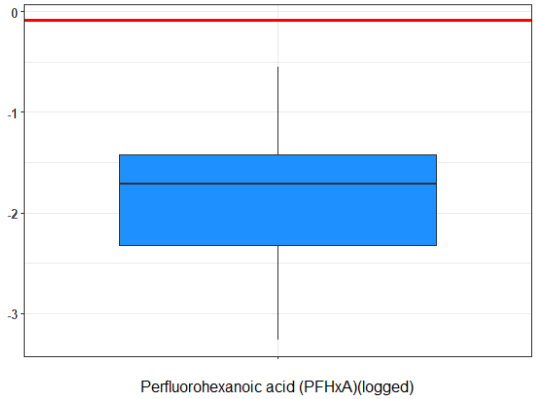
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 259
Number of non-detects: 100.



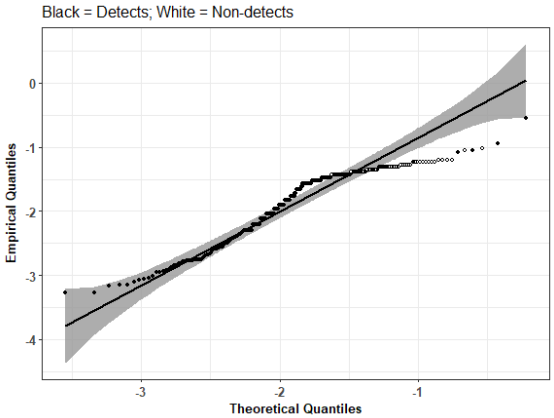
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

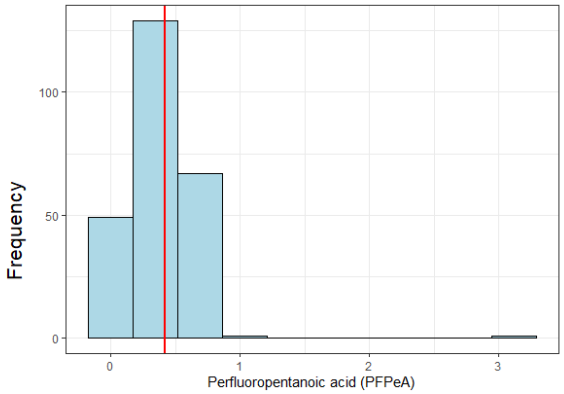
Rosner Test Results

Rosner test was not performed, there were no potential outliers.

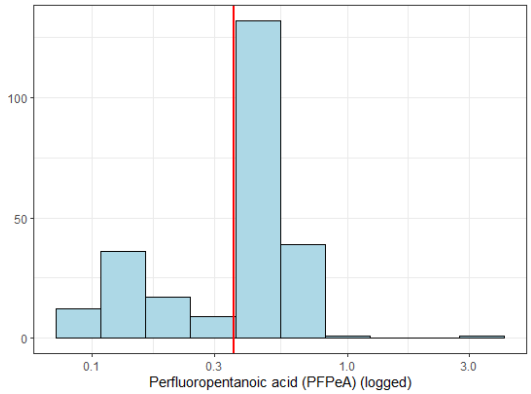
Perfluoropentanoic acid (PFPeA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



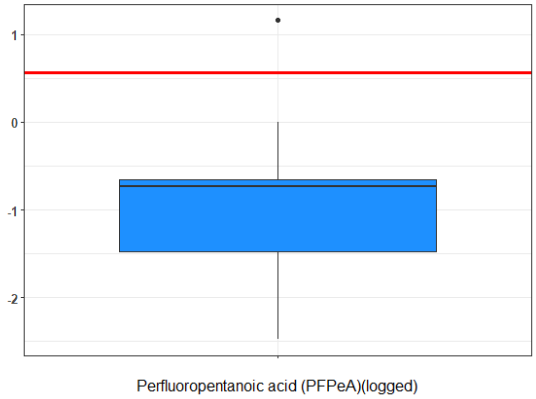
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 247
Number of non-detects: 169.



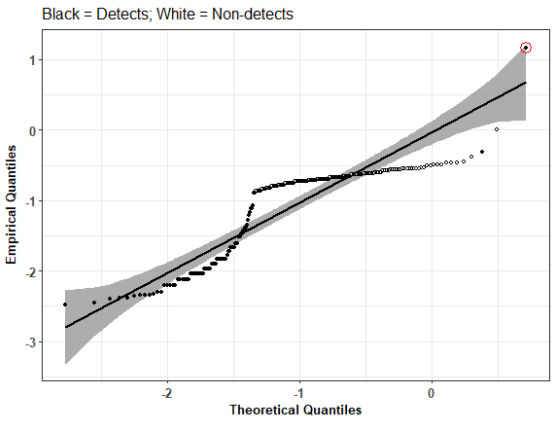
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

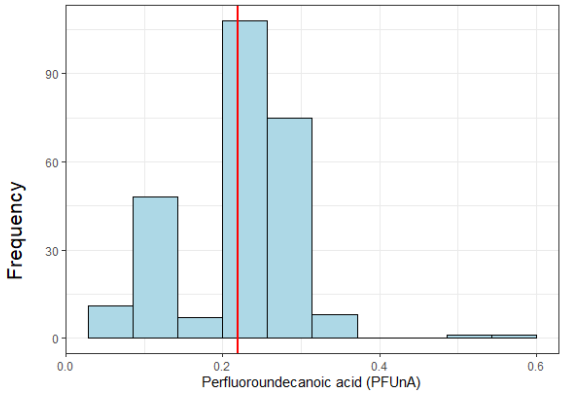
Rosner Test Results

Rosner test confirmed no outliers.

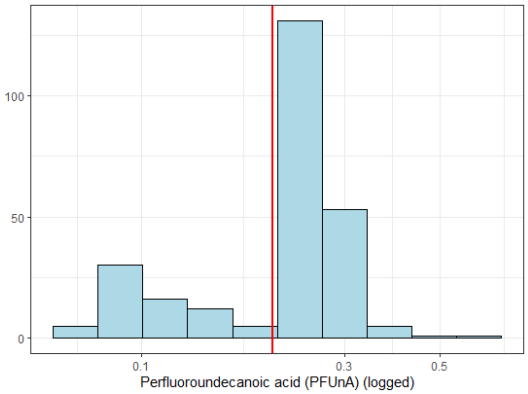
Perfluoroundecanoic acid (PFUnA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



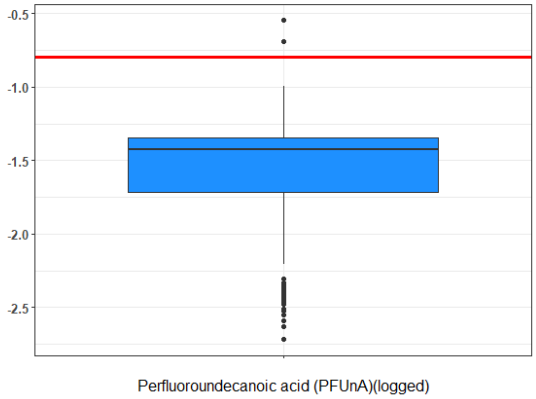
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 259
Number of non-detects: 187.



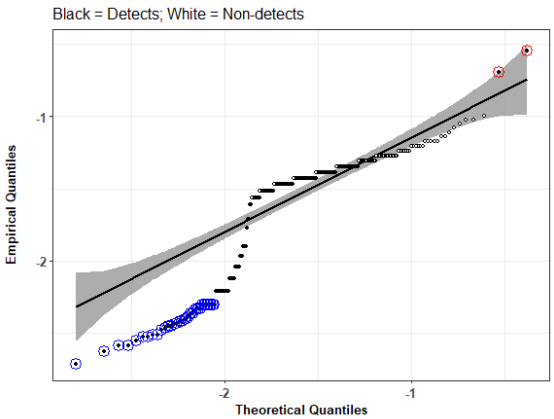
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

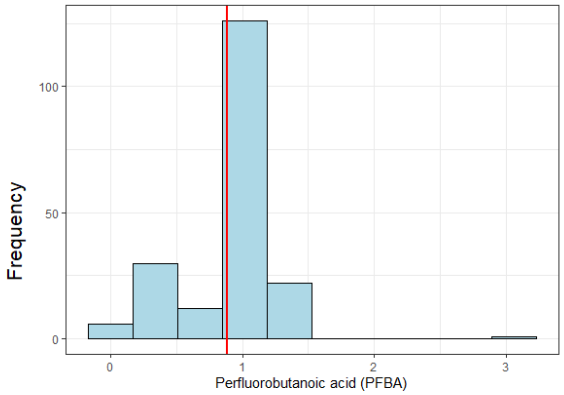
Rosner Test Results

Rosner test confirmed no outliers.

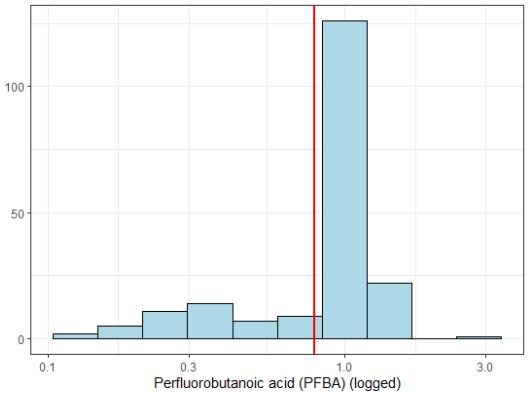
Perfluorobutanoic acid (PFBA)

Distribution

The identified distribution is Gamma. A gamma-transform will be applied for outlier testing.



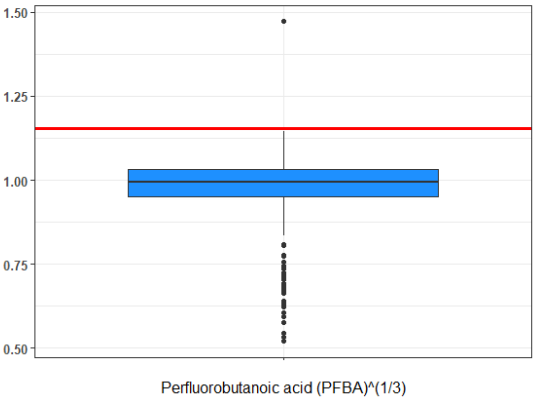
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 197
Number of non-detects: 149.



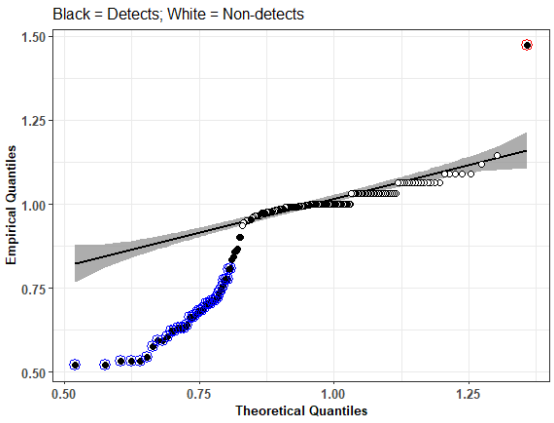
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were gamma-transformed

Rosner Test Results

Rosner test confirmed 1 outlier.

Appendix D-1 ProUCL Output – 0-2 inches

Background Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.2 1/22/2025 3:51:25 PM
From File	0-2 ALL Wide.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Result_Perfluorooctanesulfonic acid (PFOS)

General Statistics

Total Number of Observations	258	Number of Missing Observations	3
Number of Distinct Observations	99		
Number of Detects	252	Number of Non-Detects	6
Number of Distinct Detects	99	Number of Distinct Non-Detects	5
Minimum Detect	0.072	Minimum Non-Detect	0.21
Maximum Detect	10.8	Maximum Non-Detect	0.35
Variance Detected	1.06	Percent Non-Detects	2.326%
Mean Detected	0.686	SD Detected	1.03
Mean of Detected Logged Data	-0.812	SD of Detected Logged Data	0.846

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.509

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.489	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.275	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.065	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.674	KM SD	1.019
95% UTL95% Coverage	2.519	95% KM UPL (t)	2.359
90% KM Percentile (z)	1.98	95% KM Percentile (z)	2.35
99% KM Percentile (z)	3.044	95% KM USL	4.248

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.673	SD	1.021
95% UTL95% Coverage	2.523	95% UPL (t)	2.362
90% Percentile (z)	1.982	95% Percentile (z)	2.353
99% Percentile (z)	3.049	95% USL	4.256

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	8.074	**Anderson-Darling GOF Test**	

5% A-D Critical Value	0.777	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.135	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.059	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.29	k star (bias corrected MLE)	1.277
Theta hat (MLE)	0.532	Theta star (bias corrected MLE)	0.537
nu hat (MLE)	650	nu star (bias corrected)	643.6
MLE Mean (bias corrected)	0.686		
MLE Sd (bias corrected)	0.607	95% Percentile of Chisquare (2kstar)	7.026

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.67
Maximum	10.8	Median	0.4
SD	1.023	CV	1.525
k hat (MLE)	1.137	k star (bias corrected MLE)	1.126
Theta hat (MLE)	0.59	Theta star (bias corrected MLE)	0.595
nu hat (MLE)	586.7	nu star (bias corrected)	581.2
MLE Mean (bias corrected)	0.67	MLE Sd (bias corrected)	0.632
95% Percentile of Chisquare (2kstar)	6.472	90% Percentile	1.499
95% Percentile	1.926	99% Percentile	2.91

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	2.01	2.04	95% Approx. Gamma UPL	1.817	1.828
95% Gamma USL	5.013	5.674			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.674	SD (KM)	1.019
Variance (KM)	1.037	SE of Mean (KM)	0.0635
k hat (KM)	0.438	k star (KM)	0.436
nu hat (KM)	226.2	nu star (KM)	224.9
theta hat (KM)	1.538	theta star (KM)	1.547
80% gamma percentile (KM)	1.098	90% gamma percentile (KM)	1.875
95% gamma percentile (KM)	2.719	99% gamma percentile (KM)	4.824

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.94	1.928	95% Approx. Gamma UPL	1.76	1.738
95% KM Gamma Percentile	1.75	1.727	95% Gamma USL	4.704	5.115

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.968	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	0.00235	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.0554	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0515	Data Not Lognormal at 10% Significance Level	

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.674	Mean in Log Scale	-0.835
SD in Original Scale	1.021	SD in Log Scale	0.85
95% UTL95% Coverage	2.022	95% BCA UTL95% Coverage	2.4
95% Bootstrap (%) UTL95% Coverage	2.46	95% UPL (t)	1.769
90% Percentile (z)	1.289	95% Percentile (z)	1.755
99% Percentile (z)	3.133	95% USL	8.555

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.835	95% KM UTL (Lognormal)95% Coverage	2.022
KM SD of Logged Data	0.85	95% KM UPL (Lognormal)	1.769
95% KM Percentile Lognormal (z)	1.755	95% KM USL (Lognormal)	8.553

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.673	Mean in Log Scale	-0.841
SD in Original Scale	1.021	SD in Log Scale	0.857
95% UTL95% Coverage	2.036	95% UPL (t)	1.779
90% Percentile (z)	1.293	95% Percentile (z)	1.766
99% Percentile (z)	3.165	95% USL	8.715

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	251	95% UTL with95% Coverage	3
Approx, f used to compute achieved CC	1.651	Approximate Actual Confidence Coefficient achieved by UTL	0.947
Approximate Sample Size needed to achieve specified CC	234	95% UPL	2.005
95% USL	10.8	95% KM Chebyshev UPL	5.123

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorononanoic acid (PFNA)

General Statistics

Total Number of Observations	258	Number of Missing Observations	3
Number of Distinct Observations	71		

Number of Detects	228	Number of Non-Detects	30
Number of Distinct Detects	71	Number of Distinct Non-Detects	15
Minimum Detect	0.064	Minimum Non-Detect	0.21
Maximum Detect	2.6	Maximum Non-Detect	0.56
Variance Detected	0.0994	Percent Non-Detects	11.63%
Mean Detected	0.287	SD Detected	0.315
Mean of Detected Logged Data	-1.519	SD of Detected Logged Data	0.662

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.509

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.549	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.241	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0683	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.272	KM SD	0.299
95% UTL95% Coverage	0.815	95% KM UPL (t)	0.767
90% KM Percentile (z)	0.656	95% KM Percentile (z)	0.765
99% KM Percentile (z)	0.969	95% KM USL	1.322

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.27	SD	0.3
95% UTL95% Coverage	0.814	95% UPL (t)	0.767
90% Percentile (z)	0.655	95% Percentile (z)	0.764
99% Percentile (z)	0.969	95% USL	1.324

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	7.261	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.766	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.13	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0612	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.988	k star (bias corrected MLE)	1.965
Theta hat (MLE)	0.145	Theta star (bias corrected MLE)	0.146
nu hat (MLE)	906.7	nu star (bias corrected)	896.1
MLE Mean (bias corrected)	0.287		
MLE Sd (bias corrected)	0.205	95% Percentile of Chisquare (2kstar)	9.374

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.269
Maximum	2.6	Median	0.19
SD	0.302	CV	1.123
k hat (MLE)	1.841	k star (bias corrected MLE)	1.822
Theta hat (MLE)	0.146	Theta star (bias corrected MLE)	0.147
nu hat (MLE)	950	nu star (bias corrected)	940.3
MLE Mean (bias corrected)	0.269	MLE Sd (bias corrected)	0.199
95% Percentile of Chisquare (2kstar)	8.906	90% Percentile	0.534
95% Percentile	0.657	99% Percentile	0.93

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.693	0.695	95% Approx. Gamma UPL	0.637	0.635
95% Gamma USL	1.521	1.638			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.272	SD (KM)	0.299
Variance (KM)	0.0896	SE of Mean (KM)	0.0187
k hat (KM)	0.829	k star (KM)	0.821
nu hat (KM)	427.5	nu star (KM)	423.9
theta hat (KM)	0.329	theta star (KM)	0.332
80% gamma percentile (KM)	0.444	90% gamma percentile (KM)	0.658
95% gamma percentile (KM)	0.875	99% gamma percentile (KM)	1.387

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.677	0.671	95% Approx. Gamma UPL	0.624	0.616
95% KM Gamma Percentile	0.621	0.613	95% Gamma USL	1.443	1.52

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.943	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	4.234E-10	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0833	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0541	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.273	Mean in Log Scale	-1.556
SD in Original Scale	0.299	SD in Log Scale	0.636
95% UTL95% Coverage	0.667	95% BCA UTL95% Coverage	0.854
95% Bootstrap (%) UTL95% Coverage	0.85	95% UPL (t)	0.604
90% Percentile (z)	0.476	95% Percentile (z)	0.6
99% Percentile (z)	0.926	95% USL	1.963

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.564	95% KM UTL (Lognormal)95% Coverage	0.672
KM SD of Logged Data	0.644	95% KM UPL (Lognormal)	0.607
95% KM Percentile Lognormal (z)	0.604	95% KM USL (Lognormal)	2.004

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.27	Mean in Log Scale	-1.574
SD in Original Scale	0.3	SD in Log Scale	0.644
95% UTL95% Coverage	0.666	95% UPL (t)	0.602
90% Percentile (z)	0.473	95% Percentile (z)	0.598
99% Percentile (z)	0.928	95% USL	1.988

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	251	95% UTL with95% Coverage	0.92
Approx, f used to compute achieved CC	1.651	Approximate Actual Confidence Coefficient achieved by UTL	0.947
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.702
95% USL	2.6	95% KM Chebyshev UPL	1.579

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluoroheptanoic acid (PFHpA)

General Statistics

Total Number of Observations	258	Number of Missing Observations	3
Number of Distinct Observations	66		
Number of Detects	196	Number of Non-Detects	62
Number of Distinct Detects	64	Number of Distinct Non-Detects	17
Minimum Detect	0.066	Minimum Non-Detect	0.21
Maximum Detect	1.7	Maximum Non-Detect	0.83
Variance Detected	0.048	Percent Non-Detects	24.03%
Mean Detected	0.235	SD Detected	0.219
Mean of Detected Logged Data	-1.667	SD of Detected Logged Data	0.601

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.509

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.593	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.221	**Lilliefors GOF Test**	

1% Lilliefors Critical Value	0.0737	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.214	KM SD	0.196
95% UTL95% Coverage	0.569	95% KM UPL (t)	0.538
90% KM Percentile (z)	0.465	95% KM Percentile (z)	0.536
99% KM Percentile (z)	0.67	95% KM USL	0.901

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.212	SD	0.196
95% UTL95% Coverage	0.568	95% UPL (t)	0.537
90% Percentile (z)	0.463	95% Percentile (z)	0.535
99% Percentile (z)	0.669	95% USL	0.901

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	5.422	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.764	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.123	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0653	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.438	k star (bias corrected MLE)	2.405
Theta hat (MLE)	0.0964	Theta star (bias corrected MLE)	0.0977
nu hat (MLE)	955.9	nu star (bias corrected)	942.6
MLE Mean (bias corrected)	0.235		
MLE Sd (bias corrected)	0.152	95% Percentile of Chisquare (2kstar)	10.77

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0148	Mean	0.211
Maximum	1.7	Median	0.16
SD	0.199	CV	0.94
k hat (MLE)	2.239	k star (bias corrected MLE)	2.215
Theta hat (MLE)	0.0944	Theta star (bias corrected MLE)	0.0954
nu hat (MLE)	1155	nu star (bias corrected)	1143
MLE Mean (bias corrected)	0.211	MLE Sd (bias corrected)	0.142
95% Percentile of Chisquare (2kstar)	10.18	90% Percentile	0.401
95% Percentile	0.485	99% Percentile	0.671

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

WH	HW	WH	HW

95% Approx. Gamma UTL with 95% Coverage	0.515	0.519	95% Approx. Gamma UPL	0.476	0.478
95% Gamma USL	1.073	1.158			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.214	SD (KM)	0.196
Variance (KM)	0.0383	SE of Mean (KM)	0.0123
k hat (KM)	1.198	k star (KM)	1.187
nu hat (KM)	618.2	nu star (KM)	612.4
theta hat (KM)	0.179	theta star (KM)	0.181
80% gamma percentile (KM)	0.34	90% gamma percentile (KM)	0.473
95% gamma percentile (KM)	0.605	99% gamma percentile (KM)	0.906

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.491	0.488	95% Approx. Gamma UPL	0.456	0.452
95% KM Gamma Percentile	0.455	0.45	95% Gamma USL	0.98	1.023

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.943	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	2.3719E-8	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.0896	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0583	Data Not Lognormal at 10% Significance Level	

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.215	Mean in Log Scale	-1.727
SD in Original Scale	0.195	SD in Log Scale	0.554
95% UTL95% Coverage	0.485	95% BCA UTL95% Coverage	0.589
95% Bootstrap (%) UTL95% Coverage	0.58	95% UPL (t)	0.444
90% Percentile (z)	0.362	95% Percentile (z)	0.442
99% Percentile (z)	0.645	95% USL	1.241

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.739	95% KM UTL (Lognormal)95% Coverage	0.488
KM SD of Logged Data	0.564	95% KM UPL (Lognormal)	0.446
95% KM Percentile Lognormal (z)	0.444	95% KM USL (Lognormal)	1.27

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.212	Mean in Log Scale	-1.747
SD in Original Scale	0.196	SD in Log Scale	0.552
95% UTL95% Coverage	0.473	95% UPL (t)	0.434
90% Percentile (z)	0.353	95% Percentile (z)	0.432
99% Percentile (z)	0.629	95% USL	1.208

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	251	95% UTL with95% Coverage	0.67
Approx, f used to compute achieved CC	1.651	Approximate Actual Confidence Coefficient achieved by UTL	0.947
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.521
95% USL	1.7	95% KM Chebyshev UPL	1.069

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorooctanoic acid (PFOA)

General Statistics

Total Number of Observations	258	Number of Missing Observations	3
Number of Distinct Observations	81		
Number of Detects	196	Number of Non-Detects	62
Number of Distinct Detects	78	Number of Distinct Non-Detects	21
Minimum Detect	0.091	Minimum Non-Detect	0.21
Maximum Detect	4.2	Maximum Non-Detect	1.1
Variance Detected	0.261	Percent Non-Detects	24.03%
Mean Detected	0.46	SD Detected	0.511
Mean of Detected Logged Data	-1.124	SD of Detected Logged Data	0.775

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.509

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.638	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.236	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0737	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.392	KM SD	0.462
95% UTL95% Coverage	1.228	95% KM UPL (t)	1.155
90% KM Percentile (z)	0.984	95% KM Percentile (z)	1.151
99% KM Percentile (z)	1.466	95% KM USL	2.012

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.387	SD	0.465
95% UTL95% Coverage	1.23	95% UPL (t)	1.157
90% Percentile (z)	0.983	95% Percentile (z)	1.152
99% Percentile (z)	1.47	95% USL	2.02

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	5.856	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.77	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.135	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0658	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.587	k star (bias corrected MLE)	1.566
Theta hat (MLE)	0.29	Theta star (bias corrected MLE)	0.294
nu hat (MLE)	622.1	nu star (bias corrected)	613.9
MLE Mean (bias corrected)	0.46		
MLE Sd (bias corrected)	0.368	95% Percentile of Chisquare (2kstar)	8.042

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.374
Maximum	4.2	Median	0.219
SD	0.472	CV	1.262
k hat (MLE)	1.03	k star (bias corrected MLE)	1.021
Theta hat (MLE)	0.363	Theta star (bias corrected MLE)	0.367
nu hat (MLE)	531.5	nu star (bias corrected)	526.7
MLE Mean (bias corrected)	0.374	MLE Sd (bias corrected)	0.37
95% Percentile of Chisquare (2kstar)	6.072	90% Percentile	0.857
95% Percentile	1.113	99% Percentile	1.706

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.186	1.245	95% Approx. Gamma UPL	1.068	1.108
95% Gamma USL	3.042	3.654			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.392	SD (KM)	0.462
Variance (KM)	0.213	SE of Mean (KM)	0.0289
k hat (KM)	0.72	k star (KM)	0.714
nu hat (KM)	371.6	nu star (KM)	368.6
theta hat (KM)	0.544	theta star (KM)	0.548
80% gamma percentile (KM)	0.644	90% gamma percentile (KM)	0.979
95% gamma percentile (KM)	1.324	99% gamma percentile (KM)	2.146

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW

95% Approx. Gamma UTL with 95% Coverage	1.061	1.056	95% Approx. Gamma UPL	0.97	0.96
95% KM Gamma Percentile	0.965	0.955	95% Gamma USL	2.428	2.611

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.938	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	1.0506E-9	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.0929	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0583	Data Not Lognormal at 10% Significance Level	

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.394	Mean in Log Scale	-1.269
SD in Original Scale	0.461	SD in Log Scale	0.741
95% UTL95% Coverage	1.077	95% BCA UTL95% Coverage	1.3
95% Bootstrap (%) UTL95% Coverage	1.315	95% UPL (t)	0.958
90% Percentile (z)	0.727	95% Percentile (z)	0.952
99% Percentile (z)	1.577	95% USL	3.79

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.283	95% KM UTL (Lognormal)95% Coverage	1.07
KM SD of Logged Data	0.746	95% KM UPL (Lognormal)	0.952
95% KM Percentile Lognormal (z)	0.945	95% KM USL (Lognormal)	3.794

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.387	Mean in Log Scale	-1.317
SD in Original Scale	0.465	SD in Log Scale	0.776
95% UTL95% Coverage	1.092	95% UPL (t)	0.966
90% Percentile (z)	0.724	95% Percentile (z)	0.959
99% Percentile (z)	1.628	95% USL	4.072

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	251	95% UTL with95% Coverage	1.5
Approx, f used to compute achieved CC	1.651	Approximate Actual Confidence Coefficient achieved by UTL	0.947
Approximate Sample Size needed to achieve specified CC	234	95% UPL	1.205
95% USL	4.2	95% KM Chebyshev UPL	2.408

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluoroundecanoic acid (PFUnA)

General Statistics

Total Number of Observations	258	Number of Missing Observations	3
Number of Distinct Observations	59		
Number of Detects	176	Number of Non-Detects	82
Number of Distinct Detects	56	Number of Distinct Non-Detects	20
Minimum Detect	0.081	Minimum Non-Detect	0.21
Maximum Detect	1.4	Maximum Non-Detect	0.87
Variance Detected	0.0659	Percent Non-Detects	31.78%
Mean Detected	0.253	SD Detected	0.257
Mean of Detected Logged Data	-1.649	SD of Detected Logged Data	0.655

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.509

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.597	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.281	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0777	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.221	KM SD	0.219
95% UTL95% Coverage	0.617	95% KM UPL (t)	0.582
90% KM Percentile (z)	0.501	95% KM Percentile (z)	0.58
99% KM Percentile (z)	0.729	95% KM USL	0.988

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.218	SD	0.219
95% UTL95% Coverage	0.615	95% UPL (t)	0.581
90% Percentile (z)	0.499	95% Percentile (z)	0.579
99% Percentile (z)	0.728	95% USL	0.987

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	11.96	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.766	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.186	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0708	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.962	k star (bias corrected MLE)	1.932
Theta hat (MLE)	0.129	Theta star (bias corrected MLE)	0.131
nu hat (MLE)	690.4	nu star (bias corrected)	680
MLE Mean (bias corrected)	0.253		
MLE Sd (bias corrected)	0.182	95% Percentile of Chisquare (2kstar)	9.266

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.219
Maximum	1.4	Median	0.16
SD	0.224	CV	1.023
k hat (MLE)	1.722	k star (bias corrected MLE)	1.705
Theta hat (MLE)	0.127	Theta star (bias corrected MLE)	0.128
nu hat (MLE)	888.5	nu star (bias corrected)	879.5
MLE Mean (bias corrected)	0.219	MLE Sd (bias corrected)	0.168
95% Percentile of Chisquare (2kstar)	8.513	90% Percentile	0.442
95% Percentile	0.546	99% Percentile	0.78

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.58	0.59	95% Approx. Gamma UPL	0.532	0.537
95% Gamma USL	1.295	1.432			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.221	SD (KM)	0.219
Variance (KM)	0.0478	SE of Mean (KM)	0.0138
k hat (KM)	1.019	k star (KM)	1.01
nu hat (KM)	525.8	nu star (KM)	521
theta hat (KM)	0.217	theta star (KM)	0.219
80% gamma percentile (KM)	0.355	90% gamma percentile (KM)	0.507
95% gamma percentile (KM)	0.659	99% gamma percentile (KM)	1.011

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.528	0.52	95% Approx. Gamma UPL	0.489	0.48
95% KM Gamma Percentile	0.486	0.478	95% Gamma USL	1.094	1.135

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.865	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.128	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0615	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.224	Mean in Log Scale	-1.722
SD in Original Scale	0.218	SD in Log Scale	0.582
95% UTL95% Coverage	0.513	95% BCA UTL95% Coverage	0.9
95% Bootstrap (%) UTL95% Coverage	0.94	95% UPL (t)	0.468

90% Percentile (z)	0.377	95% Percentile (z)	0.466
99% Percentile (z)	0.692	95% USL	1.378

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.743	95% KM UTL (Lognormal)95% Coverage	0.504
KM SD of Logged Data	0.584	95% KM UPL (Lognormal)	0.46
95% KM Percentile Lognormal (z)	0.457	95% KM USL (Lognormal)	1.358

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.218	Mean in Log Scale	-1.752
SD in Original Scale	0.219	SD in Log Scale	0.572
95% UTL95% Coverage	0.489	95% UPL (t)	0.447
90% Percentile (z)	0.361	95% Percentile (z)	0.444
99% Percentile (z)	0.656	95% USL	1.291

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	251	95% UTL with95% Coverage	1
Approx, f used to compute achieved CC	1.651	Approximate Actual Confidence Coefficient achieved by UTL	0.947
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.841
95% USL	1.4	95% KM Chebyshev UPL	1.175

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorohexanoic acid (PFHxA)

General Statistics

Total Number of Observations	258	Number of Missing Observations	3
Number of Distinct Observations	79		
Number of Detects	150	Number of Non-Detects	108
Number of Distinct Detects	68	Number of Distinct Non-Detects	29
Minimum Detect	0.042	Minimum Non-Detect	0.21
Maximum Detect	1.6	Maximum Non-Detect	1.1
Variance Detected	0.0296	Percent Non-Detects	41.86%
Mean Detected	0.177	SD Detected	0.172
Mean of Detected Logged Data	-1.975	SD of Detected Logged Data	0.655

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.509

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.607	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.216	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0841	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.156	KM SD	0.139
95% UTL95% Coverage	0.407	95% KM UPL (t)	0.385
90% KM Percentile (z)	0.334	95% KM Percentile (z)	0.384
99% KM Percentile (z)	0.479	95% KM USL	0.643

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.17	SD	0.14
95% UTL95% Coverage	0.424	95% UPL (t)	0.402
90% Percentile (z)	0.35	95% Percentile (z)	0.4
99% Percentile (z)	0.496	95% USL	0.661

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.248	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.764	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.097	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0775	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.204	k star (bias corrected MLE)	2.164
Theta hat (MLE)	0.0803	Theta star (bias corrected MLE)	0.0818
nu hat (MLE)	661.2	nu star (bias corrected)	649.3
MLE Mean (bias corrected)	0.177		
MLE Sd (bias corrected)	0.12	95% Percentile of Chisquare (2kstar)	10.02

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.153
Maximum	1.6	Median	0.125
SD	0.14	CV	0.916
k hat (MLE)	2.196	k star (bias corrected MLE)	2.173
Theta hat (MLE)	0.0698	Theta star (bias corrected MLE)	0.0705
nu hat (MLE)	1133	nu star (bias corrected)	1121
MLE Mean (bias corrected)	0.153	MLE Sd (bias corrected)	0.104
95% Percentile of Chisquare (2kstar)	10.04	90% Percentile	0.292
95% Percentile	0.354	99% Percentile	0.49

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.377	0.384	95% Approx. Gamma UPL	0.348	0.353
95% Gamma USL	0.79	0.865			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.156	SD (KM)	0.139
Variance (KM)	0.0193	SE of Mean (KM)	0.00921
k hat (KM)	1.263	k star (KM)	1.251
nu hat (KM)	651.7	nu star (KM)	645.5
theta hat (KM)	0.123	theta star (KM)	0.125
80% gamma percentile (KM)	0.246	90% gamma percentile (KM)	0.34
95% gamma percentile (KM)	0.432	99% gamma percentile (KM)	0.643

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.361	0.362	95% Approx. Gamma UPL	0.336	0.335
95% KM Gamma Percentile	0.334	0.334	95% Gamma USL	0.725	0.769

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.966	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.0203	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0652	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0666	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.155	Mean in Log Scale	-2.05
SD in Original Scale	0.137	SD in Log Scale	0.56
95% UTL95% Coverage	0.355	95% BCA UTL95% Coverage	0.36
95% Bootstrap (%) UTL95% Coverage	0.36	95% UPL (t)	0.325
90% Percentile (z)	0.264	95% Percentile (z)	0.323
99% Percentile (z)	0.474	95% USL	0.919

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.061	95% KM UTL (Lognormal)95% Coverage	0.375
KM SD of Logged Data	0.597	95% KM UPL (Lognormal)	0.342
95% KM Percentile Lognormal (z)	0.34	95% KM USL (Lognormal)	1.034

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.17	Mean in Log Scale	-1.94
SD in Original Scale	0.14	SD in Log Scale	0.541
95% UTL95% Coverage	0.383	95% UPL (t)	0.352
90% Percentile (z)	0.288	95% Percentile (z)	0.35
99% Percentile (z)	0.506	95% USL	0.959

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	251	95% UTL with95% Coverage	0.83
Approx, f used to compute achieved CC	1.651	Approximate Actual Confidence Coefficient achieved by UTL	0.947
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.461
95% USL	1.6	95% KM Chebyshev UPL	0.762

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorodecanoic acid (PFDA)

General Statistics

Total Number of Observations	258	Number of Missing Observations	3
Number of Distinct Observations	49		
Number of Detects	116	Number of Non-Detects	142
Number of Distinct Detects	41	Number of Distinct Non-Detects	21
Minimum Detect	0.09	Minimum Non-Detect	0.21
Maximum Detect	2.6	Maximum Non-Detect	0.87
Variance Detected	0.113	Percent Non-Detects	55.04%
Mean Detected	0.273	SD Detected	0.335
Mean of Detected Logged Data	-1.612	SD of Detected Logged Data	0.675

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.509

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.52	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.293	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0955	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.204	KM SD	0.235
95% UTL95% Coverage	0.629	95% KM UPL (t)	0.592
90% KM Percentile (z)	0.505	95% KM Percentile (z)	0.59
99% KM Percentile (z)	0.75	95% KM USL	1.027

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.202	SD	0.235
95% UTL95% Coverage	0.627	95% UPL (t)	0.59

90% Percentile (z)	0.502	95% Percentile (z)	0.588
99% Percentile (z)	0.748	95% USL	1.025

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	9.156	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.768	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.213	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0867	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.745	k star (bias corrected MLE)	1.706
Theta hat (MLE)	0.156	Theta star (bias corrected MLE)	0.16
nu hat (MLE)	404.8	nu star (bias corrected)	395.7
MLE Mean (bias corrected)	0.273		
MLE Sd (bias corrected)	0.209	95% Percentile of Chisquare (2kstar)	8.516

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.198
Maximum	2.6	Median	0.14
SD	0.248	CV	1.251
k hat (MLE)	1.168	k star (bias corrected MLE)	1.157
Theta hat (MLE)	0.17	Theta star (bias corrected MLE)	0.171
nu hat (MLE)	602.5	nu star (bias corrected)	596.8
MLE Mean (bias corrected)	0.198	MLE Sd (bias corrected)	0.184
95% Percentile of Chisquare (2kstar)	6.585	90% Percentile	0.44
95% Percentile	0.565	99% Percentile	0.849

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.602	0.633	95% Approx. Gamma UPL	0.545	0.566
95% Gamma USL	1.488	1.774			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.204	SD (KM)	0.235
Variance (KM)	0.055	SE of Mean (KM)	0.015
k hat (KM)	0.76	k star (KM)	0.753
nu hat (KM)	391.9	nu star (KM)	388.7
theta hat (KM)	0.269	theta star (KM)	0.271
80% gamma percentile (KM)	0.335	90% gamma percentile (KM)	0.504
95% gamma percentile (KM)	0.678	99% gamma percentile (KM)	1.089

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.467	0.455	95% Approx. Gamma UPL	0.434	0.422
95% KM Gamma Percentile	0.432	0.42	95% Gamma USL	0.939	0.948

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.846	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.167	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0756	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.213	Mean in Log Scale	-1.757
SD in Original Scale	0.235	SD in Log Scale	0.544
95% UTL95% Coverage	0.462	95% BCA UTL95% Coverage	0.697
95% Bootstrap (%) UTL95% Coverage	0.69	95% UPL (t)	0.424
90% Percentile (z)	0.346	95% Percentile (z)	0.422
99% Percentile (z)	0.612	95% USL	1.163

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.795	95% KM UTL (Lognormal)95% Coverage	0.425
KM SD of Logged Data	0.519	95% KM UPL (Lognormal)	0.392
95% KM Percentile Lognormal (z)	0.39	95% KM USL (Lognormal)	1.027

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.202	Mean in Log Scale	-1.804
SD in Original Scale	0.235	SD in Log Scale	0.501
95% UTL95% Coverage	0.408	95% UPL (t)	0.377
90% Percentile (z)	0.313	95% Percentile (z)	0.375
99% Percentile (z)	0.528	95% USL	0.954

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	251	95% UTL with95% Coverage	0.87
Approx, f used to compute achieved CC	1.651	Approximate Actual Confidence Coefficient achieved by UTL	0.947
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.591
95% USL	2.6	95% KM Chebyshev UPL	1.229

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.

The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluoropentanoic acid (PFPeA)

General Statistics

Total Number of Observations	246	Number of Missing Observations	15
Number of Distinct Observations	77		
Number of Detects	110	Number of Non-Detects	136
Number of Distinct Detects	49	Number of Distinct Non-Detects	36
Minimum Detect	0.1	Minimum Non-Detect	0.42
Maximum Detect	28.5	Maximum Non-Detect	2.2
Variance Detected	9.067	Percent Non-Detects	55.28%
Mean Detected	0.789	SD Detected	3.011
Mean of Detected Logged Data	-1.223	SD of Detected Logged Data	0.968

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.816	d2max (for USL)	3.495

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.226	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.41	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.098	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.478	KM SD	2.025
95% UTL95% Coverage	4.156	95% KM UPL (t)	3.829
90% KM Percentile (z)	3.074	95% KM Percentile (z)	3.81
99% KM Percentile (z)	5.19	95% KM USL	7.556

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.512	SD	2.025
95% UTL95% Coverage	4.188	95% UPL (t)	3.862
90% Percentile (z)	3.107	95% Percentile (z)	3.842
99% Percentile (z)	5.222	95% USL	7.588

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	15.88	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.807	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.295	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0911	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.623	k star (bias corrected MLE)	0.612
Theta hat (MLE)	1.265	Theta star (bias corrected MLE)	1.288
nu hat (MLE)	137.1	nu star (bias corrected)	134.7

MLE Mean (bias corrected)	0.789		
MLE Sd (bias corrected)	1.008	95% Percentile of Chisquare (2kstar)	4.375

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.474
Maximum	28.5	Median	0.15
SD	2.048	CV	4.319
k hat (MLE)	0.411	k star (bias corrected MLE)	0.409
Theta hat (MLE)	1.153	Theta star (bias corrected MLE)	1.16
nu hat (MLE)	202.3	nu star (bias corrected)	201.2
MLE Mean (bias corrected)	0.474	MLE Sd (bias corrected)	0.742
95% Percentile of Chisquare (2kstar)	3.372	90% Percentile	1.334
95% Percentile	1.955	99% Percentile	3.514

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.7	1.711	95% Approx. Gamma UPL	1.467	1.448
95% Gamma USL	5.713	7.049			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.478	SD (KM)	2.025
Variance (KM)	4.102	SE of Mean (KM)	0.13
k hat (KM)	0.0558	k star (KM)	0.0578
nu hat (KM)	27.44	nu star (KM)	28.43
theta hat (KM)	8.577	theta star (KM)	8.275
80% gamma percentile (KM)	0.104	90% gamma percentile (KM)	0.866
95% gamma percentile (KM)	2.657	99% gamma percentile (KM)	9.804

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.32	1.176	95% Approx. Gamma UPL	1.181	1.051
95% KM Gamma Percentile	1.173	1.044	95% Gamma USL	3.458	3.249

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.807	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.156	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0776	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.494	Mean in Log Scale	-1.363

SD in Original Scale	2.028	SD in Log Scale	0.747
95% UTL95% Coverage	0.994	95% BCA UTL95% Coverage	1.65
95% Bootstrap (%) UTL95% Coverage	1.65	95% UPL (t)	0.881
90% Percentile (z)	0.667	95% Percentile (z)	0.875
99% Percentile (z)	1.456	95% USL	3.485

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.419	95% KM UTL (Lognormal)95% Coverage	0.927
KM SD of Logged Data	0.74	95% KM UPL (Lognormal)	0.823
95% KM Percentile Lognormal (z)	0.817	95% KM USL (Lognormal)	3.209

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.512	Mean in Log Scale	-1.249
SD in Original Scale	2.025	SD in Log Scale	0.662
95% UTL95% Coverage	0.954	95% UPL (t)	0.857
90% Percentile (z)	0.67	95% Percentile (z)	0.852
99% Percentile (z)	1.337	95% USL	2.896

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	239	95% UTL with95% Coverage	2.1
Approx, f used to compute achieved CC	1.572	Approximate Actual Confidence Coefficient achieved by UTL	0.928
Approximate Sample Size needed to achieve specified CC	234	95% UPL	1.1
95% USL	28.5	95% KM Chebyshev UPL	9.324

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorobutanoic acid (PFBA)

General Statistics

Total Number of Observations	166	Number of Missing Observations	95
Number of Distinct Observations	51		
Number of Detects	48	Number of Non-Detects	118
Number of Distinct Detects	39	Number of Distinct Non-Detects	20
Minimum Detect	0.17	Minimum Non-Detect	0.84
Maximum Detect	5.7	Maximum Non-Detect	4.3
Variance Detected	0.886	Percent Non-Detects	71.08%
Mean Detected	0.87	SD Detected	0.941
Mean of Detected Logged Data	-0.471	SD of Detected Logged Data	0.777

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.856	d2max (for USL)	3.375

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.631	**Shapiro Wilk GOF Test**	
1% Shapiro Wilk Critical Value	0.929	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.228	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.148	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.61	KM SD	0.567
95% UTL95% Coverage	1.661	95% KM UPL (t)	1.55
90% KM Percentile (z)	1.336	95% KM Percentile (z)	1.542
99% KM Percentile (z)	1.928	95% KM USL	2.522

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.664	SD	0.539
95% UTL95% Coverage	1.664	95% UPL (t)	1.558
90% Percentile (z)	1.354	95% Percentile (z)	1.55
99% Percentile (z)	1.917	95% USL	2.482

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.99	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.766	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.119	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.13	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.654	k star (bias corrected MLE)	1.565
Theta hat (MLE)	0.526	Theta star (bias corrected MLE)	0.556
nu hat (MLE)	158.8	nu star (bias corrected)	150.2
MLE Mean (bias corrected)	0.87		
MLE Sd (bias corrected)	0.696	95% Percentile of Chisquare (2kstar)	8.038

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.574
Maximum	5.7	Median	0.441
SD	0.61	CV	1.063
k hat (MLE)	1.143	k star (bias corrected MLE)	1.127
Theta hat (MLE)	0.502	Theta star (bias corrected MLE)	0.509
nu hat (MLE)	379.6	nu star (bias corrected)	374.1

MLE Mean (bias corrected)	0.574	MLE Sd (bias corrected)	0.541
95% Percentile of Chisquare (2kstar)	6.474	90% Percentile	1.283
95% Percentile	1.649	99% Percentile	2.491

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.82	1.967	95% Approx. Gamma UPL	1.608	1.71
95% Gamma USL	4.118	5.042			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.61	SD (KM)	0.567
Variance (KM)	0.321	SE of Mean (KM)	0.0546
k hat (KM)	1.157	k star (KM)	1.14
nu hat (KM)	384.1	nu star (KM)	378.5
theta hat (KM)	0.527	theta star (KM)	0.535
80% gamma percentile (KM)	0.97	90% gamma percentile (KM)	1.359
95% gamma percentile (KM)	1.744	99% gamma percentile (KM)	2.63

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.476	1.482	95% Approx. Gamma UPL	1.343	1.341
95% KM Gamma Percentile	1.333	1.331	95% Gamma USL	2.808	2.974

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.963	**Shapiro Wilk GOF Test**
10% Shapiro Wilk Critical Value	0.954	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0761	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.117	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.604	Mean in Log Scale	-0.711
SD in Original Scale	0.564	SD in Log Scale	0.594
95% UTL95% Coverage	1.479	95% BCA UTL95% Coverage	1.6
95% Bootstrap (%) UTL95% Coverage	1.6	95% UPL (t)	1.316
90% Percentile (z)	1.052	95% Percentile (z)	1.305
99% Percentile (z)	1.956	95% USL	3.646

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.715	95% KM UTL (Lognormal)95% Coverage	1.55
KM SD of Logged Data	0.621	95% KM UPL (Lognormal)	1.372
95% KM Percentile Lognormal (z)	1.36	95% KM USL (Lognormal)	3.982

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.664	Mean in Log Scale	-0.539
SD in Original Scale	0.539	SD in Log Scale	0.447
95% UTL95% Coverage	1.336	95% UPL (t)	1.224

90% Percentile (z)	1.034	95% Percentile (z)	1.216
99% Percentile (z)	1.649	95% USL	2.633

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	162	95% UTL with95% Coverage	1.8
Approx, f used to compute achieved CC	1.705	Approximate Actual Confidence Coefficient achieved by UTL	0.922
Approximate Sample Size needed to achieve specified CC	153	95% UPL	1.6
95% USL	5.7	95% KM Chebyshev UPL	3.087

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix D-2 ProUCL Output – 2-12 inches

Background Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.2 1/23/2025 11:16:27 AM
From File	2-12 ALL Wide.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Result_Perfluorooctanesulfonic acid (PFOS)

General Statistics

Total Number of Observations	259	Number of Missing Observations	2
Number of Distinct Observations	79		
Number of Detects	240	Number of Non-Detects	19
Number of Distinct Detects	79	Number of Distinct Non-Detects	10
Minimum Detect	0.056	Minimum Non-Detect	0.21
Maximum Detect	3.2	Maximum Non-Detect	0.33
Variance Detected	0.0822	Percent Non-Detects	7.336%
Mean Detected	0.33	SD Detected	0.287
Mean of Detected Logged Data	-1.323	SD of Detected Logged Data	0.63

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.51

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.651	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.176	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0666	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.317	KM SD	0.279
95% UTL95% Coverage	0.823	95% KM UPL (t)	0.779
90% KM Percentile (z)	0.675	95% KM Percentile (z)	0.777
99% KM Percentile (z)	0.967	95% KM USL	1.298

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.315	SD	0.281
95% UTL95% Coverage	0.824	95% UPL (t)	0.78
90% Percentile (z)	0.675	95% Percentile (z)	0.777
99% Percentile (z)	0.969	95% USL	1.302

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.27	**Anderson-Darling GOF Test**	

5% A-D Critical Value	0.763	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.102	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0596	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.492	k star (bias corrected MLE)	2.464
Theta hat (MLE)	0.132	Theta star (bias corrected MLE)	0.134
nu hat (MLE)	1196	nu star (bias corrected)	1182
MLE Mean (bias corrected)	0.33		
MLE Sd (bias corrected)	0.21	95% Percentile of Chisquare (2kstar)	10.96

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0282	Mean	0.314
Maximum	3.2	Median	0.25
SD	0.282	CV	0.896
k hat (MLE)	2.296	k star (bias corrected MLE)	2.272
Theta hat (MLE)	0.137	Theta star (bias corrected MLE)	0.138
nu hat (MLE)	1190	nu star (bias corrected)	1177
MLE Mean (bias corrected)	0.314	MLE Sd (bias corrected)	0.209
95% Percentile of Chisquare (2kstar)	10.36	90% Percentile	0.594
95% Percentile	0.717	99% Percentile	0.987

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.763	0.771	95% Approx. Gamma UPL	0.706	0.71
95% Gamma USL	1.584	1.715			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.317	SD (KM)	0.279
Variance (KM)	0.078	SE of Mean (KM)	0.0174
k hat (KM)	1.291	k star (KM)	1.279
nu hat (KM)	668.8	nu star (KM)	662.4
theta hat (KM)	0.246	theta star (KM)	0.248
80% gamma percentile (KM)	0.499	90% gamma percentile (KM)	0.688
95% gamma percentile (KM)	0.873	99% gamma percentile (KM)	1.295

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.752	0.757	95% Approx. Gamma UPL	0.697	0.699
95% KM Gamma Percentile	0.694	0.696	95% Gamma USL	1.535	1.645

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.985	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	0.643	Detected Data appear Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.0542	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0527	Data Not Lognormal at 10% Significance Level	

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.317	Mean in Log Scale	-1.362
SD in Original Scale	0.28	SD in Log Scale	0.624
95% UTL95% Coverage	0.794	95% BCA UTL95% Coverage	0.78
95% Bootstrap (%) UTL95% Coverage	0.78	95% UPL (t)	0.719
90% Percentile (z)	0.57	95% Percentile (z)	0.715
99% Percentile (z)	1.095	95% USL	2.292

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.365	95% KM UTL (Lognormal)95% Coverage	0.801
KM SD of Logged Data	0.631	95% KM UPL (Lognormal)	0.725
95% KM Percentile Lognormal (z)	0.721	95% KM USL (Lognormal)	2.339

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.315	Mean in Log Scale	-1.38
SD in Original Scale	0.281	SD in Log Scale	0.64
95% UTL95% Coverage	0.802	95% UPL (t)	0.725
90% Percentile (z)	0.571	95% Percentile (z)	0.721
99% Percentile (z)	1.115	95% USL	2.377

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	252	95% UTL with95% Coverage	0.95
Approx, f used to compute achieved CC	1.658	Approximate Actual Confidence Coefficient achieved by UTL	0.949
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.68
95% USL	3.2	95% KM Chebyshev UPL	1.537

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorooctanoic acid (PFOA)

General Statistics

Total Number of Observations	259	Number of Missing Observations	2
Number of Distinct Observations	73		

Number of Detects	226	Number of Non-Detects	33
Number of Distinct Detects	73	Number of Distinct Non-Detects	9
Minimum Detect	0.087	Minimum Non-Detect	0.21
Maximum Detect	4.7	Maximum Non-Detect	0.3
Variance Detected	0.149	Percent Non-Detects	12.74%
Mean Detected	0.36	SD Detected	0.385
Mean of Detected Logged Data	-1.271	SD of Detected Logged Data	0.649

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.51

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.55	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.241	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0686	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.335	KM SD	0.366
95% UTL95% Coverage	0.997	95% KM UPL (t)	0.94
90% KM Percentile (z)	0.803	95% KM Percentile (z)	0.936
99% KM Percentile (z)	1.185	95% KM USL	1.618

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.33	SD	0.369
95% UTL95% Coverage	0.997	95% UPL (t)	0.94
90% Percentile (z)	0.802	95% Percentile (z)	0.936
99% Percentile (z)	1.187	95% USL	1.624

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	4.367	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.765	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.109	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0614	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.154	k star (bias corrected MLE)	2.128
Theta hat (MLE)	0.167	Theta star (bias corrected MLE)	0.169
nu hat (MLE)	973.5	nu star (bias corrected)	961.9
MLE Mean (bias corrected)	0.36		
MLE Sd (bias corrected)	0.247	95% Percentile of Chisquare (2kstar)	9.901

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.327
Maximum	4.7	Median	0.24
SD	0.371	CV	1.135
k hat (MLE)	1.635	k star (bias corrected MLE)	1.619
Theta hat (MLE)	0.2	Theta star (bias corrected MLE)	0.202
nu hat (MLE)	847.1	nu star (bias corrected)	838.7
MLE Mean (bias corrected)	0.327	MLE Sd (bias corrected)	0.257
95% Percentile of Chisquare (2kstar)	8.224	90% Percentile	0.669
95% Percentile	0.83	99% Percentile	1.193

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.881	0.904	95% Approx. Gamma UPL	0.807	0.822
95% Gamma USL	1.987	2.237			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.335	SD (KM)	0.366
Variance (KM)	0.134	SE of Mean (KM)	0.0228
k hat (KM)	0.838	k star (KM)	0.831
nu hat (KM)	434	nu star (KM)	430.3
theta hat (KM)	0.399	theta star (KM)	0.403
80% gamma percentile (KM)	0.546	90% gamma percentile (KM)	0.806
95% gamma percentile (KM)	1.071	99% gamma percentile (KM)	1.694

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.822	0.819	95% Approx. Gamma UPL	0.759	0.753
95% KM Gamma Percentile	0.756	0.749	95% Gamma USL	1.736	1.839

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.963	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	4.3359E-4	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0593	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0543	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.335	Mean in Log Scale	-1.342
SD in Original Scale	0.366	SD in Log Scale	0.642
95% UTL95% Coverage	0.835	95% BCA UTL95% Coverage	1
95% Bootstrap (%) UTL95% Coverage	1.01	95% UPL (t)	0.755
90% Percentile (z)	0.595	95% Percentile (z)	0.751
99% Percentile (z)	1.163	95% USL	2.486

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.346	95% KM UTL (Lognormal)95% Coverage	0.834
KM SD of Logged Data	0.643	95% KM UPL (Lognormal)	0.754
95% KM Percentile Lognormal (z)	0.75	95% KM USL (Lognormal)	2.489

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.33	Mean in Log Scale	-1.379
SD in Original Scale	0.369	SD in Log Scale	0.67
95% UTL95% Coverage	0.847	95% UPL (t)	0.763
90% Percentile (z)	0.594	95% Percentile (z)	0.758
99% Percentile (z)	1.196	95% USL	2.643

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	252	95% UTL with95% Coverage	1.2
Approx, f used to compute achieved CC	1.658	Approximate Actual Confidence Coefficient achieved by UTL	0.949
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.78
95% USL	4.7	95% KM Chebyshev UPL	1.932

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorononanoic acid (PFNA)

General Statistics

Total Number of Observations	259	Number of Missing Observations	2
Number of Distinct Observations	62		
Number of Detects	198	Number of Non-Detects	61
Number of Distinct Detects	62	Number of Distinct Non-Detects	10
Minimum Detect	0.058	Minimum Non-Detect	0.21
Maximum Detect	0.69	Maximum Non-Detect	0.3
Variance Detected	0.00804	Percent Non-Detects	23.55%
Mean Detected	0.151	SD Detected	0.0897
Mean of Detected Logged Data	-2.018	SD of Detected Logged Data	0.481

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.51

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.789	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.186	**Lilliefors GOF Test**	

1% Lilliefors Critical Value	0.0733	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.145	KM SD	0.0819
95% UTL95% Coverage	0.293	95% KM UPL (t)	0.28
90% KM Percentile (z)	0.25	95% KM Percentile (z)	0.279
99% KM Percentile (z)	0.335	95% KM USL	0.432

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.145	SD	0.0794
95% UTL95% Coverage	0.289	95% UPL (t)	0.276
90% Percentile (z)	0.247	95% Percentile (z)	0.275
99% Percentile (z)	0.33	95% USL	0.424

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	3.849	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.756	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.13	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0644	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	4.073	k star (bias corrected MLE)	4.014
Theta hat (MLE)	0.0371	Theta star (bias corrected MLE)	0.0376
nu hat (MLE)	1613	nu star (bias corrected)	1590
MLE Mean (bias corrected)	0.151		
MLE Sd (bias corrected)	0.0754	95% Percentile of Chisquare (2kstar)	15.55

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0455	Mean	0.145
Maximum	0.69	Median	0.121
SD	0.0823	CV	0.567
k hat (MLE)	4.364	k star (bias corrected MLE)	4.316
Theta hat (MLE)	0.0332	Theta star (bias corrected MLE)	0.0336
nu hat (MLE)	2261	nu star (bias corrected)	2236
MLE Mean (bias corrected)	0.145	MLE Sd (bias corrected)	0.0698
95% Percentile of Chisquare (2kstar)	16.4	90% Percentile	0.239
95% Percentile	0.276	99% Percentile	0.354

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

WH	HW	WH	HW

95% Approx. Gamma UTL with 95% Coverage	0.292	0.293	95% Approx. Gamma UPL	0.275	0.275
95% Gamma USL	0.523	0.547			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.145	SD (KM)	0.0819
Variance (KM)	0.00671	SE of Mean (KM)	0.00532
k hat (KM)	3.119	k star (KM)	3.085
nu hat (KM)	1616	nu star (KM)	1598
theta hat (KM)	0.0464	theta star (KM)	0.0469
80% gamma percentile (KM)	0.206	90% gamma percentile (KM)	0.255
95% gamma percentile (KM)	0.301	99% gamma percentile (KM)	0.401

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.288	0.289	95% Approx. Gamma UPL	0.271	0.272
95% KM Gamma Percentile	0.271	0.271	95% Gamma USL	0.513	0.535

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.951	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	2.9907E-6	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.0936	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.058	Data Not Lognormal at 10% Significance Level	

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.145	Mean in Log Scale	-2.042
SD in Original Scale	0.081	SD in Log Scale	0.446
95% UTL95% Coverage	0.291	95% BCA UTL95% Coverage	0.37
95% Bootstrap (%) UTL95% Coverage	0.37	95% UPL (t)	0.272
90% Percentile (z)	0.23	95% Percentile (z)	0.271
99% Percentile (z)	0.367	95% USL	0.622

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.049	95% KM UTL (Lognormal)95% Coverage	0.294
KM SD of Logged Data	0.456	95% KM UPL (Lognormal)	0.274
95% KM Percentile Lognormal (z)	0.273	95% KM USL (Lognormal)	0.639

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.145	Mean in Log Scale	-2.035
SD in Original Scale	0.0794	SD in Log Scale	0.424
95% UTL95% Coverage	0.282	95% UPL (t)	0.264
90% Percentile (z)	0.225	95% Percentile (z)	0.263
99% Percentile (z)	0.351	95% USL	0.579

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	252	95% UTL with95% Coverage	0.38
Approx, f used to compute achieved CC	1.658	Approximate Actual Confidence Coefficient achieved by UTL	0.949
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.3
95% USL	0.69	95% KM Chebyshev UPL	0.502

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluoroheptanoic acid (PFHpA)

General Statistics

Total Number of Observations	259	Number of Missing Observations	2
Number of Distinct Observations	59		
Number of Detects	193	Number of Non-Detects	66
Number of Distinct Detects	56	Number of Distinct Non-Detects	10
Minimum Detect	0.058	Minimum Non-Detect	0.21
Maximum Detect	0.55	Maximum Non-Detect	0.3
Variance Detected	0.00666	Percent Non-Detects	25.48%
Mean Detected	0.149	SD Detected	0.0816
Mean of Detected Logged Data	-2.017	SD of Detected Logged Data	0.46

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.51

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.811	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.183	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0742	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.143	KM SD	0.0744
95% UTL95% Coverage	0.278	95% KM UPL (t)	0.266
90% KM Percentile (z)	0.238	95% KM Percentile (z)	0.265
99% KM Percentile (z)	0.316	95% KM USL	0.404

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.142	SD	0.0717
95% UTL95% Coverage	0.272	95% UPL (t)	0.261
90% Percentile (z)	0.234	95% Percentile (z)	0.26
99% Percentile (z)	0.309	95% USL	0.394

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	3.202	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.756	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.141	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0657	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	4.526	k star (bias corrected MLE)	4.459
Theta hat (MLE)	0.033	Theta star (bias corrected MLE)	0.0335
nu hat (MLE)	1747	nu star (bias corrected)	1721
MLE Mean (bias corrected)	0.149		
MLE Sd (bias corrected)	0.0706	95% Percentile of Chisquare (2kstar)	16.8

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0504	Mean	0.143
Maximum	0.55	Median	0.12
SD	0.0746	CV	0.52
k hat (MLE)	4.918	k star (bias corrected MLE)	4.863
Theta hat (MLE)	0.0292	Theta star (bias corrected MLE)	0.0295
nu hat (MLE)	2547	nu star (bias corrected)	2519
MLE Mean (bias corrected)	0.143	MLE Sd (bias corrected)	0.065
95% Percentile of Chisquare (2kstar)	17.93	90% Percentile	0.23
95% Percentile	0.264	99% Percentile	0.336

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.279	0.281	95% Approx. Gamma UPL	0.264	0.264
95% Gamma USL	0.488	0.51			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.143	SD (KM)	0.0744
Variance (KM)	0.00553	SE of Mean (KM)	0.00489
k hat (KM)	3.697	k star (KM)	3.657
nu hat (KM)	1915	nu star (KM)	1894
theta hat (KM)	0.0387	theta star (KM)	0.0391
80% gamma percentile (KM)	0.199	90% gamma percentile (KM)	0.243
95% gamma percentile (KM)	0.284	99% gamma percentile (KM)	0.371

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW

95% Approx. Gamma UTL with 95% Coverage	0.277	0.278	95% Approx. Gamma UPL	0.261	0.262
95% KM Gamma Percentile	0.261	0.261	95% Gamma USL	0.482	0.502

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.957	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	7.7507E-5	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.11	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0587	Data Not Lognormal at 10% Significance Level	

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.143	Mean in Log Scale	-2.042
SD in Original Scale	0.0734	SD in Log Scale	0.425
95% UTL95% Coverage	0.28	95% BCA UTL95% Coverage	0.33
95% Bootstrap (%) UTL95% Coverage	0.331	95% UPL (t)	0.262
90% Percentile (z)	0.224	95% Percentile (z)	0.261
99% Percentile (z)	0.349	95% USL	0.577

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.048	95% KM UTL (Lognormal)95% Coverage	0.284
KM SD of Logged Data	0.436	95% KM UPL (Lognormal)	0.265
95% KM Percentile Lognormal (z)	0.264	95% KM USL (Lognormal)	0.595

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.142	Mean in Log Scale	-2.04
SD in Original Scale	0.0717	SD in Log Scale	0.403
95% UTL95% Coverage	0.27	95% UPL (t)	0.253
90% Percentile (z)	0.218	95% Percentile (z)	0.252
99% Percentile (z)	0.332	95% USL	0.534

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	252	95% UTL with95% Coverage	0.35
Approx, f used to compute achieved CC	1.658	Approximate Actual Confidence Coefficient achieved by UTL	0.949
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.3
95% USL	0.55	95% KM Chebyshev UPL	0.468

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorohexanoic acid (PFHxA)

General Statistics

Total Number of Observations	259	Number of Missing Observations	2
Number of Distinct Observations	68		
Number of Detects	159	Number of Non-Detects	100
Number of Distinct Detects	64	Number of Distinct Non-Detects	12
Minimum Detect	0.038	Minimum Non-Detect	0.21
Maximum Detect	0.58	Maximum Non-Detect	0.36
Variance Detected	0.00572	Percent Non-Detects	38.61%
Mean Detected	0.128	SD Detected	0.0756
Mean of Detected Logged Data	-2.199	SD of Detected Logged Data	0.528

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.51

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.849	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.13	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.0817	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.122	KM SD	0.0672
95% UTL95% Coverage	0.244	95% KM UPL (t)	0.233
90% KM Percentile (z)	0.208	95% KM Percentile (z)	0.233
99% KM Percentile (z)	0.278	95% KM USL	0.358

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.127	SD	0.0598
95% UTL95% Coverage	0.236	95% UPL (t)	0.226
90% Percentile (z)	0.204	95% Percentile (z)	0.226
99% Percentile (z)	0.266	95% USL	0.337

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.967	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.757	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.0859	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0746	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.66	k star (bias corrected MLE)	3.595
Theta hat (MLE)	0.035	Theta star (bias corrected MLE)	0.0356
nu hat (MLE)	1164	nu star (bias corrected)	1143
MLE Mean (bias corrected)	0.128		
MLE Sd (bias corrected)	0.0675	95% Percentile of Chisquare (2kstar)	14.34

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0329	Mean	0.122
Maximum	0.58	Median	0.11
SD	0.0663	CV	0.544
k hat (MLE)	4.122	k star (bias corrected MLE)	4.077
Theta hat (MLE)	0.0295	Theta star (bias corrected MLE)	0.0299
nu hat (MLE)	2135	nu star (bias corrected)	2112
MLE Mean (bias corrected)	0.122	MLE Sd (bias corrected)	0.0603
95% Percentile of Chisquare (2kstar)	15.73	90% Percentile	0.203
95% Percentile	0.235	99% Percentile	0.304

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.249	0.252	95% Approx. Gamma UPL	0.234	0.236
95% Gamma USL	0.452	0.48			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.122	SD (KM)	0.0672
Variance (KM)	0.00451	SE of Mean (KM)	0.00485
k hat (KM)	3.306	k star (KM)	3.27
nu hat (KM)	1712	nu star (KM)	1694
theta hat (KM)	0.0369	theta star (KM)	0.0373
80% gamma percentile (KM)	0.172	90% gamma percentile (KM)	0.213
95% gamma percentile (KM)	0.25	99% gamma percentile (KM)	0.331

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.251	0.254	95% Approx. Gamma UPL	0.236	0.238
95% KM Gamma Percentile	0.235	0.237	95% Gamma USL	0.457	0.484

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.978	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.283	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0556	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0647	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.121	Mean in Log Scale	-2.229
SD in Original Scale	0.0648	SD in Log Scale	0.475
95% UTL95% Coverage	0.255	95% BCA UTL95% Coverage	0.241
95% Bootstrap (%) UTL95% Coverage	0.252	95% UPL (t)	0.236

90% Percentile (z)	0.198	95% Percentile (z)	0.235
99% Percentile (z)	0.325	95% USL	0.571

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.231	95% KM UTL (Lognormal)95% Coverage	0.267
KM SD of Logged Data	0.502	95% KM UPL (Lognormal)	0.246
95% KM Percentile Lognormal (z)	0.245	95% KM USL (Lognormal)	0.625

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.127	Mean in Log Scale	-2.152
SD in Original Scale	0.0598	SD in Log Scale	0.423
95% UTL95% Coverage	0.25	95% UPL (t)	0.234
90% Percentile (z)	0.2	95% Percentile (z)	0.233
99% Percentile (z)	0.311	95% USL	0.513

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	252	95% UTL with95% Coverage	0.3
Approx, f used to compute achieved CC	1.658	Approximate Actual Confidence Coefficient achieved by UTL	0.949
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.29
95% USL	0.58	95% KM Chebyshev UPL	0.415

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluoropentanoic acid (PFPeA)

General Statistics

Total Number of Observations	247	Number of Missing Observations	14
Number of Distinct Observations	55		
Number of Detects	78	Number of Non-Detects	169
Number of Distinct Detects	32	Number of Distinct Non-Detects	25
Minimum Detect	0.084	Minimum Non-Detect	0.41
Maximum Detect	3.2	Maximum Non-Detect	1
Variance Detected	0.127	Percent Non-Detects	68.42%
Mean Detected	0.218	SD Detected	0.357
Mean of Detected Logged Data	-1.786	SD of Detected Logged Data	0.548

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.815	d2max (for USL)	3.496

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.294	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.353	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.116	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.184	KM SD	0.209
95% UTL95% Coverage	0.563	95% KM UPL (t)	0.529
90% KM Percentile (z)	0.452	95% KM Percentile (z)	0.527
99% KM Percentile (z)	0.67	95% KM USL	0.914

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.244	SD	0.202
95% UTL95% Coverage	0.61	95% UPL (t)	0.578
90% Percentile (z)	0.503	95% Percentile (z)	0.576
99% Percentile (z)	0.714	95% USL	0.95

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	6.634	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.763	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.198	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.102	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.046	k star (bias corrected MLE)	1.976
Theta hat (MLE)	0.107	Theta star (bias corrected MLE)	0.11
nu hat (MLE)	319.2	nu star (bias corrected)	308.2
MLE Mean (bias corrected)	0.218		
MLE Sd (bias corrected)	0.155	95% Percentile of Chisquare (2kstar)	9.409

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.191
Maximum	3.2	Median	0.15
SD	0.232	CV	1.216
k hat (MLE)	1.311	k star (bias corrected MLE)	1.297
Theta hat (MLE)	0.145	Theta star (bias corrected MLE)	0.147
nu hat (MLE)	647.4	nu star (bias corrected)	640.9
MLE Mean (bias corrected)	0.191	MLE Sd (bias corrected)	0.167
95% Percentile of Chisquare (2kstar)	7.099	90% Percentile	0.411
95% Percentile	0.521	99% Percentile	0.772

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.559	0.591	95% Approx. Gamma UPL	0.507	0.531
95% Gamma USL	1.325	1.58			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.184	SD (KM)	0.209
Variance (KM)	0.0436	SE of Mean (KM)	0.0149
k hat (KM)	0.776	k star (KM)	0.769
nu hat (KM)	383.3	nu star (KM)	379.9
theta hat (KM)	0.237	theta star (KM)	0.239
80% gamma percentile (KM)	0.301	90% gamma percentile (KM)	0.452
95% gamma percentile (KM)	0.605	99% gamma percentile (KM)	0.969

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.377	0.368	95% Approx. Gamma UPL	0.354	0.345
95% KM Gamma Percentile	0.352	0.344	95% Gamma USL	0.689	0.69

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.833	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	3.241E-12	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.149	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0919	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.186	Mean in Log Scale	-1.817
SD in Original Scale	0.207	SD in Log Scale	0.428
95% UTL95% Coverage	0.354	95% BCA UTL95% Coverage	0.324
95% Bootstrap (%) UTL95% Coverage	0.325	95% UPL (t)	0.33
90% Percentile (z)	0.282	95% Percentile (z)	0.329
99% Percentile (z)	0.441	95% USL	0.727

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.836	95% KM UTL (Lognormal)95% Coverage	0.354
KM SD of Logged Data	0.439	95% KM UPL (Lognormal)	0.33
95% KM Percentile Lognormal (z)	0.328	95% KM USL (Lognormal)	0.739

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.244	Mean in Log Scale	-1.503
SD in Original Scale	0.202	SD in Log Scale	0.374
95% UTL95% Coverage	0.439	95% UPL (t)	0.413
90% Percentile (z)	0.359	95% Percentile (z)	0.412
99% Percentile (z)	0.531	95% USL	0.823

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	240	95% UTL with95% Coverage	0.63
Approx, f used to compute achieved CC	1.579	Approximate Actual Confidence Coefficient achieved by UTL	0.93
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.6
95% USL	3.2	95% KM Chebyshev UPL	1.096

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluoroundecanoic acid (PFUnA)

General Statistics

Total Number of Observations	259	Number of Missing Observations	2
Number of Distinct Observations	46		
Number of Detects	72	Number of Non-Detects	187
Number of Distinct Detects	31	Number of Distinct Non-Detects	17
Minimum Detect	0.066	Minimum Non-Detect	0.21
Maximum Detect	0.58	Maximum Non-Detect	0.37
Variance Detected	0.00626	Percent Non-Detects	72.2%
Mean Detected	0.126	SD Detected	0.0791
Mean of Detected Logged Data	-2.164	SD of Detected Logged Data	0.379

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.811	d2max (for USL)	3.51

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.539	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.259	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.121	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.116	KM SD	0.0499
95% UTL95% Coverage	0.206	95% KM UPL (t)	0.199
90% KM Percentile (z)	0.18	95% KM Percentile (z)	0.198
99% KM Percentile (z)	0.232	95% KM USL	0.291

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.127	SD	0.0435
95% UTL95% Coverage	0.206	95% UPL (t)	0.199

90% Percentile (z)	0.183	95% Percentile (z)	0.199
99% Percentile (z)	0.229	95% USL	0.28

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	4.864	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.754	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.206	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.105	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	5.433	k star (bias corrected MLE)	5.216
Theta hat (MLE)	0.0232	Theta star (bias corrected MLE)	0.0242
nu hat (MLE)	782.4	nu star (bias corrected)	751.1
MLE Mean (bias corrected)	0.126		
MLE Sd (bias corrected)	0.0553	95% Percentile of Chisquare (2kstar)	18.9

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.033	Mean	0.119
Maximum	0.58	Median	0.11
SD	0.0579	CV	0.486
k hat (MLE)	5.63	k star (bias corrected MLE)	5.567
Theta hat (MLE)	0.0211	Theta star (bias corrected MLE)	0.0214
nu hat (MLE)	2916	nu star (bias corrected)	2884
MLE Mean (bias corrected)	0.119	MLE Sd (bias corrected)	0.0504
95% Percentile of Chisquare (2kstar)	19.86	90% Percentile	0.186
95% Percentile	0.212	99% Percentile	0.266

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.223	0.225	95% Approx. Gamma UPL	0.212	0.213
95% Gamma USL	0.38	0.397			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.116	SD (KM)	0.0499
Variance (KM)	0.00249	SE of Mean (KM)	0.00445
k hat (KM)	5.418	k star (KM)	5.358
nu hat (KM)	2806	nu star (KM)	2775
theta hat (KM)	0.0214	theta star (KM)	0.0217
80% gamma percentile (KM)	0.155	90% gamma percentile (KM)	0.183
95% gamma percentile (KM)	0.209	99% gamma percentile (KM)	0.263

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.191	0.19	95% Approx. Gamma UPL	0.183	0.182
95% KM Gamma Percentile	0.183	0.182	95% Gamma USL	0.294	0.297

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.829	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	2.479E-11	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.184	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0955	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.118	Mean in Log Scale	-2.191
SD in Original Scale	0.0497	SD in Log Scale	0.308
95% UTL95% Coverage	0.195	95% BCA UTL95% Coverage	0.192
95% Bootstrap (%) UTL95% Coverage	0.193	95% UPL (t)	0.186
90% Percentile (z)	0.166	95% Percentile (z)	0.185
99% Percentile (z)	0.229	95% USL	0.329

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.206	95% KM UTL (Lognormal)95% Coverage	0.188
KM SD of Logged Data	0.296	95% KM UPL (Lognormal)	0.18
95% KM Percentile Lognormal (z)	0.179	95% KM USL (Lognormal)	0.311

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.127	Mean in Log Scale	-2.092
SD in Original Scale	0.0435	SD in Log Scale	0.226
95% UTL95% Coverage	0.186	95% UPL (t)	0.179
90% Percentile (z)	0.165	95% Percentile (z)	0.179
99% Percentile (z)	0.209	95% USL	0.273

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	252	95% UTL with95% Coverage	0.34
Approx, f used to compute achieved CC	1.658	Approximate Actual Confidence Coefficient achieved by UTL	0.949
Approximate Sample Size needed to achieve specified CC	234	95% UPL	0.31
95% USL	0.58	95% KM Chebyshev UPL	0.334

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result_Perfluorobutanoic acid (PFBA)

General Statistics

Total Number of Observations	197	Number of Missing Observations	64
Number of Distinct Observations	54		
Number of Detects	48	Number of Non-Detects	149
Number of Distinct Detects	34	Number of Distinct Non-Detects	22
Minimum Detect	0.14	Minimum Non-Detect	0.82
Maximum Detect	3.2	Maximum Non-Detect	1.5
Variance Detected	0.202	Percent Non-Detects	75.63%
Mean Detected	0.44	SD Detected	0.45
Mean of Detected Logged Data	-1.038	SD of Detected Logged Data	0.592

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.837	d2max (for USL)	3.428

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.511	**Shapiro Wilk GOF Test**	
1% Shapiro Wilk Critical Value	0.929	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.252	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.148	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.391	KM SD	0.273
95% UTL95% Coverage	0.893	95% KM UPL (t)	0.844
90% KM Percentile (z)	0.741	95% KM Percentile (z)	0.84
99% KM Percentile (z)	1.027	95% KM USL	1.327

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.498	SD	0.228
95% UTL95% Coverage	0.917	95% UPL (t)	0.875
90% Percentile (z)	0.79	95% Percentile (z)	0.873
99% Percentile (z)	1.028	95% USL	1.279

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.385	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.759	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.128	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.129	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.454	k star (bias corrected MLE)	2.315
Theta hat (MLE)	0.179	Theta star (bias corrected MLE)	0.19
nu hat (MLE)	235.6	nu star (bias corrected)	222.2

MLE Mean (bias corrected)	0.44		
MLE Sd (bias corrected)	0.289	95% Percentile of Chisquare (2kstar)	10.49

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.397
Maximum	3.2	Median	0.341
SD	0.312	CV	0.787
k hat (MLE)	1.901	k star (bias corrected MLE)	1.876
Theta hat (MLE)	0.209	Theta star (bias corrected MLE)	0.212
nu hat (MLE)	749.1	nu star (bias corrected)	739
MLE Mean (bias corrected)	0.397	MLE Sd (bias corrected)	0.29
95% Percentile of Chisquare (2kstar)	9.081	90% Percentile	0.784
95% Percentile	0.961	99% Percentile	1.356

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.045	1.099	95% Approx. Gamma UPL	0.951	0.99
95% Gamma USL	2.162	2.493			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.391	SD (KM)	0.273
Variance (KM)	0.0746	SE of Mean (KM)	0.0303
k hat (KM)	2.051	k star (KM)	2.023
nu hat (KM)	808	nu star (KM)	797
theta hat (KM)	0.191	theta star (KM)	0.193
80% gamma percentile (KM)	0.585	90% gamma percentile (KM)	0.759
95% gamma percentile (KM)	0.924	99% gamma percentile (KM)	1.292

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.832	0.837	95% Approx. Gamma UPL	0.773	0.774
95% KM Gamma Percentile	0.769	0.77	95% Gamma USL	1.49	1.564

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.942	**Shapiro Wilk GOF Test**
10% Shapiro Wilk Critical Value	0.954	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0777	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.117	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.389	Mean in Log Scale	-1.074

SD in Original Scale	0.266	SD in Log Scale	0.483
95% UTL95% Coverage	0.831	95% BCA UTL95% Coverage	0.791
95% Bootstrap (%) UTL95% Coverage	0.797	95% UPL (t)	0.761
90% Percentile (z)	0.635	95% Percentile (z)	0.757
99% Percentile (z)	1.052	95% USL	1.792

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.082	95% KM UTL (Lognormal)95% Coverage	0.869
KM SD of Logged Data	0.512	95% KM UPL (Lognormal)	0.792
95% KM Percentile Lognormal (z)	0.787	95% KM USL (Lognormal)	1.963

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.498	Mean in Log Scale	-0.758
SD in Original Scale	0.228	SD in Log Scale	0.343
95% UTL95% Coverage	0.881	95% UPL (t)	0.828
90% Percentile (z)	0.728	95% Percentile (z)	0.824
99% Percentile (z)	1.042	95% USL	1.52

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	192	95% UTL with95% Coverage	1.3
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.932
Approximate Sample Size needed to achieve specified CC	181	95% UPL	1.2
95% USL	3.2	95% KM Chebyshev UPL	1.585

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.

The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E Habitat Sample Data Analysis

APPENDIX E

PFAS Rural Soil Background Study

Habitat Sample Data Analysis

To establish PFAS Rural Soil Background Concentrations for protection of ecological resources, only data from the remote samples were used. Data were available for 232 remote samples from 116 locations. Using sampling notes, site photographs, and aerial imagery, sampling locations were reviewed by NYSDEC Division of Fish & Wildlife to ensure that they met the requirements of habitat areas, as defined in Appendix D of the New York State Brownfield Cleanup Program Development of Soil Cleanup Objectives Technical Support Document (2006):

> "locations that (1) provided environmental conditions that could sustain plant and animal life and (2) were at least 15 meters distant from the edge of areas of regular human activity such as yards, golf courses, farms, athletic fields, areas of fill, mines, etc."

Of the 116 remote sample locations, 17 did not meet habitat requirements as determined by NYSDEC Division of Fish & Wildlife. Of the 99 locations (198 samples) designated as habitat, results from two samples (differing locations) were rejected during validation. Since sample results from one of the two depth intervals at two locations were rejected, these two locations could not be included. Therefore, data from 97 locations were retained for analysis as the final habitat data set.

For the 0-2 and 2-12 inch depth intervals, data processing and statistical evaluation were performed as described in the main text. Descriptive statistics, outlier analysis, and background threshold values (BTVs) are presented in **Tables E-1** through **Table E-4** and **Attachment E-1** through **Attachment E-6**.

In addition, for PFOA and PFOS, weighted 95% UTLs with 95% confidence were calculated for the combined 0-12 inch depth interval using the method described in the main text but replacing the mean and standard deviations used in the parametric methods with weighted means and standard deviations of concentrations in the 0-2 and 2-12 inch intervals. ProUCL was used to evaluate the underlying distribution of the combined (unweighted) data for each analyte. Both were concluded to be lognormally distributed (**Attachment E-7**). Since ProUCL does not provide weighted calculations, R Statistical Software was used to calculate the weighted BTVs. For this analysis, non-detects were estimated as described in Section 2.1.1 of the main text. The calculated BTVs for the 0-12 inch interval of the Habitat Sample set are presented for PFOS and PFOA on **Table E-5**

Tables

Table E-1 Habitat Sample Summary – 0-2 inches
Table E-2 Habitat Sample Summary – 2-12 inches
Table E-3 Habitat Calculation of Background Values – 0-2 inches
Table E-4 Habitat Calculation of Background Values – 2-12 inches
Table E-5 Habitat Calculation of Weighted Background Values – 0-12 Inches

Attachments

Attachment E-1 Outlier Testing Figures – 0-2 Inches
Attachment E-2 Outlier Testing Figures – 2-12 Inches
Attachment E-3 ProUCL Outputs – 0-2 Inches
Attachment E-4 ProUCL Outputs – 0-2 Inches – Minus Outliers
Attachment E-5 ProUCL Outputs – 2-12 Inches
Attachment E-6 ProUCL Outputs – 2-12 Inches – Minus Outliers
Attachment E-7 ProUCL Outputs – Distribution Testing for Combined 0-2 and 2-12 Inch Data Set

Tables

Table E-1: Habitat Sample Summary, 0"-2"

Analyte	Number of Samples	# of NDs	Percent NDs	Min Detect (ug/kg)	Max Detect (ug/kg)	Min ND (ug/kg)	Max ND (ug/kg)
Perfluorooctanesulfonic acid (PFOS)	98	0	0%	0.16	6.2	NA	NA
Perfluorononanoic acid (PFNA)	98	4	4%	0.083	2.6	0.24	0.56
Perfluoroheptanoic acid (PFHpA)	98	8	8%	0.077	1.7	0.22	0.83
Perfluorooctanoic acid (PFOA)	98	10	10%	0.1	4.2	0.26	0.83
Perfluoroundecanoic acid (PFUnA)	98	14	14%	0.089	1.4	0.24	0.45
Perfluorohexanoic acid (PFHxA)	98	28	29%	0.042	1.6	0.24	0.84
Perfluorodecanoic acid (PFDA)	98	37	38%	0.09	2.6	0.22	0.45
Perfluoropentanoic acid (PFPeA)	94	37	39%	0.1	28.5	0.46	0.93
Perfluorobutanoic acid (PFBA)	59	34	58%	0.22	3.7	0.94	1.8
Perfluorododecanoic acid (PFDoA)	98	79	81%	0.11	0.59	0.22	0.84
Perfluorobutanesulfonic acid (PFBS)	98	81	83%	0.094	0.92	0.22	0.84
Perfluorotridecanoic acid (PFTriA/PFTrDA)	98	86	88%	0.15	0.73	0.22	0.84
Perfluorooctane sulfonamide (PFOSA)	98	92	94%	0.15	1	0.22	0.84
Perfluorohexanesulfonic acid (PFHxS)	98	95	97%	0.15	0.33	0.22	0.84
Perfluorotetradecanoic acid (PFTeDA)	98	95	97%	0.15	0.47	0.22	0.84
Perfluorododecanesulfonic acid (PFDoS)	98	96	98%	0.1	5.2	0.22	0.84
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	98	97	99%	0.043	0.043	0.44	1.7
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	98	98	100%	NA	NA	0.88	3.4
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	98	98	100%	NA	NA	0.88	3.4
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	98	98	100%	NA	NA	0.88	3.4
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	98	98	100%	NA	NA	0.88	3.4
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	98	98	100%	NA	NA	5.5	21
3-Perfluoroheptyl propanoic acid (7:3FTCA)	98	98	100%	NA	NA	5.5	21
3-Perfluoropropyl propanoic acid (3:3FTCA)	94	94	100%	NA	NA	1.1	4.2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	98	98	100%	NA	NA	0.88	3.4
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	98	98	100%	NA	NA	0.88	3.4
Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	98	98	100%	NA	NA	0.88	3.4
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	98	98	100%	NA	NA	0.22	0.84
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	98	98	100%	NA	NA	0.22	0.84
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	99	99	100%	NA	NA	2.2	8.4
N-methyl perfluorooctanesulfonamide (NMeFOSA)	98	98	100%	NA	NA	0.22	0.84
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	98	98	100%	NA	NA	0.22	0.84
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	98	98	100%	NA	NA	2.2	8.4
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	98	98	100%	NA	NA	0.44	1.7
Perfluoro-3-methoxypropanoic acid (PFMPA)	94	94	100%	NA	NA	0.44	1.7
Perfluoro-4-methoxybutanoic acid (PFMBA)	94	94	100%	NA	NA	0.44	1.7
Perfluorodecanesulfonic acid (PFDS)	98	98	100%	NA	NA	0.22	0.84
Perfluoroheptanesulfonic acid (PFHpS)	98	98	100%	NA	NA	0.22	0.84
Perfluorononanesulfonic acid (PFNS)	98	98	100%	NA	NA	0.22	0.84
Perfluoropentanesulfonic acid (PFPeS)	98	98	100%	NA	NA	0.22	0.84

ND = non-detect; value is below the Reporting Limit.

ug/kg = micrograms per kilogram

NA = No detected values to report.

Min ND = Minimum Reporting Limit.

Max ND = Maximum Reporting Limit.

Table E-2: Habitat Sample Summary, 2"-12"

Analyte	Number of Samples	# of NDs	Percent NDs	Min Detect (ug/kg)	Max Detect (ug/kg)	Min ND (ug/kg)	Max ND (ug/kg)
Perfluorooctanesulfonic acid (PFOS)	98	3	3%	0.069	1.8	0.24	0.28
Perfluorooctanoic acid (PFOA)	98	6	6%	0.11	4.7	0.24	0.27
Perfluoroheptanoic acid (PFHpA)	98	12	12%	0.058	0.55	0.24	0.3
Perfluorononanoic acid (PFNA)	98	18	18%	0.066	0.69	0.22	0.3
Perfluorohexanoic acid (PFHxA)	98	28	29%	0.038	0.58	0.24	0.36
Perfluoropentanoic acid (PFPeA)	92	55	60%	0.092	3.2	0.44	1
Perfluorobutanoic acid (PFBA)	71	46	65%	0.15	3.2	0.9	1.4
Perfluoroundecanoic acid (PFUnA)	98	69	70%	0.084	0.58	0.22	0.36
Perfluorodecanoic acid (PFDA)	98	84	86%	0.094	0.42	0.22	0.36
Perfluorobutanesulfonic acid (PFBS)	98	91	93%	0.091	0.25	0.22	0.5
Perfluorooctane sulfonamide (PFOSA)	98	94	96%	0.1	0.21	0.22	0.5
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	98	97	99%	0.36	0.36	0.86	2
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	98	97	99%	0.8	0.8	5.4	13
3-Perfluoroheptyl propanoic acid (7:3FTCA)	98	97	99%	0.93	0.93	5.4	13
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	98	97	99%	0.16	0.16	0.86	2
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	98	97	99%	0.097	0.097	0.22	0.5
N-methyl perfluorooctanesulfonamide (NMeFOSA)	98	97	99%	0.078	0.078	0.22	0.5
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	98	97	99%	0.072	0.072	0.43	1
Perfluorododecanesulfonic acid (PFDoS)	98	97	99%	0.071	0.071	0.22	0.5
Perfluorododecanoic acid (PFDoA)	98	97	99%	0.18	0.18	0.22	0.5
Perfluorohexanesulfonic acid (PFHxS)	98	97	99%	0.19	0.19	0.22	0.5
Perfluorotridecanoic acid (PFTriA/PFTrDA)	98	97	99%	0.23	0.23	0.22	0.5
3-Perfluoropropyl propanoic acid (3:3FTCA)	92	92	100%	NA	NA	1.1	2.5
Perfluoro-3-methoxypropanoic acid (PFMPA)	92	92	100%	NA	NA	0.43	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	92	92	100%	NA	NA	0.43	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	98	98	100%	NA	NA	0.86	2
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	98	98	100%	NA	NA	0.86	2
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	98	98	100%	NA	NA	0.86	2
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	98	98	100%	NA	NA	0.86	2
Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	98	98	100%	NA	NA	0.86	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	98	98	100%	NA	NA	0.22	0.5
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	98	98	100%	NA	NA	2.2	5
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	98	98	100%	NA	NA	0.22	0.5
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	98	98	100%	NA	NA	2.2	5
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	98	98	100%	NA	NA	0.43	1
Perfluorodecanesulfonic acid (PFDS)	98	98	100%	NA	NA	0.22	0.5
Perfluoroheptanesulfonic acid (PFHpS)	98	98	100%	NA	NA	0.22	0.5
Perfluorononanesulfonic acid (PFNS)	98	98	100%	NA	NA	0.22	0.5
Perfluoropentanesulfonic acid (PFPeS)	98	98	100%	NA	NA	0.22	0.5
Perfluorotetradecanoic acid (PFTeDA)	98	98	100%	NA	NA	0.22	0.5

ND = non-detect; value is below the Reporting Limit.

ug/kg = micrograms per kilogram

NA = No detected values to report.

Min ND = Minimum Reporting Limit.

Max ND = Maximum Reporting Limit.

Table E-3: Calculation of Background Values, Habitat 0"-2"

Analyte	# of Samples	# of NDs	Percent NDs	Distribution/ Method	ND Method	Min Detect (ug/kg)	Max Detect (ug/kg)	Min ND (ug/kg)	Max ND (ug/kg)	Upper Limits All Data				Outlier Testing			Upper Limits Excluding Outliers			
										95% UPL	UTL95_95	95th Percentile	98th Percentile	# of Potential Outliers	Confirmed Outliers	Confirmed Outlier List	95% UPL	UTL95_95	95th Percentile	98th Percentile
Perfluorooctanesulfonic acid (PFOS)	98	0	0%	Lognormal	NA	0.16	6.2	NA	NA	2.498	3.057	2.83	6.01	3	0		2.498	3.057	2.83	6.01
Perfluorononanoic acid (PFNA)	98	4	4%	Lognormal	KM	0.083	2.6	0.24	0.56	0.935	1.117	0.93	2.40	3	3	2.6; 2.4; 2.4	0.705	0.798	0.79	0.93
Perfluoroheptanoic acid (PFHpA)	98	8	8%	Lognormal	KM	0.077	1.7	0.22	0.83	0.665	0.78	0.66	1.51	3	0		0.665	0.78	0.66	1.51
Perfluorooctanoic acid (PFOA)	98	10	10%	Nonparametric	KM	0.1	4.2	0.26	0.83	2.005	3.5	1.66	2.28	0	0		2.005	3.5	1.66	2.28
Perfluoroundecanoic acid (PFUnA)	98	14	14%	Nonparametric	KM	0.089	1.4	0.24	0.45	0.962	1.3	0.94	1.11	2	0		0.962	1.3	0.94	1.11
Perfluorohexanoic acid (PFHxA)	98	28	29%	Gamma	KM	0.042	1.6	0.24	0.84	0.505	0.581	0.59	0.86	2	1	1.6	0.455	0.52	0.53	0.83
Perfluorodecanoic acid (PFDA)	98	37	38%	Nonparametric	KM	0.09	2.6	0.22	0.45	0.902	2	0.83	1.01	6	2	2.6; 2	0.752	0.93	0.66	0.90
Perfluoropentanoic acid (PFPeA)	94	37	39%	Nonparametric	KM	0.1	28.5	0.46	0.93	2.2	3	1.91	2.66	2	1	28.5	1.89	2.6	1.62	2.52
Perfluorobutanoic acid (PFBA)	59	34	58%	Normal	KM	0.22	3.7	0.94	1.8	1.65	1.828	1.80	1.80	6	1	3.7	1.323	1.446	1.63	1.8

Background Values were estimated for all analytes with < 85% NDs.

ND = non-detect; value is below the Reporting Limit.

KM = Kaplan Meier method for handling NDs.

ug/kg = micrograms per kilogram

Min ND = Minimum Reporting Limit.

Max ND = Maximum Reporting Limit.

95% UPL = 95% Upper Prediction Limit.

UTL95_95 = 95% Upper Tolerance Limit with 95% Coverage.

NA = No NDs.

Table E-4: Calculation of Background Values, Habitat 2"-12"

Analyte	# of Samples	# of NDs	Percent NDs	Distribution/ Method	ND Method	Min Detect (ug/kg)	Max Detect (ug/kg)	Min ND (ug/kg)	Max ND (ug/kg)	Upper Limits All Data				Outlier Testing			Upper Limits Excluding Outliers			
										95% UPL	UTL95_95	95th Percentile	98th Percentile	# of Potential Outliers	Confirmed Outliers	Confirmed Outlier List	95% UPL	UTL95_95	95th Percentile	98th Percentile
Perfluorooctanesulfonic acid (PFOS)	98	3	3%	Gamma	KM	0.069	1.8	0.24	0.28	0.778	0.886	0.77	1.02	2	1	1.8	0.725	0.821	0.68	0.88
Perfluorooctanoic acid (PFOA)	98	6	6%	Nonparametric	KM	0.11	4.7	0.24	0.27	1.205	1.7	1.20	1.51	3	1	4.7	0.921	1.076	1.12	1.32
Perfluoroheptanoic acid (PFHpA)	98	12	12%	Lognormal	KM	0.058	0.55	0.24	0.3	0.329	0.373	0.35	0.47	0	0		0.329	0.373	0.35	0.47
Perfluorononanoic acid (PFNA)	98	18	18%	Nonparametric	KM	0.066	0.69	0.22	0.3	0.391	0.49	0.38	0.45	0	0		0.391	0.49	0.38	0.45
Perfluorohexanoic acid (PFHxA)	98	28	29%	Gamma	KM	0.038	0.58	0.24	0.36	0.286	0.319	0.34	0.36	0	0		0.286	0.319	0.34	0.36
Perfluoropentanoic acid (PFPeA)	92	55	60%	Nonparametric	KM	0.092	3.2	0.44	1	0.63	3.2	0.62	0.74	1	0		0.63	3.2	0.62	0.74
Perfluorobutanoic acid (PFBA)	71	46	65%	Gamma	KM	0.15	3.2	0.9	1.4	0.964	1.1	1.30	1.36	3	0		0.964	1.1	1.30	1.36
Perfluoroundecanoic acid (PFUnA)	98	69	70%	Nonparametric	KM	0.084	0.58	0.22	0.36	0.341	0.5	0.32	0.37	22	2	0.58; 0.5	0.189	0.203	0.31	0.341

Background Values were estimated for all analytes with < 85% NDs.

ND = non-detect; value is below the Reporting Limit.

KM = Kaplan Meier method for handling NDs.

ug/kg = micrograms per kilogram

Min ND = Minimum Reporting Limit.

Max ND = Maximum Reporting Limit.

95% UPL = 95% Upper Prediction Limit.

UTL95_95 = 95% Upper Tolerance Limit with 95% Coverage.

Table E-5: Calculation of Weighted Background Values, Habitat 0"-12"

Analyte	# of Locations	# of Samples	# of NDs	Percent NDs	Distribution/ Method	ND Method	Min Value (ug/kg)	Max Value (ug/kg)	Weighted UTL95_95 (ug/kg)
Perfluorooctanesulfonic acid (PFOS)	97	194	3	1.5%	Lognormal	Simulated	0.026	6.2	1.43
Perfluorooctanoic acid (PFOA)	97	194	16	8.2%	Lognormal	Simulated	0.039	0.1	1.56

ug/kg = micrograms per kilogram

UTL95_95 = 95% Upper Tolerance Limit with 95% Coverage.

Attachment E-1 Outlier Testing Figures – 0-2 Inches

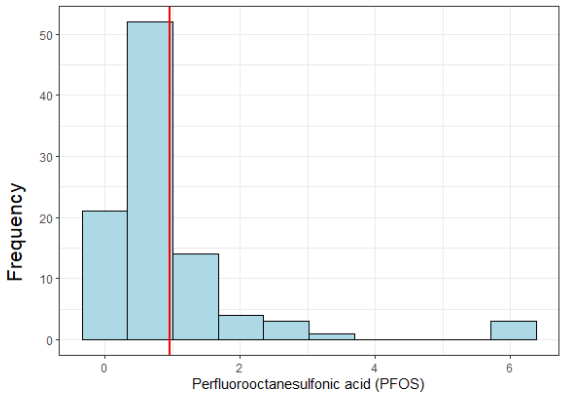
NYSDEC Background Study for Per- and Polyfluoroalkyl Substances (PFAS) in Soil, Habitat 0-2 inches

2025-02-14

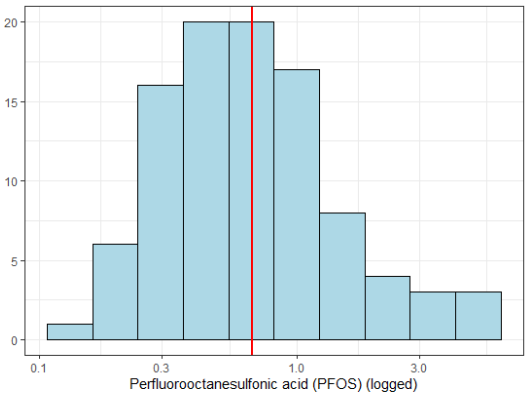
Perfluorooctanesulfonic acid (PFOS)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



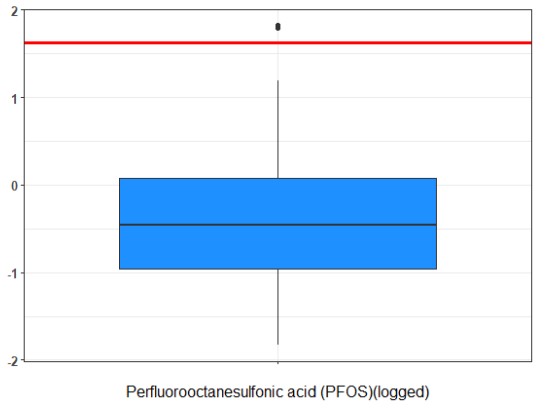
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 0.



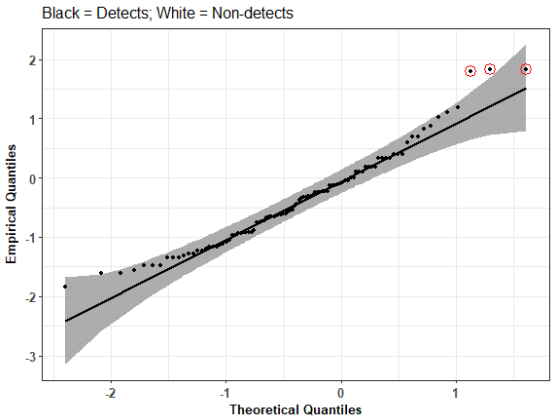
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

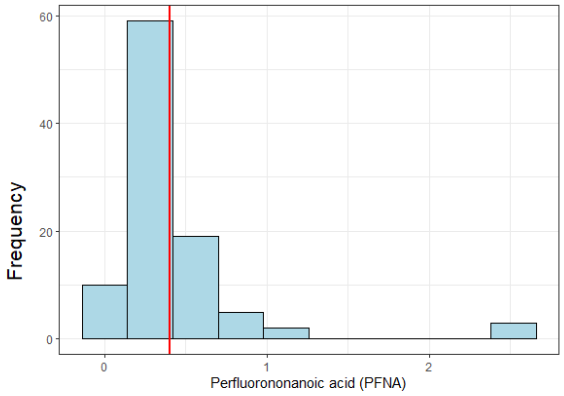
Rosner Test Results

Rosner test confirmed no outliers.

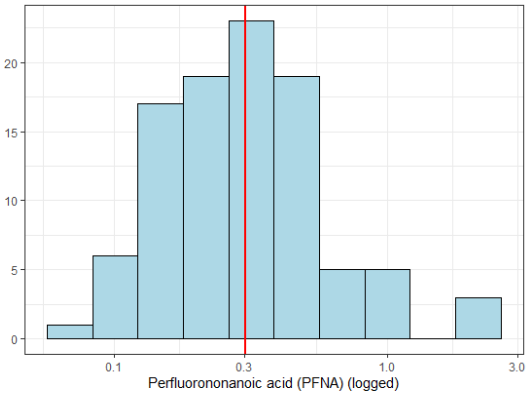
Perfluorononanoic acid (PFNA)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



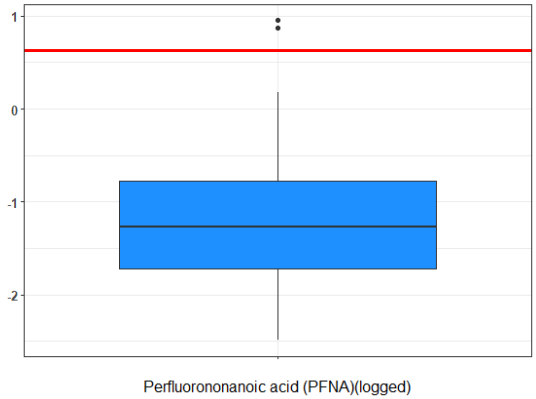
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 4.



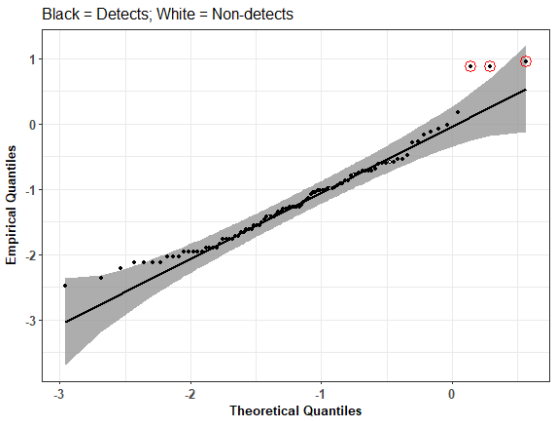
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

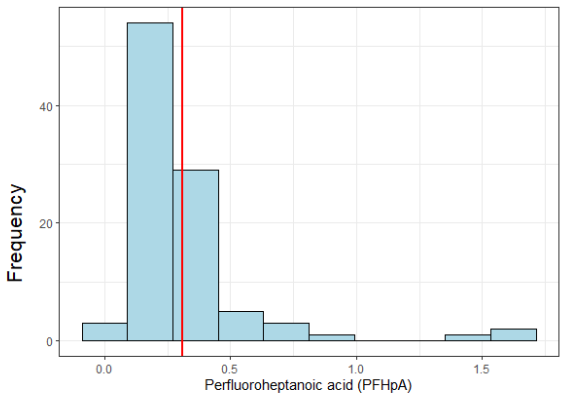
Rosner Test Results

Rosner test confirmed 3 outliers.

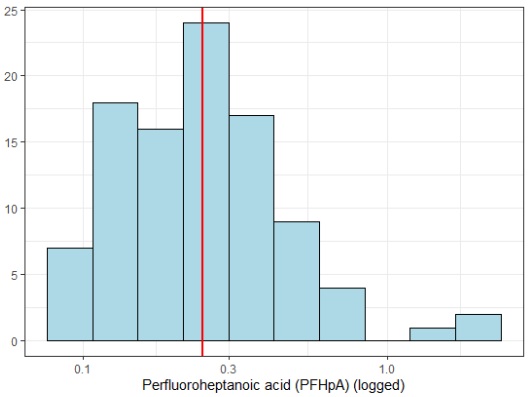
Perfluoroheptanoic acid (PFHpA)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



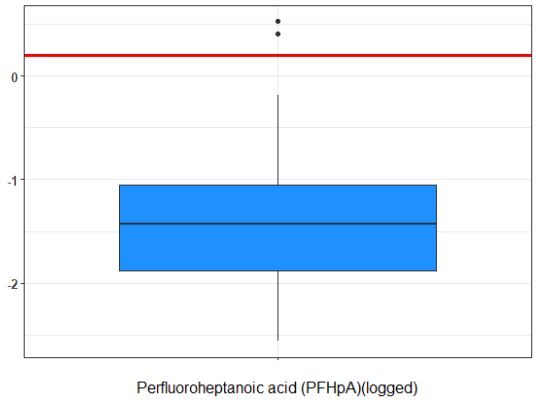
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 8.



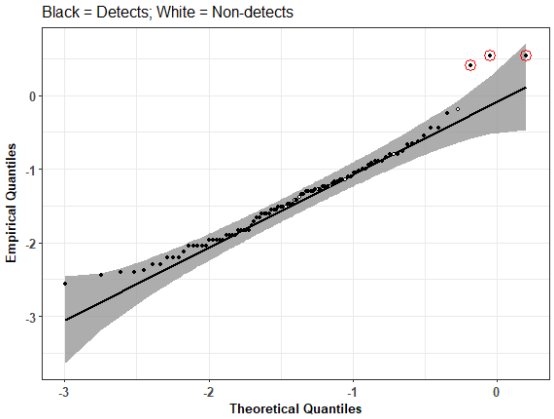
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

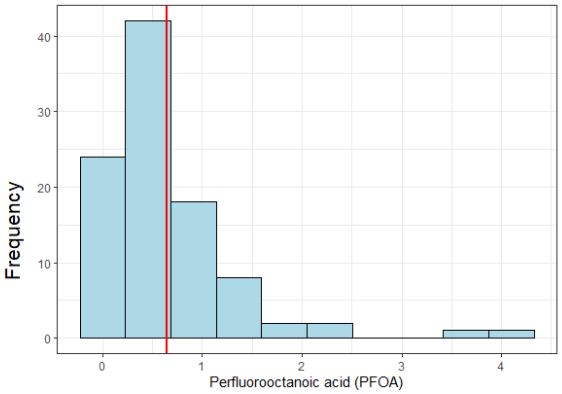
Rosner Test Results

Rosner test confirmed no outliers.

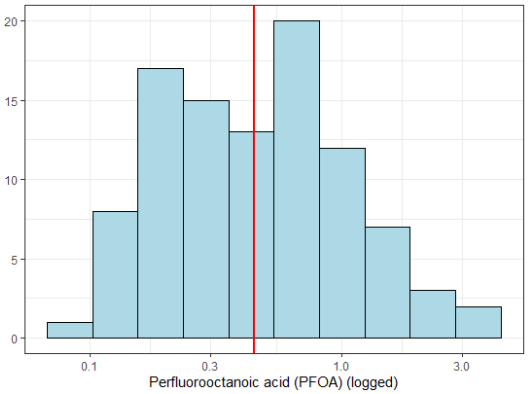
Perfluorooctanoic acid (PFOA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



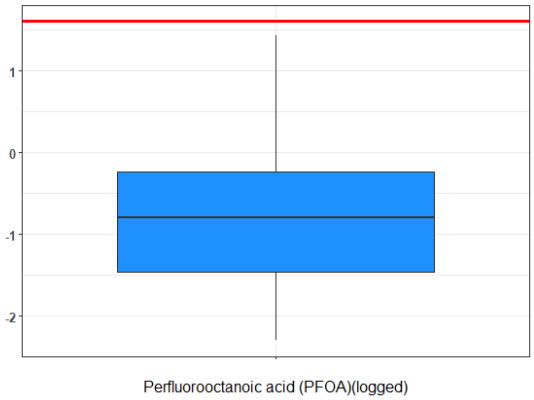
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 10.



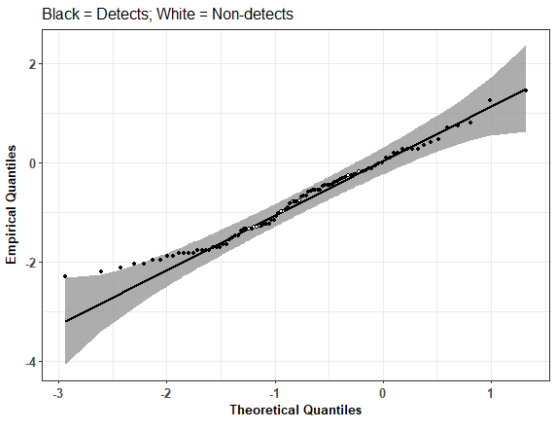
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

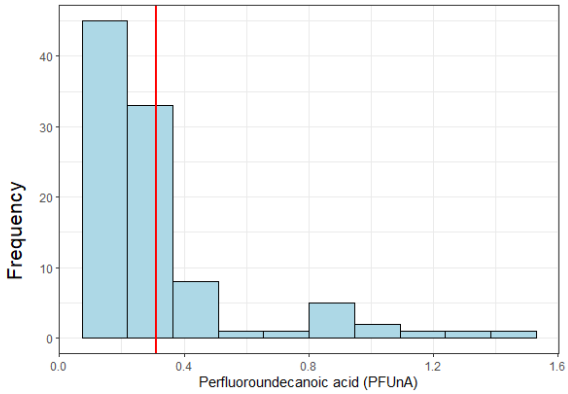
Rosner Test Results

Confirmed No Outliers.

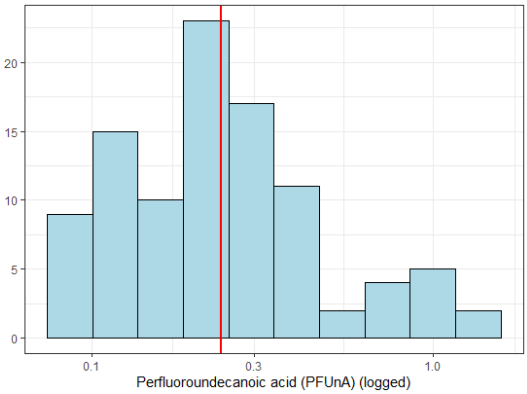
Perfluoroundecanoic acid (PFUnA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



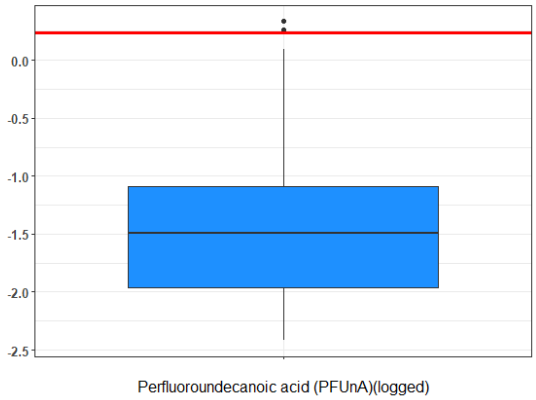
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 14.



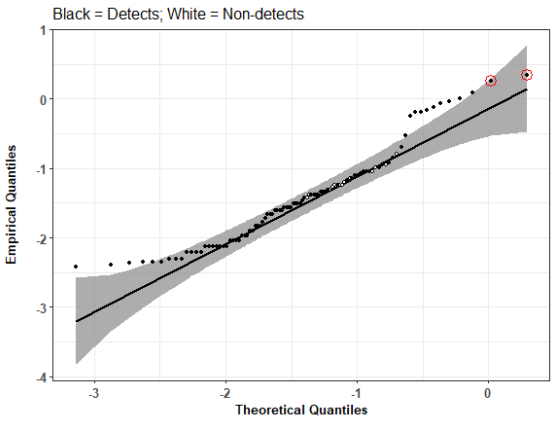
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

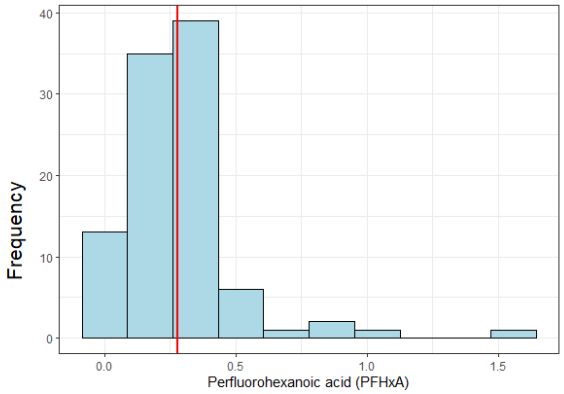
Rosner Test Results

Rosner test confirmed no outliers.

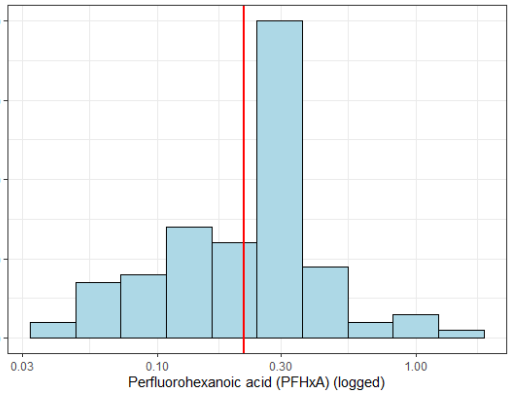
Perfluorohexanoic acid (PFHxA)

Distribution

The identified distribution is Gamma. A gamma-transform will applied for outlier testing.



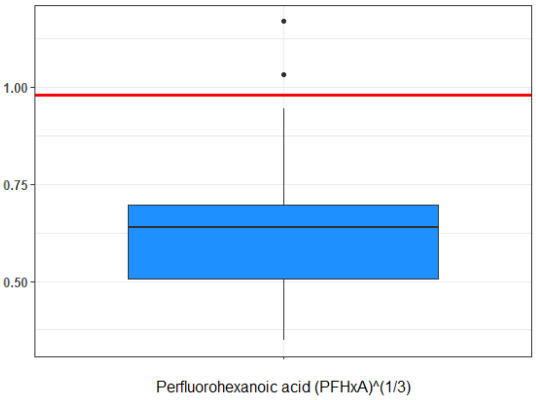
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 28.



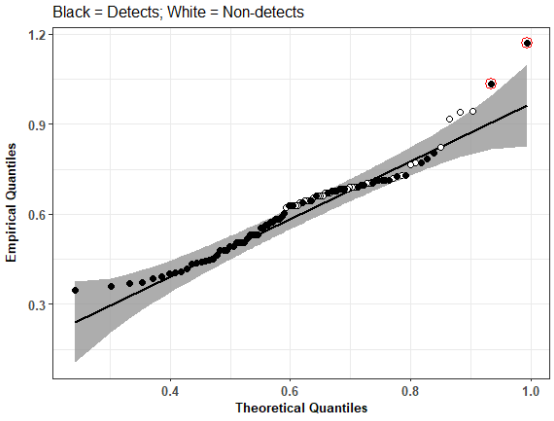
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were gamma-transformed

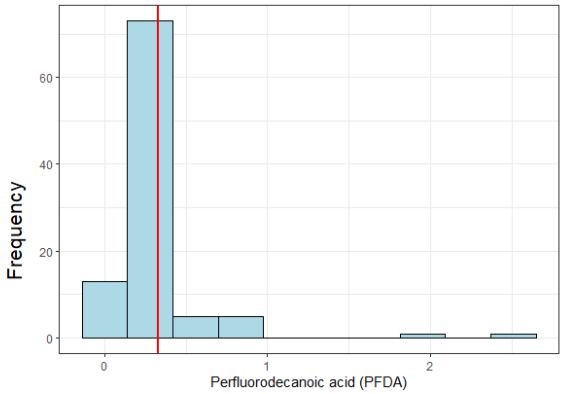
Rosner Test Results

Rosner test confirmed 1 outliers.

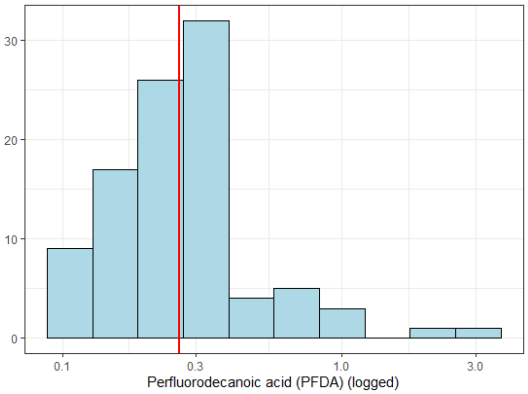
Perfluorodecanoic acid (PFDA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



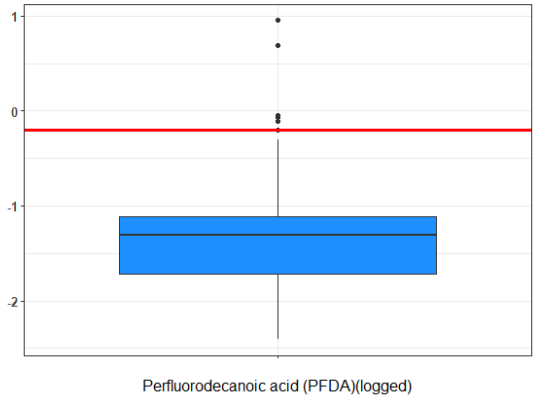
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 37.



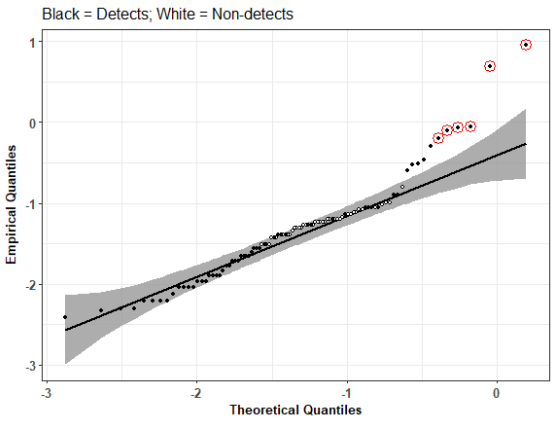
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

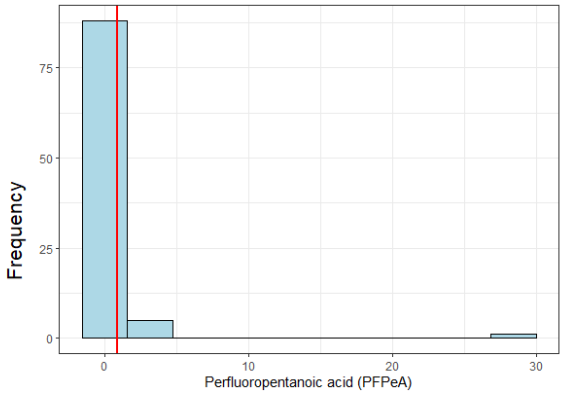
Rosner Test Results

Rosner test confirmed 2 outliers.

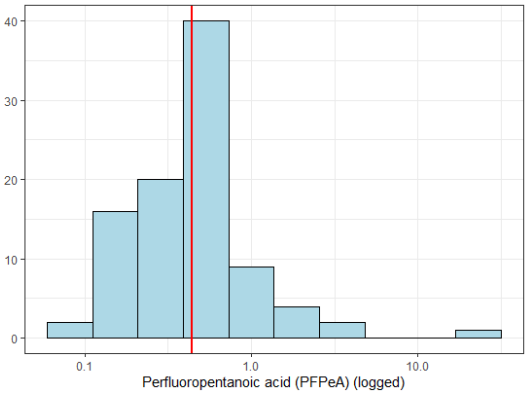
Perfluoropentanoic acid (PFPeA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



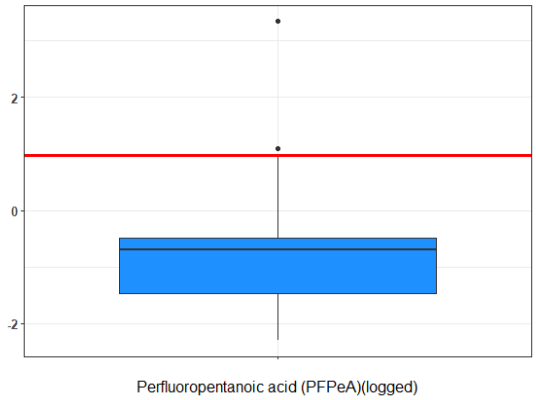
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 94
Number of non-detects: 37.



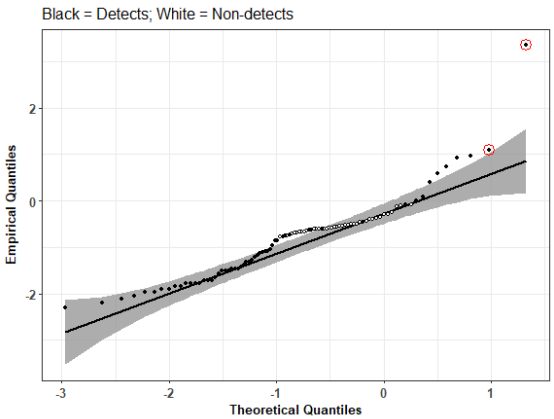
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

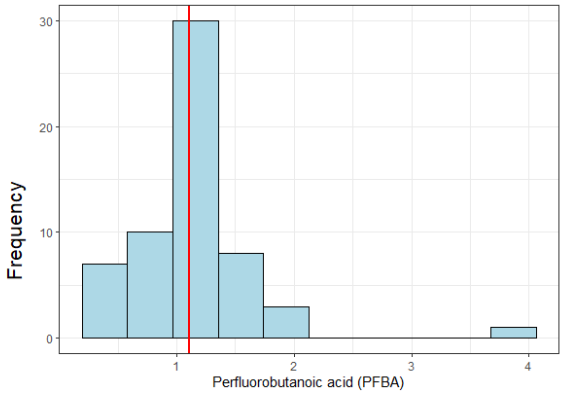
Rosner Test Results

Rosner test confirmed 1 outliers.

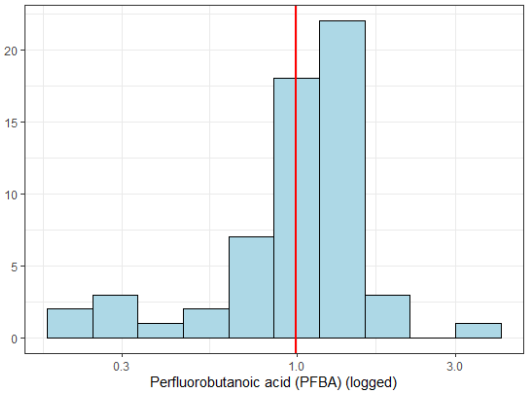
Perfluorobutanoic acid (PFBA)

Distribution

The identified distribution is Normal. No transform will applied for outlier testing.



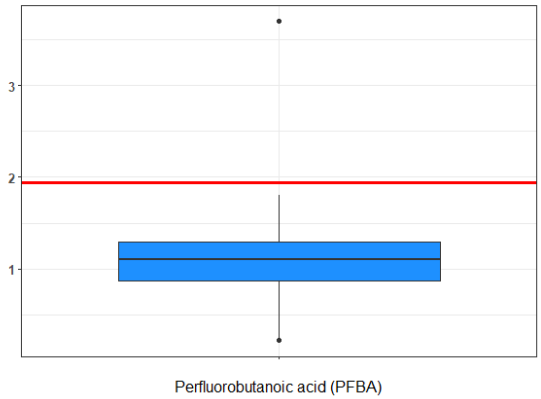
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 59
Number of non-detects: 34.



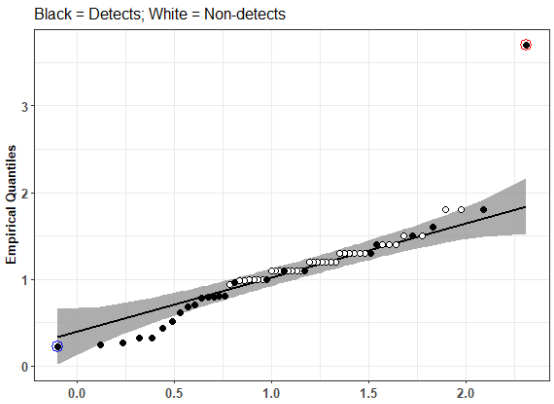
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue

Rosner Test Results

Rosner test confirmed 1 outliers.

Attachment E-2 Outlier Testing Figures – 2-12 Inches

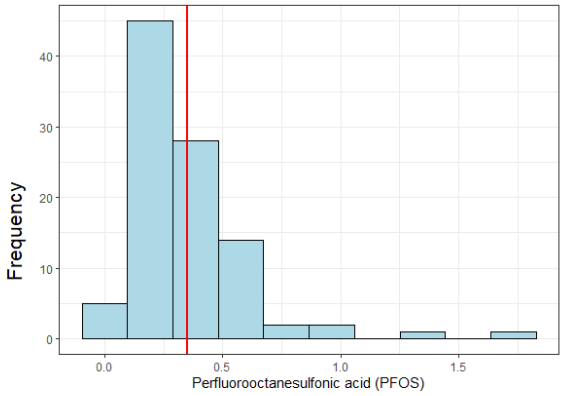
NYSDEC Background Study for Per- and Polyfluoroalkyl Substances (PFAS) in Soil, Habitat 2-12 inches

2025-02-14

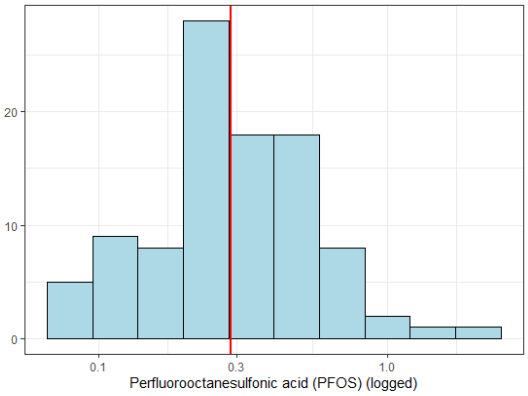
Perfluorooctanesulfonic acid (PFOS)

Distribution

The identified distribution is Gamma. A gamma-transform will applied for outlier testing.



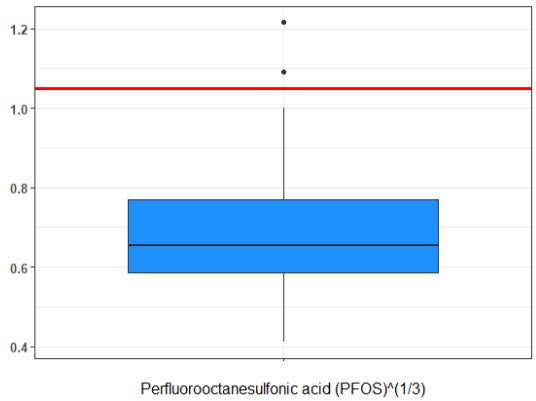
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 3.



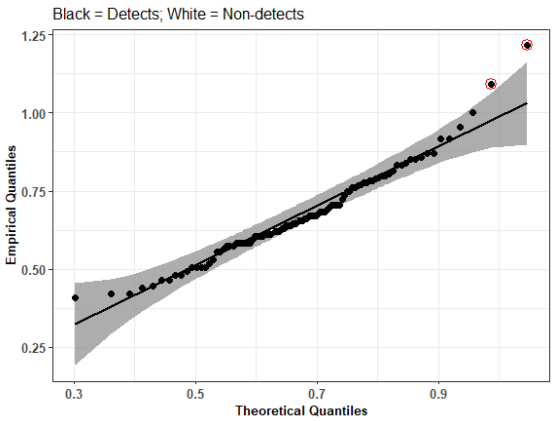
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were gamma-transformed

Rosner Test Results

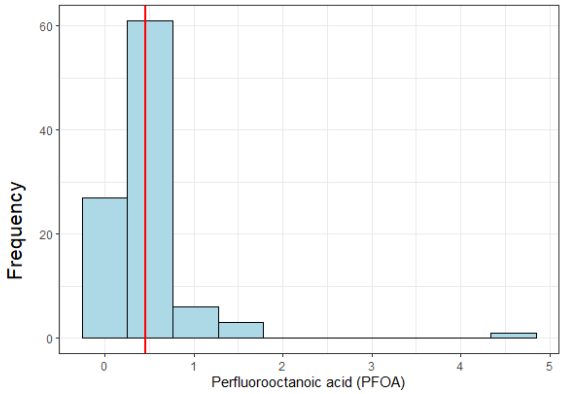
Rosner test confirmed 1 outliers.

Habitat Outlier Testing 2-12 inches

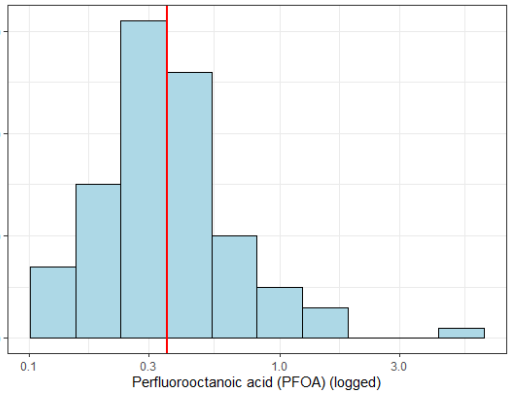
Perfluorooctanoic acid (PFOA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



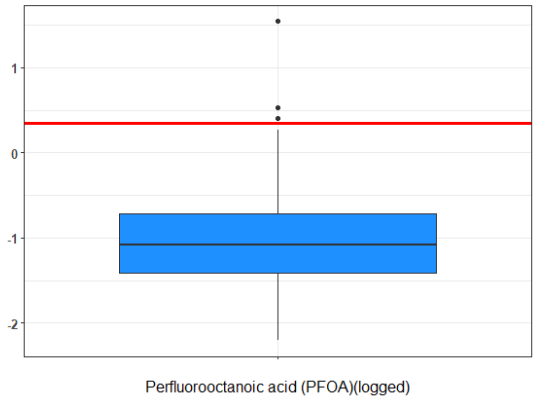
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 6.



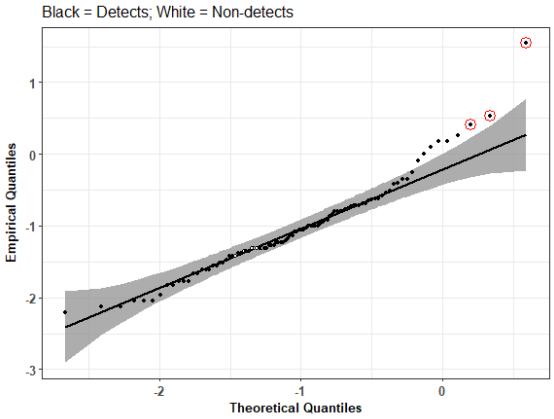
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

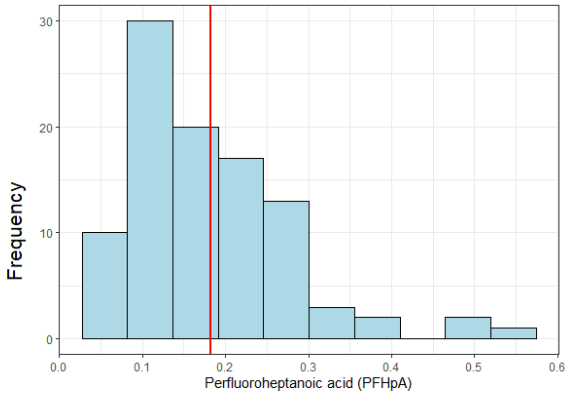
Rosner Test Results

Rosner test confirmed 1 outliers.

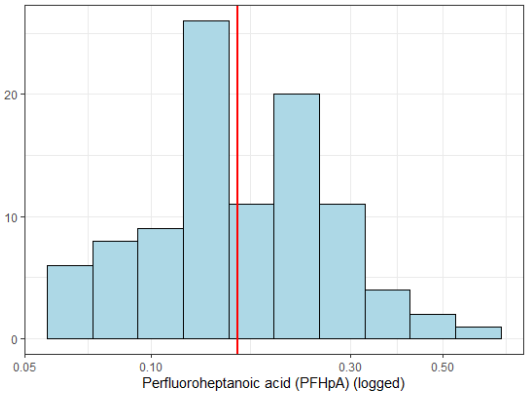
Perfluoroheptanoic acid (PFHpA)

Distribution

The identified distribution is Lognormal. A log-transform will be applied for outlier testing.



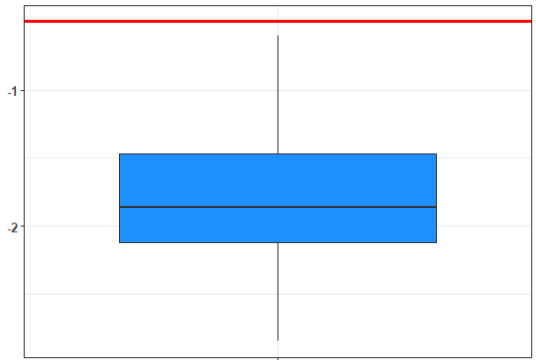
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 12.



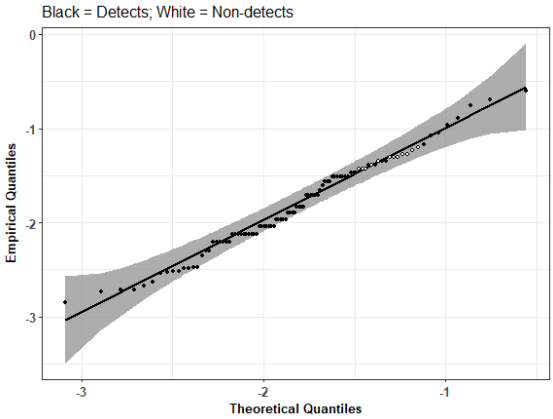
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

Rosner Test Results

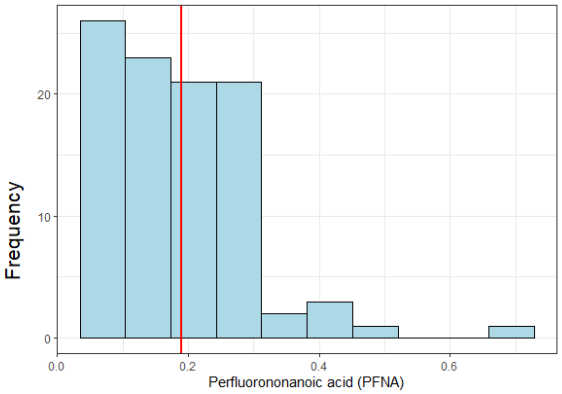
Confirmed No Outliers.

Habitat Outlier Testing 2-12 inches

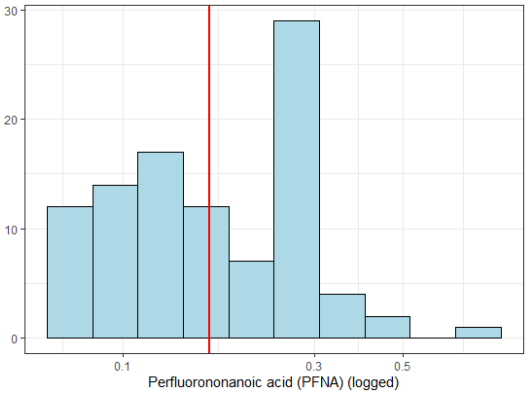
Perfluorononanoic acid (PFNA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



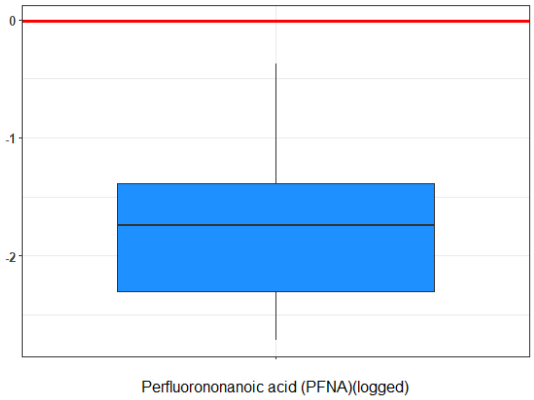
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 18.



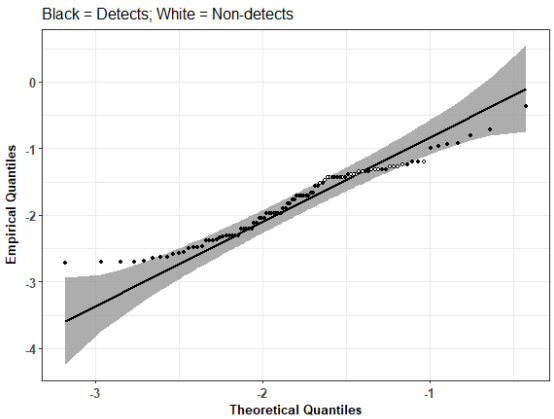
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

Rosner Test Results

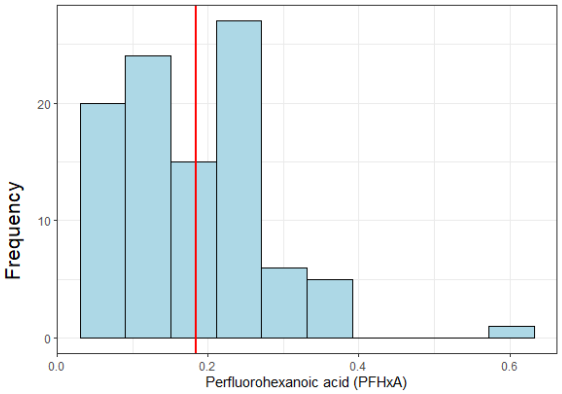
Confirmed No Outliers.

Habitat Outlier Testing 2-12 inches

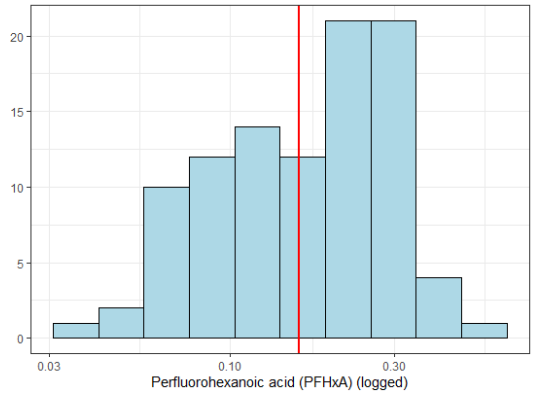
Perfluorohexanoic acid (PFHxA)

Distribution

The identified distribution is Gamma. A gamma-transform will applied for outlier testing.



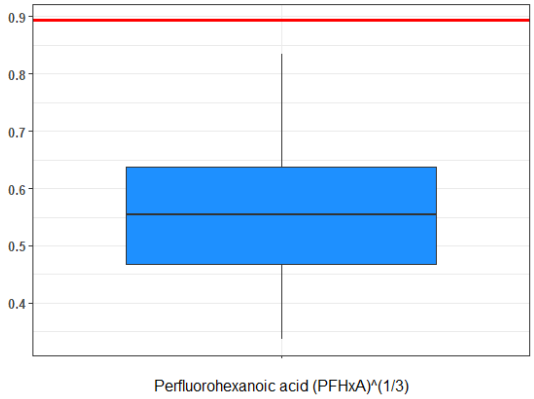
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 28.



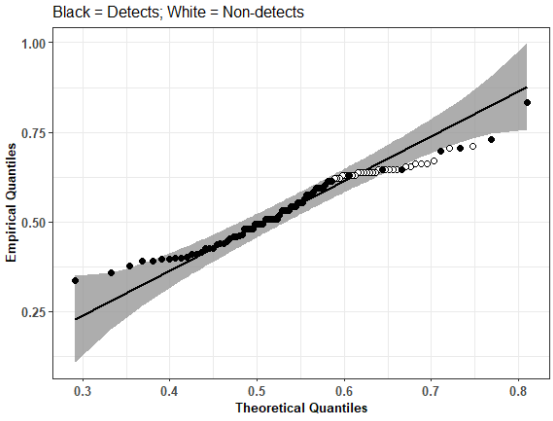
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were gamma-transformed

Rosner Test Results

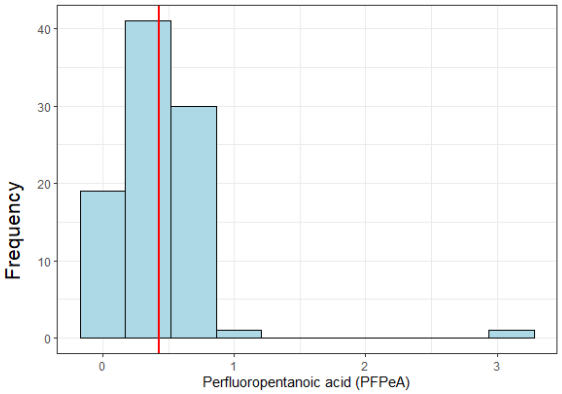
Confirmed No Outliers.

Habitat Outlier Testing 2-12 inches

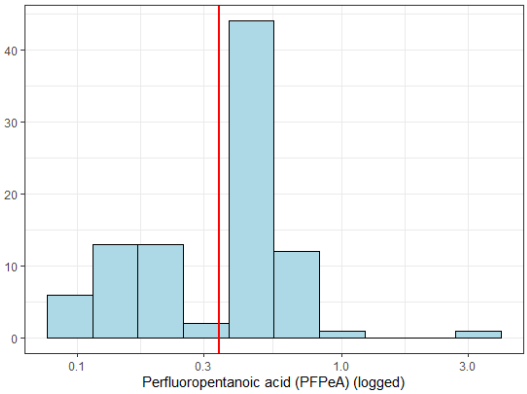
Perfluoropentanoic acid (PFPeA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



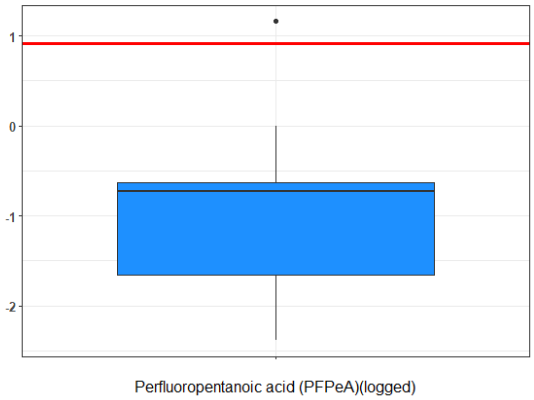
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 92
Number of non-detects: 55.



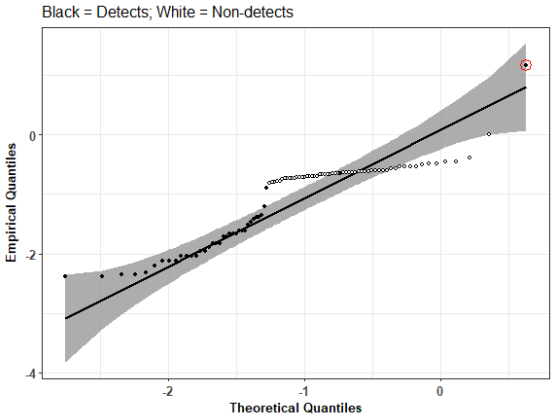
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

Rosner Test Results

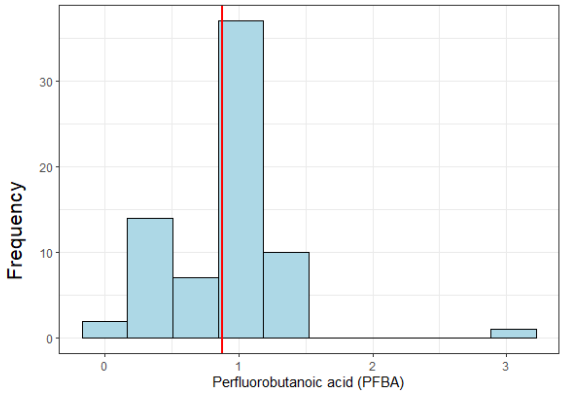
Rosner test confirmed no outliers.

Habitat Outlier Testing 2-12 inches

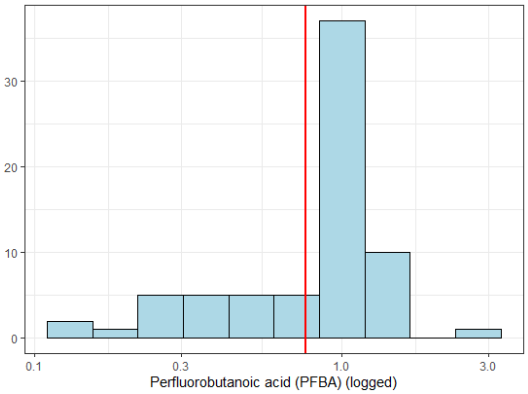
Perfluorobutanoic acid (PFBA)

Distribution

The identified distribution is Gamma. A gamma-transform will applied for outlier testing.



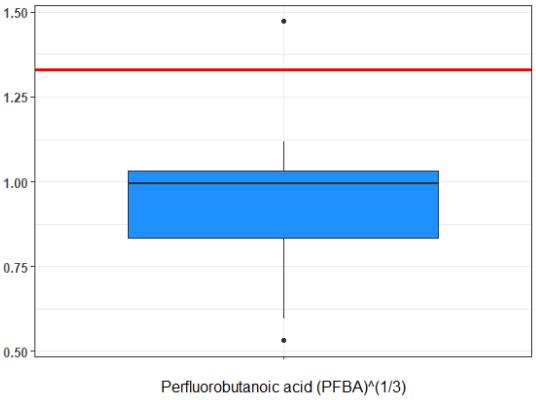
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 71
Number of non-detects: 46.



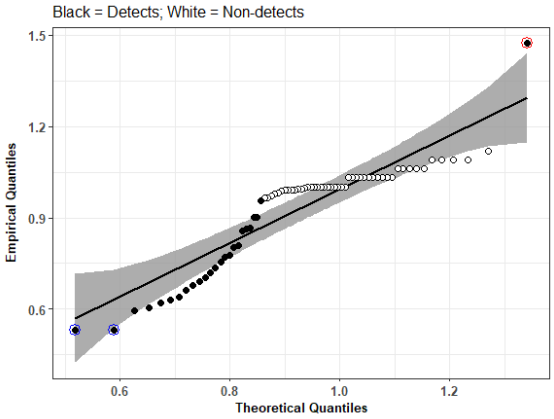
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were gamma-transformed

Rosner Test Results

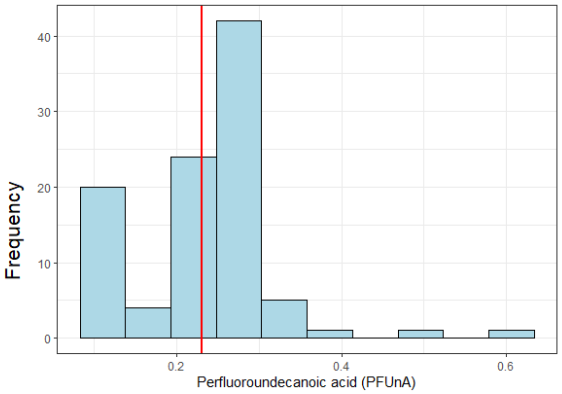
Rosner test confirmed no outliers.

Habitat Outlier Testing 2-12 inches

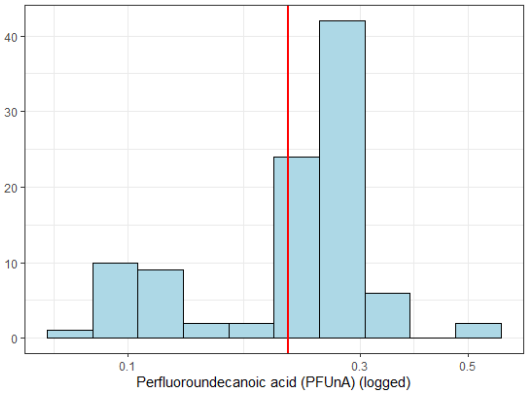
Perfluoroundecanoic acid (PFUnA)

Distribution

The identified distribution is None. A log-transform will be applied for outlier testing.



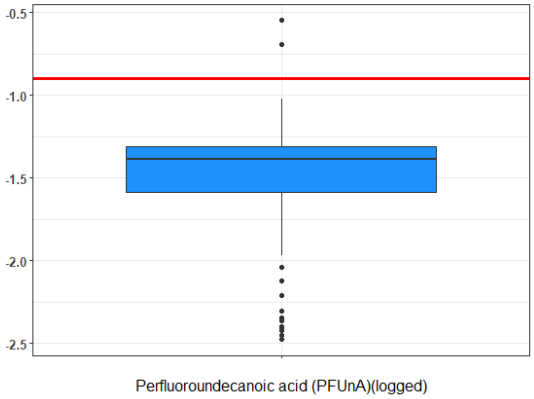
Frequency histogram of raw data.
Red line indicates arithmetic mean.
Number of samples: 98
Number of non-detects: 69.



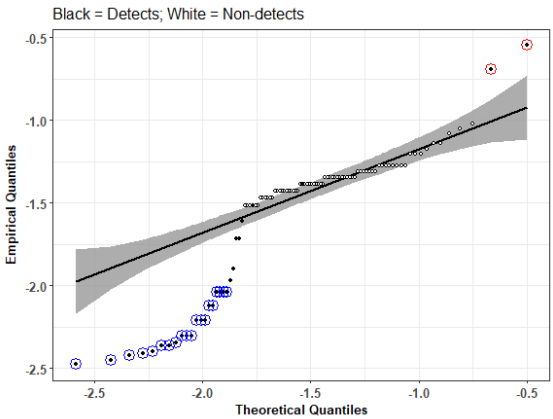
Frequency histogram of natural log-transformed data.
Red line indicates geometric mean.

Outlier Testing

Potential Outliers



The red line indicates the upper limit used to identify potential outliers
Upper limit = 75th percentile + 1.5(IQR)



QQ plot: Potential high outliers are circled red, potential low outliers circled blue
Data were log-transformed

Rosner Test Results

Rosner test confirmed 2 outliers.

Attachment E-3 ProUCL Outputs – 0-2 Inches

Background Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.2 2/12/2025 3:03:21 PM
From File	Copy of NYSDEC_Rural_PFAS_Habitat_Review_PROUCL_20250212 (002).xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Perfluorooctanesulfonic acid (PFOS)

General Statistics

Total Number of Observations	98	Number of Distinct Observations	58
		Number of Missing Observations	1
Minimum	0.16	First Quartile	0.383
Second Largest	6.2	Median	0.63
Maximum	6.2	Third Quartile	1.075
Mean	0.966	SD	1.111
Coefficient of Variation	1.15	Skewness	3.371
Mean of logged Data	-0.394	SD of logged Data	0.784

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test

Shapiro Wilk Test Statistic	0.604	**Normal GOF Test**
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.235	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.104	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	3.107	90% Percentile (z)	2.39
	95% UPL (t)	2.821	95% Percentile (z)	2.794
	95% USL	4.525	99% Percentile (z)	3.551

Gamma GOF Test

A-D Test Statistic	2.966	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.77	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.125	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.092	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	1.537	k star (bias corrected MLE)	1.497
Theta hat (MLE)	0.629	Theta star (bias corrected MLE)	0.646
nu hat (MLE)	301.3	nu star (bias corrected)	293.4
MLE Mean (bias corrected)	0.966	MLE Sd (bias corrected)	0.79

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL		2.457	90% Percentile	2.014
95% Hawkins Wixley (HW) Approx. Gamma UPL		2.447	95% Percentile	2.519
95% WH Approx. Gamma UTL with	95% Coverage	2.847	99% Percentile	3.657
95% HW Approx. Gamma UTL with	95% Coverage	2.865		
	95% WH USL	5.396	95% HW USL	5.778

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.952	**Shapiro Wilk Lognormal GOF Test**
10% Shapiro Wilk P Value	0.00449	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0662	**Lilliefors Lognormal GOF Test**

10% Lilliefors Critical Value	0.0821	Data appear Lognormal at 10% Significance Level

Data appear Approximate Lognormal at 10% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with	95% Coverage	3.057	90% Percentile (z)	1.843
	95% UPL (t)	2.498	95% Percentile (z)	2.451
	95% USL	8.316	99% Percentile (z)	4.182

Nonparametric Distribution Free Background Statistics

Data appear Approximate Lognormal at 10% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, order		97	95% UTL with	95% Coverage	6.2
Approx, f used to compute achieved CC		1.684	Approximate Actual Confidence Coefficient achieved by UTL		0.873
			Approximate Sample Size needed to achieve specified CC		93
95% Percentile Bootstrap UTL with	95% Coverage	6	95% BCA Bootstrap UTL with	95% Coverage	6
	95% UPL	3.015		90% Percentile	1.86
	90% Chebyshev UPL	4.316		95% Percentile	2.83
	95% Chebyshev UPL	5.834		99% Percentile	6.2
	95% USL	6.2			

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorononanoic acid (PFNA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	51		
Number of Detects	94	Number of Non-Detects	4
Number of Distinct Detects	51	Number of Distinct Non-Detects	4
Minimum Detect	0.083	Minimum Non-Detect	0.24
Maximum Detect	2.6	Maximum Non-Detect	0.56
Variance Detected	0.188	Percent Non-Detects	4.082%
Mean Detected	0.403	SD Detected	0.434
Mean of Detected Logged Data	-1.205	SD of Detected Logged Data	0.7

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.585	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.231	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.106	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.395	KM SD	0.425
95% UTL95% Coverage	1.213	95% KM UPL (t)	1.104
90% KM Percentile (z)	0.939	95% KM Percentile (z)	1.093
99% KM Percentile (z)	1.383	95% KM USL	1.755

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.394	SD	0.427
95% UTL95% Coverage	1.217	95% UPL (t)	1.107
90% Percentile (z)	0.941	95% Percentile (z)	1.096
99% Percentile (z)	1.387	95% USL	1.761

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.978	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.767	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.118	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.0937	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.844	k star (bias corrected MLE)	1.792
Theta hat (MLE)	0.218	Theta star (bias corrected MLE)	0.225
nu hat (MLE)	346.6	nu star (bias corrected)	336.9
MLE Mean (bias corrected)	0.403		
MLE Sd (bias corrected)	0.301	95% Percentile of Chisquare (2kstar)	8.805

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0722	Mean	0.393
Maximum	2.6	Median	0.275
SD	0.427	CV	1.087
k hat (MLE)	1.828	k star (bias corrected MLE)	1.779
Theta hat (MLE)	0.215	Theta star (bias corrected MLE)	0.221
nu hat (MLE)	358.3	nu star (bias corrected)	348.7
MLE Mean (bias corrected)	0.393	MLE Sd (bias corrected)	0.295
95% Percentile of Chisquare (2kstar)	8.762	90% Percentile	0.786
95% Percentile	0.968	99% Percentile	1.375

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.087	1.088	95% Approx. Gamma UPL	0.947	0.94
95% Gamma USL	1.985	2.094			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.395	SD (KM)	0.425
Variance (KM)	0.18	SE of Mean (KM)	0.0432
k hat (KM)	0.866	k star (KM)	0.846
nu hat (KM)	169.7	nu star (KM)	165.9
theta hat (KM)	0.456	theta star (KM)	0.467
80% gamma percentile (KM)	0.644	90% gamma percentile (KM)	0.948
95% gamma percentile (KM)	1.256	99% gamma percentile (KM)	1.981

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.08	1.08	95% Approx. Gamma UPL	0.943	0.935
95% KM Gamma Percentile	0.93	0.922	95% Gamma USL	1.964	2.066

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.945	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	0.0013	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.0706	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0838	Detected Data appear Lognormal at 10% Significance Level	

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.395	Mean in Log Scale	-1.219

SD in Original Scale	0.426	SD in Log Scale	0.689
95% UTL95% Coverage	1.116	95% BCA UTL95% Coverage	2.4
95% Bootstrap (%) UTL95% Coverage	2.4	95% UPL (t)	0.934
90% Percentile (z)	0.715	95% Percentile (z)	0.919
99% Percentile (z)	1.469	95% USL	2.688

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.221	95% KM UTL (Lognormal)95% Coverage	1.117
KM SD of Logged Data	0.692	95% KM UPL (Lognormal)	0.935
95% KM Percentile Lognormal (z)	0.92	95% KM USL (Lognormal)	2.7

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.394	Mean in Log Scale	-1.223
SD in Original Scale	0.427	SD in Log Scale	0.694
95% UTL95% Coverage	1.12	95% UPL (t)	0.937
90% Percentile (z)	0.716	95% Percentile (z)	0.921
99% Percentile (z)	1.478	95% USL	2.714

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	2.4
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	1.001
95% USL	2.6	95% KM Chebyshev UPL	2.255

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluoroheptanoic acid (PFHpA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	47		
Number of Detects	90	Number of Non-Detects	8
Number of Distinct Detects	45	Number of Distinct Non-Detects	8
Minimum Detect	0.077	Minimum Non-Detect	0.22
Maximum Detect	1.7	Maximum Non-Detect	0.83
Variance Detected	0.0818	Percent Non-Detects	8.163%
Mean Detected	0.306	SD Detected	0.286
Mean of Detected Logged Data	-1.421	SD of Detected Logged Data	0.636

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.615	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.211	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.108	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.296	KM SD	0.276
95% UTL95% Coverage	0.827	95% KM UPL (t)	0.756
90% KM Percentile (z)	0.649	95% KM Percentile (z)	0.75

99% KM Percentile (z)	0.937	95% KM USL	1.179

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.296	SD	0.277
95% UTL95% Coverage	0.831	95% UPL (t)	0.759
90% Percentile (z)	0.652	95% Percentile (z)	0.752
99% Percentile (z)	0.941	95% USL	1.185

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.27	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.764	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.102	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0953	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.259	k star (bias corrected MLE)	2.192
Theta hat (MLE)	0.136	Theta star (bias corrected MLE)	0.14
nu hat (MLE)	406.7	nu star (bias corrected)	394.5
MLE Mean (bias corrected)	0.306		
MLE Sd (bias corrected)	0.207	95% Percentile of Chisquare (2kstar)	10.1

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.077	Mean	0.294
Maximum	1.7	Median	0.22
SD	0.277	CV	0.945
k hat (MLE)	2.275	k star (bias corrected MLE)	2.213
Theta hat (MLE)	0.129	Theta star (bias corrected MLE)	0.133
nu hat (MLE)	446	nu star (bias corrected)	433.7
MLE Mean (bias corrected)	0.294	MLE Sd (bias corrected)	0.197
95% Percentile of Chisquare (2kstar)	10.17	90% Percentile	0.558
95% Percentile	0.675	99% Percentile	0.933

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.755	0.755	95% Approx. Gamma UPL	0.665	0.661
95% Gamma USL	1.32	1.381			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.296	SD (KM)	0.276
Variance (KM)	0.076	SE of Mean (KM)	0.0281
k hat (KM)	1.154	k star (KM)	1.125
nu hat (KM)	226.1	nu star (KM)	220.5
theta hat (KM)	0.257	theta star (KM)	0.263
80% gamma percentile (KM)	0.472	90% gamma percentile (KM)	0.662
95% gamma percentile (KM)	0.851	99% gamma percentile (KM)	1.286

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.755	0.756	95% Approx. Gamma UPL	0.666	0.662
95% KM Gamma Percentile	0.658	0.654	95% Gamma USL	1.316	1.377

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.949	**Shapiro Wilk GOF Test**

10% Shapiro Wilk P Value	0.00403	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.0747	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0856	Detected Data appear Lognormal at 10% Significance Level	

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.296	Mean in Log Scale	-1.446
SD in Original Scale	0.276	SD in Log Scale	0.616
95% UTL95% Coverage	0.772	95% BCA UTL95% Coverage	0.888
95% Bootstrap (%) UTL95% Coverage	1.5	95% UPL (t)	0.659
90% Percentile (z)	0.519	95% Percentile (z)	0.649
99% Percentile (z)	0.987	95% USL	1.693

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.451	95% KM UTL (Lognormal)95% Coverage	0.78
KM SD of Logged Data	0.624	95% KM UPL (Lognormal)	0.665
95% KM Percentile Lognormal (z)	0.655	95% KM USL (Lognormal)	1.731

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.296	Mean in Log Scale	-1.453
SD in Original Scale	0.277	SD in Log Scale	0.629
95% UTL95% Coverage	0.786	95% UPL (t)	0.669
90% Percentile (z)	0.524	95% Percentile (z)	0.659
99% Percentile (z)	1.012	95% USL	1.756

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	1.7
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.783
95% USL	1.7	95% KM Chebyshev UPL	1.504

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorooctanoic acid (PFOA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	61		
Number of Detects	88	Number of Non-Detects	10
Number of Distinct Detects	57	Number of Distinct Non-Detects	8
Minimum Detect	0.1	Minimum Non-Detect	0.26
Maximum Detect	4.2	Maximum Non-Detect	0.83
Variance Detected	0.466	Percent Non-Detects	10.2%
Mean Detected	0.665	SD Detected	0.683
Mean of Detected Logged Data	-0.792	SD of Detected Logged Data	0.87

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.726	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.204	**Lilliefors GOF Test**	

1% Lilliefors Critical Value	0.109	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.62	KM SD	0.658
95% UTL95% Coverage	1.888	95% KM UPL (t)	1.718
90% KM Percentile (z)	1.463	95% KM Percentile (z)	1.702
99% KM Percentile (z)	2.151	95% KM USL	2.727

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.619	SD	0.661
95% UTL95% Coverage	1.894	95% UPL (t)	1.723
90% Percentile (z)	1.467	95% Percentile (z)	1.707
99% Percentile (z)	2.158	95% USL	2.737

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.388	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.772	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.108	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0972	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.446	k star (bias corrected MLE)	1.405
Theta hat (MLE)	0.46	Theta star (bias corrected MLE)	0.474
nu hat (MLE)	254.6	nu star (bias corrected)	247.2
MLE Mean (bias corrected)	0.665		
MLE Sd (bias corrected)	0.561	95% Percentile of Chisquare (2kstar)	7.481

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.611
Maximum	4.2	Median	0.395
SD	0.667	CV	1.091
k hat (MLE)	1.228	k star (bias corrected MLE)	1.197
Theta hat (MLE)	0.498	Theta star (bias corrected MLE)	0.511
nu hat (MLE)	240.7	nu star (bias corrected)	234.6
MLE Mean (bias corrected)	0.611	MLE Sd (bias corrected)	0.559
95% Percentile of Chisquare (2kstar)	6.735	90% Percentile	1.346
95% Percentile	1.719	99% Percentile	2.574

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.979	2.063	95% Approx. Gamma UPL	1.687	1.73
95% Gamma USL	3.93	4.468			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.62	SD (KM)	0.658
Variance (KM)	0.433	SE of Mean (KM)	0.0669
k hat (KM)	0.888	k star (KM)	0.867
nu hat (KM)	174	nu star (KM)	170
theta hat (KM)	0.698	theta star (KM)	0.715
80% gamma percentile (KM)	1.008	90% gamma percentile (KM)	1.478
95% gamma percentile (KM)	1.954	99% gamma percentile (KM)	3.07

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.899	1.944	95% Approx. Gamma UPL	1.631	1.648
95% KM Gamma Percentile	1.607	1.622	95% Gamma USL	3.668	4.04

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.955	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.0138	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0912	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0866	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.621	Mean in Log Scale	-0.863
SD in Original Scale	0.66	SD in Log Scale	0.854
95% UTL95% Coverage	2.186	95% BCA UTL95% Coverage	2.31
95% Bootstrap (%) UTL95% Coverage	2.2	95% UPL (t)	1.754
90% Percentile (z)	1.26	95% Percentile (z)	1.718
99% Percentile (z)	3.075	95% USL	6.497

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.875	95% KM UTL (Lognormal)95% Coverage	2.212
KM SD of Logged Data	0.866	95% KM UPL (Lognormal)	1.77
95% KM Percentile Lognormal (z)	1.733	95% KM USL (Lognormal)	6.681

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.619	Mean in Log Scale	-0.876
SD in Original Scale	0.661	SD in Log Scale	0.871
95% UTL95% Coverage	2.229	95% UPL (t)	1.781
90% Percentile (z)	1.271	95% Percentile (z)	1.744
99% Percentile (z)	3.157	95% USL	6.77

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	3.5
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	2.005
95% USL	4.2	95% KM Chebyshev UPL	3.503

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluoroundecanoic acid (PFUnA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	49		
Number of Detects	84	Number of Non-Detects	14
Number of Distinct Detects	46	Number of Distinct Non-Detects	11
Minimum Detect	0.089	Minimum Non-Detect	0.24
Maximum Detect	1.4	Maximum Non-Detect	0.45
Variance Detected	0.0846	Percent Non-Detects	14.29%
Mean Detected	0.311	SD Detected	0.291
Mean of Detected Logged Data	-1.464	SD of Detected Logged Data	0.716

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.698	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.248	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.112	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.29	KM SD	0.273
95% UTL95% Coverage	0.817	95% KM UPL (t)	0.747
90% KM Percentile (z)	0.641	95% KM Percentile (z)	0.74
99% KM Percentile (z)	0.926	95% KM USL	1.166

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.288	SD	0.275
95% UTL95% Coverage	0.818	95% UPL (t)	0.747
90% Percentile (z)	0.641	95% Percentile (z)	0.741
99% Percentile (z)	0.928	95% USL	1.169

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	4.143	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.766	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.172	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.099	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.842	k star (bias corrected MLE)	1.784
Theta hat (MLE)	0.169	Theta star (bias corrected MLE)	0.174
nu hat (MLE)	309.4	nu star (bias corrected)	299.7
MLE Mean (bias corrected)	0.311		
MLE Sd (bias corrected)	0.233	95% Percentile of Chisquare (2kstar)	8.778

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0563	Mean	0.288
Maximum	1.4	Median	0.19
SD	0.275	CV	0.954
k hat (MLE)	1.894	k star (bias corrected MLE)	1.842
Theta hat (MLE)	0.152	Theta star (bias corrected MLE)	0.157
nu hat (MLE)	371.1	nu star (bias corrected)	361.1
MLE Mean (bias corrected)	0.288	MLE Sd (bias corrected)	0.213
95% Percentile of Chisquare (2kstar)	8.972	90% Percentile	0.572
95% Percentile	0.702	99% Percentile	0.993

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.794	0.798	95% Approx. Gamma UPL	0.693	0.69
95% Gamma USL	1.443	1.529			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.29	SD (KM)	0.273
Variance (KM)	0.0747	SE of Mean (KM)	0.0279

k hat (KM)	1.128	k star (KM)	1.1
nu hat (KM)	221	nu star (KM)	215.6
theta hat (KM)	0.257	theta star (KM)	0.264
80% gamma percentile (KM)	0.463	90% gamma percentile (KM)	0.653
95% gamma percentile (KM)	0.841	99% gamma percentile (KM)	1.275

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.791	0.794	95% Approx. Gamma UPL	0.691	0.688
95% KM Gamma Percentile	0.682	0.678	95% Gamma USL	1.431	1.513

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.901	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	3.5587E-7	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.113	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0886	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.291	Mean in Log Scale	-1.506
SD in Original Scale	0.273	SD in Log Scale	0.673
95% UTL95% Coverage	0.811	95% BCA UTL95% Coverage	1.1
95% Bootstrap (%) UTL95% Coverage	1.1	95% UPL (t)	0.682
90% Percentile (z)	0.526	95% Percentile (z)	0.671
99% Percentile (z)	1.062	95% USL	1.914

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.519	95% KM UTL (Lognormal)95% Coverage	0.82
KM SD of Logged Data	0.686	95% KM UPL (Lognormal)	0.687
95% KM Percentile Lognormal (z)	0.676	95% KM USL (Lognormal)	1.966

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.288	Mean in Log Scale	-1.524
SD in Original Scale	0.275	SD in Log Scale	0.681
95% UTL95% Coverage	0.81	95% UPL (t)	0.679
90% Percentile (z)	0.522	95% Percentile (z)	0.668
99% Percentile (z)	1.063	95% USL	1.931

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	1.3
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.962
95% USL	1.4	95% KM Chebyshev UPL	1.488

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorohexanoic acid (PFHxA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	54		
Number of Detects	70	Number of Non-Detects	28

Number of Distinct Detects	46	Number of Distinct Non-Detects	18
Minimum Detect	0.042	Minimum Non-Detect	0.24
Maximum Detect	1.6	Maximum Non-Detect	0.84
Variance Detected	0.0531	Percent Non-Detects	28.57%
Mean Detected	0.239	SD Detected	0.23
Mean of Detected Logged Data	-1.716	SD of Detected Logged Data	0.741

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.653	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.2	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.122	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.214	KM SD	0.202
95% UTL95% Coverage	0.604	95% KM UPL (t)	0.552
90% KM Percentile (z)	0.473	95% KM Percentile (z)	0.547
99% KM Percentile (z)	0.685	95% KM USL	0.862

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.224	SD	0.201
95% UTL95% Coverage	0.611	95% UPL (t)	0.56
90% Percentile (z)	0.482	95% Percentile (z)	0.555
99% Percentile (z)	0.692	95% USL	0.868

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.916	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.764	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.1	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.108	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.902	k star (bias corrected MLE)	1.83
Theta hat (MLE)	0.126	Theta star (bias corrected MLE)	0.131
nu hat (MLE)	266.3	nu star (bias corrected)	256.2
MLE Mean (bias corrected)	0.239		
MLE Sd (bias corrected)	0.177	95% Percentile of Chisquare (2kstar)	8.931

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0413	Mean	0.208
Maximum	1.6	Median	0.16
SD	0.202	CV	0.971
k hat (MLE)	2.046	k star (bias corrected MLE)	1.991
Theta hat (MLE)	0.102	Theta star (bias corrected MLE)	0.105
nu hat (MLE)	401.1	nu star (bias corrected)	390.2
MLE Mean (bias corrected)	0.208	MLE Sd (bias corrected)	0.147
95% Percentile of Chisquare (2kstar)	9.457	90% Percentile	0.405
95% Percentile	0.494	99% Percentile	0.692

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.556	0.563	95% Approx. Gamma UPL	0.487	0.489
95% Gamma USL	0.993	1.06			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.214	SD (KM)	0.202
Variance (KM)	0.041	SE of Mean (KM)	0.0212
k hat (KM)	1.116	k star (KM)	1.089
nu hat (KM)	218.7	nu star (KM)	213.4
theta hat (KM)	0.192	theta star (KM)	0.196
80% gamma percentile (KM)	0.342	90% gamma percentile (KM)	0.482
95% gamma percentile (KM)	0.622	99% gamma percentile (KM)	0.944

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.573	0.581	95% Approx. Gamma UPL	0.502	0.505
95% KM Gamma Percentile	0.495	0.498	95% Gamma USL	1.024	1.098

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.967	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	0.179	Detected Data appear Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.0837	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0969	Detected Data appear Lognormal at 10% Significance Level	

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.21	Mean in Log Scale	-1.799
SD in Original Scale	0.2	SD in Log Scale	0.653
95% UTL95% Coverage	0.582	95% BCA UTL95% Coverage	0.573
95% Bootstrap (%) UTL95% Coverage	0.556	95% UPL (t)	0.492
90% Percentile (z)	0.382	95% Percentile (z)	0.484
99% Percentile (z)	0.755	95% USL	1.338

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.81	95% KM UTL (Lognormal)95% Coverage	0.638
KM SD of Logged Data	0.707	95% KM UPL (Lognormal)	0.532
95% KM Percentile Lognormal (z)	0.523	95% KM USL (Lognormal)	1.572

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.224	Mean in Log Scale	-1.725
SD in Original Scale	0.201	SD in Log Scale	0.654
95% UTL95% Coverage	0.628	95% UPL (t)	0.53
90% Percentile (z)	0.412	95% Percentile (z)	0.522
99% Percentile (z)	0.815	95% USL	1.445

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	1.1
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.773
95% USL	1.6	95% KM Chebyshev UPL	1.101

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorodecanoic acid (PFDA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	42		
Number of Detects	61	Number of Non-Detects	37
Number of Distinct Detects	33	Number of Distinct Non-Detects	16
Minimum Detect	0.09	Minimum Non-Detect	0.22
Maximum Detect	2.6	Maximum Non-Detect	0.45
Variance Detected	0.181	Percent Non-Detects	37.76%
Mean Detected	0.348	SD Detected	0.426
Mean of Detected Logged Data	-1.411	SD of Detected Logged Data	0.747

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.57	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.285	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.131	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.279	KM SD	0.346
95% UTL95% Coverage	0.947	95% KM UPL (t)	0.857
90% KM Percentile (z)	0.723	95% KM Percentile (z)	0.849
99% KM Percentile (z)	1.085	95% KM USL	1.389

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.273	SD	0.349
95% UTL95% Coverage	0.946	95% UPL (t)	0.856
90% Percentile (z)	0.721	95% Percentile (z)	0.847
99% Percentile (z)	1.085	95% USL	1.391

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	3.659	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.768	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.201	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.116	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.547	k star (bias corrected MLE)	1.482
Theta hat (MLE)	0.225	Theta star (bias corrected MLE)	0.235
nu hat (MLE)	188.8	nu star (bias corrected)	180.8
MLE Mean (bias corrected)	0.348		
MLE Sd (bias corrected)	0.286	95% Percentile of Chisquare (2kstar)	7.753

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.265
Maximum	2.6	Median	0.175
SD	0.357	CV	1.345
k hat (MLE)	1.146	k star (bias corrected MLE)	1.118

Theta hat (MLE)	0.231	Theta star (bias corrected MLE)	0.237
nu hat (MLE)	224.6	nu star (bias corrected)	219.1
MLE Mean (bias corrected)	0.265	MLE Sd (bias corrected)	0.251
95% Percentile of Chisquare (2kstar)	6.44	90% Percentile	0.594
95% Percentile	0.764	99% Percentile	1.155

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.865	0.898	95% Approx. Gamma UPL	0.735	0.751
95% Gamma USL	1.736	1.967			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.279	SD (KM)	0.346
Variance (KM)	0.12	SE of Mean (KM)	0.0355
k hat (KM)	0.651	k star (KM)	0.638
nu hat (KM)	127.5	nu star (KM)	125
theta hat (KM)	0.429	theta star (KM)	0.438
80% gamma percentile (KM)	0.46	90% gamma percentile (KM)	0.717
95% gamma percentile (KM)	0.983	99% gamma percentile (KM)	1.626

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.76	0.746	95% Approx. Gamma UPL	0.663	0.646
95% KM Gamma Percentile	0.654	0.638	95% Gamma USL	1.385	1.421

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.898	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	2.5384E-5	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.145	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.104	Data Not Lognormal at 10% Significance Level	

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.284	Mean in Log Scale	-1.545
SD in Original Scale	0.347	SD in Log Scale	0.638
95% UTL95% Coverage	0.729	95% BCA UTL95% Coverage	0.95
95% Bootstrap (%) UTL95% Coverage	1.09	95% UPL (t)	0.618
90% Percentile (z)	0.483	95% Percentile (z)	0.609
99% Percentile (z)	0.94	95% USL	1.644

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.575	95% KM UTL (Lognormal)95% Coverage	0.721
KM SD of Logged Data	0.648	95% KM UPL (Lognormal)	0.611
95% KM Percentile Lognormal (z)	0.601	95% KM USL (Lognormal)	1.649

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.273	Mean in Log Scale	-1.603
SD in Original Scale	0.349	SD in Log Scale	0.644
95% UTL95% Coverage	0.696	95% UPL (t)	0.59
90% Percentile (z)	0.46	95% Percentile (z)	0.581
99% Percentile (z)	0.901	95% USL	1.584

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	2
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.902

95% USL	2.6	95% KM Chebyshev UPL	1.797

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluoropentanoic acid (PFPeA)

General Statistics

Total Number of Observations	94	Number of Missing Observations	5
Number of Distinct Observations	62		
Number of Detects	57	Number of Non-Detects	37
Number of Distinct Detects	41	Number of Distinct Non-Detects	25
Minimum Detect	0.1	Minimum Non-Detect	0.46
Maximum Detect	28.5	Maximum Non-Detect	0.93
Variance Detected	14.16	Percent Non-Detects	39.36%
Mean Detected	1.014	SD Detected	3.763
Mean of Detected Logged Data	-1.022	SD of Detected Logged Data	1.031

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.933	d2max (for USL)	3.188

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.231	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.404	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.135	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.716	KM SD	2.929
95% UTL95% Coverage	6.378	95% KM UPL (t)	5.608
90% KM Percentile (z)	4.469	95% KM Percentile (z)	5.533
99% KM Percentile (z)	7.529	95% KM USL	10.05

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.735	SD	2.941
95% UTL95% Coverage	6.42	95% UPL (t)	5.647
90% Percentile (z)	4.504	95% Percentile (z)	5.572
99% Percentile (z)	7.577	95% USL	10.11

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	7.517	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.807	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.303	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.124	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.597	k star (bias corrected MLE)	0.577
Theta hat (MLE)	1.699	Theta star (bias corrected MLE)	1.757
nu hat (MLE)	68.04	nu star (bias corrected)	65.79
MLE Mean (bias corrected)	1.014		
MLE Sd (bias corrected)	1.335	95% Percentile of Chisquare (2kstar)	4.212

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.648
Maximum	28.5	Median	0.215
SD	2.957	CV	4.56
k hat (MLE)	0.399	k star (bias corrected MLE)	0.393
Theta hat (MLE)	1.625	Theta star (bias corrected MLE)	1.648
nu hat (MLE)	75.02	nu star (bias corrected)	73.95
MLE Mean (bias corrected)	0.648	MLE Sd (bias corrected)	1.034
95% Percentile of Chisquare (2kstar)	3.288	90% Percentile	1.837
95% Percentile	2.71	99% Percentile	4.908

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	2.451	2.414	95% Approx. Gamma UPL	1.934	1.849
95% Gamma USL	6.205	7.059			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.716	SD (KM)	2.929
Variance (KM)	8.577	SE of Mean (KM)	0.305
k hat (KM)	0.0598	k star (KM)	0.065
nu hat (KM)	11.25	nu star (KM)	12.22
theta hat (KM)	11.97	theta star (KM)	11.02
80% gamma percentile (KM)	0.214	90% gamma percentile (KM)	1.453
95% gamma percentile (KM)	4.077	99% gamma percentile (KM)	13.95

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	2.278	2.038	95% Approx. Gamma UPL	1.875	1.666
95% KM Gamma Percentile	1.839	1.633	95% Gamma USL	4.998	4.731

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.844	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	6.8740E-8	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.16	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.107	Data Not Lognormal at 10% Significance Level	

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.724	Mean in Log Scale	-1.14
SD in Original Scale	2.943	SD in Log Scale	0.833
95% UTL95% Coverage	1.599	95% BCA UTL95% Coverage	2.675
95% Bootstrap (%) UTL95% Coverage	2.6	95% UPL (t)	1.285
90% Percentile (z)	0.93	95% Percentile (z)	1.258
99% Percentile (z)	2.219	95% USL	4.548

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.192	95% KM UTL (Lognormal)95% Coverage	1.623
KM SD of Logged Data	0.867	95% KM UPL (Lognormal)	1.292
95% KM Percentile Lognormal (z)	1.264	95% KM USL (Lognormal)	4.821

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.735	Mean in Log Scale	-1.093
SD in Original Scale	2.941	SD in Log Scale	0.812
95% UTL95% Coverage	1.612	95% UPL (t)	1.302
90% Percentile (z)	0.95	95% Percentile (z)	1.276
99% Percentile (z)	2.219	95% USL	4.469

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	92	95% UTL with95% Coverage	3
Approx, f used to compute achieved CC	1.614	Approximate Actual Confidence Coefficient achieved by UTL	0.855
Approximate Sample Size needed to achieve specified CC	93	95% UPL	2.2
95% USL	28.5	95% KM Chebyshev UPL	13.55

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorobutanoic acid (PFBA)

General Statistics

Total Number of Observations	59	Number of Missing Observations	39
Number of Distinct Observations	26		
Number of Detects	25	Number of Non-Detects	34
Number of Distinct Detects	22	Number of Distinct Non-Detects	10
Minimum Detect	0.22	Minimum Non-Detect	0.94
Maximum Detect	3.7	Maximum Non-Detect	1.8
Variance Detected	0.521	Percent Non-Detects	57.63%
Mean Detected	0.95	SD Detected	0.722
Mean of Detected Logged Data	-0.275	SD of Detected Logged Data	0.687

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.02	d2max (for USL)	3.021

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.778	**Shapiro Wilk GOF Test**	
1% Shapiro Wilk Critical Value	0.886	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.178	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.201	Detected Data appear Normal at 1% Significance Level	

Detected Data appear Approximate Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.757	KM SD	0.53
95% UTL95% Coverage	1.828	95% KM UPL (t)	1.65
90% KM Percentile (z)	1.436	95% KM Percentile (z)	1.629
99% KM Percentile (z)	1.99	95% KM USL	2.358

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.755	SD	0.5
95% UTL95% Coverage	1.766	95% UPL (t)	1.599
90% Percentile (z)	1.396	95% Percentile (z)	1.578
99% Percentile (z)	1.919	95% USL	2.266

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.328	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.754	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.108	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.176	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.384	k star (bias corrected MLE)	2.125
Theta hat (MLE)	0.399	Theta star (bias corrected MLE)	0.447

nu hat (MLE)	119.2	nu star (bias corrected)	106.2
MLE Mean (bias corrected)	0.95		
MLE Sd (bias corrected)	0.652	95% Percentile of Chisquare (2kstar)	9.889

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.169	Mean	0.734
Maximum	3.7	Median	0.645
SD	0.537	CV	0.732
k hat (MLE)	2.767	k star (bias corrected MLE)	2.638
Theta hat (MLE)	0.265	Theta star (bias corrected MLE)	0.278
nu hat (MLE)	326.5	nu star (bias corrected)	311.2
MLE Mean (bias corrected)	0.734	MLE Sd (bias corrected)	0.452
95% Percentile of Chisquare (2kstar)	11.49	90% Percentile	1.339
95% Percentile	1.599	99% Percentile	2.165

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.863	1.901	95% Approx. Gamma UPL	1.6	1.616
95% Gamma USL	2.814	2.978			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.757	SD (KM)	0.53
Variance (KM)	0.281	SE of Mean (KM)	0.0826
k hat (KM)	2.043	k star (KM)	1.95
nu hat (KM)	241	nu star (KM)	230.1
theta hat (KM)	0.371	theta star (KM)	0.388
80% gamma percentile (KM)	1.137	90% gamma percentile (KM)	1.481
95% gamma percentile (KM)	1.811	99% gamma percentile (KM)	2.541

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.887	1.927	95% Approx. Gamma UPL	1.626	1.644
95% KM Gamma Percentile	1.596	1.612	95% Gamma USL	2.83	2.994

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.968	**Shapiro Wilk GOF Test**
10% Shapiro Wilk Critical Value	0.931	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.116	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.159	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.736	Mean in Log Scale	-0.466
SD in Original Scale	0.522	SD in Log Scale	0.541
95% UTL95% Coverage	1.872	95% BCA UTL95% Coverage	1.99
95% Bootstrap (%) UTL95% Coverage	1.99	95% UPL (t)	1.562
90% Percentile (z)	1.255	95% Percentile (z)	1.528
99% Percentile (z)	2.208	95% USL	3.214

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.463	95% KM UTL (Lognormal)95% Coverage	2.133
KM SD of Logged Data	0.604	95% KM UPL (Lognormal)	1.743
95% KM Percentile Lognormal (z)	1.7	95% KM USL (Lognormal)	3.903

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.755	Mean in Log Scale	-0.407
SD in Original Scale	0.5	SD in Log Scale	0.472
95% UTL95% Coverage	1.728	95% UPL (t)	1.475
90% Percentile (z)	1.219	95% Percentile (z)	1.447
99% Percentile (z)	1.997	95% USL	2.772

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	58	95% UTL with95% Coverage	3.7
Approx, f used to compute achieved CC	1.526	Approximate Actual Confidence Coefficient achieved by UTL	0.801
Approximate Sample Size needed to achieve specified CC	59	95% UPL	1.8
95% USL	3.7	95% KM Chebyshev UPL	3.086

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Attachment E-4 ProUCL Outputs – 0-2 Inches – Minus Outliers

Background Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.2 2/17/2025 1:08:32 PM
From File	NYSDEC_Rural_PFAS_Habitat_Review_PROUCL_20250212_NO OUTLIERS.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Perfluorononanoic acid (PFNA)

General Statistics

Total Number of Observations	95	Number of Missing Observations	4
Number of Distinct Observations	49		
Number of Detects	91	Number of Non-Detects	4
Number of Distinct Detects	49	Number of Distinct Non-Detects	4
Minimum Detect	0.083	Minimum Non-Detect	0.24
Maximum Detect	1.2	Maximum Non-Detect	0.56
Variance Detected	0.0474	Percent Non-Detects	4.211%
Mean Detected	0.334	SD Detected	0.218
Mean of Detected Logged Data	-1.275	SD of Detected Logged Data	0.594

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.932	d2max (for USL)	3.192

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.848	**Normal GOF Test on Detected Observations Only**
1% Shapiro Wilk P Value	2.083E-13	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.148	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.108	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.33	KM SD	0.214
95% UTL95% Coverage	0.743	95% KM UPL (t)	0.687
90% KM Percentile (z)	0.604	95% KM Percentile (z)	0.682
99% KM Percentile (z)	0.828	95% KM USL	1.013

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.329	SD	0.215
95% UTL95% Coverage	0.744	95% UPL (t)	0.688
90% Percentile (z)	0.605	95% Percentile (z)	0.683
99% Percentile (z)	0.829	95% USL	1.015

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.938	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.759	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0885	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0944	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.944	k star (bias corrected MLE)	2.854
Theta hat (MLE)	0.114	Theta star (bias corrected MLE)	0.117
nu hat (MLE)	535.8	nu star (bias corrected)	519.5
MLE Mean (bias corrected)	0.334		
MLE Sd (bias corrected)	0.198	95% Percentile of Chisquare (2kstar)	12.15

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.083	Mean	0.329
Maximum	1.2	Median	0.27
SD	0.215	CV	0.652
k hat (MLE)	2.993	k star (bias corrected MLE)	2.906
Theta hat (MLE)	0.11	Theta star (bias corrected MLE)	0.113
nu hat (MLE)	568.7	nu star (bias corrected)	552.1
MLE Mean (bias corrected)	0.329	MLE Sd (bias corrected)	0.193
95% Percentile of Chisquare (2kstar)	12.31	90% Percentile	0.588
95% Percentile	0.698	99% Percentile	0.935

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.784	0.797	95% Approx. Gamma UPL	0.698	0.704
95% Gamma USL	1.297	1.376			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.33	SD (KM)	0.214
Variance (KM)	0.0459	SE of Mean (KM)	0.0222
k hat (KM)	2.37	k star (KM)	2.302
nu hat (KM)	450.2	nu star (KM)	437.3
theta hat (KM)	0.139	theta star (KM)	0.143
80% gamma percentile (KM)	0.485	90% gamma percentile (KM)	0.621
95% gamma percentile (KM)	0.748	99% gamma percentile (KM)	1.03

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.785	0.798	95% Approx. Gamma UPL	0.699	0.705
95% KM Gamma Percentile	0.691	0.697	95% Gamma USL	1.299	1.38

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.971	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.178	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0625	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0852	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.33	Mean in Log Scale	-1.286
SD in Original Scale	0.215	SD in Log Scale	0.585

95% UTL95% Coverage	0.855	95% BCA UTL95% Coverage	0.92
95% Bootstrap (%) UTL95% Coverage	0.92	95% UPL (t)	0.734
90% Percentile (z)	0.585	95% Percentile (z)	0.723
99% Percentile (z)	1.077	95% USL	1.787

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.288	95% KM UTL (Lognormal)95% Coverage	0.859
KM SD of Logged Data	0.589	95% KM UPL (Lognormal)	0.737
95% KM Percentile Lognormal (z)	0.726	95% KM USL (Lognormal)	1.804

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.329	Mean in Log Scale	-1.29
SD in Original Scale	0.215	SD in Log Scale	0.59
95% UTL95% Coverage	0.86	95% UPL (t)	0.737
90% Percentile (z)	0.586	95% Percentile (z)	0.726
99% Percentile (z)	1.085	95% USL	1.808

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	93	95% UTL with95% Coverage	0.99
Approx, f used to compute achieved CC	1.632	Approximate Actual Confidence Coefficient achieved by UTL	0.859
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.856
95% USL	1.2	95% KM Chebyshev UPL	1.268

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorohexanoic acid (PFHxA)

General Statistics

Total Number of Observations	97	Number of Missing Observations	2
Number of Distinct Observations	53		
Number of Detects	69	Number of Non-Detects	28
Number of Distinct Detects	45	Number of Distinct Non-Detects	18
Minimum Detect	0.042	Minimum Non-Detect	0.24
Maximum Detect	1.1	Maximum Non-Detect	0.84
Variance Detected	0.0262	Percent Non-Detects	28.87%
Mean Detected	0.219	SD Detected	0.162
Mean of Detected Logged Data	-1.748	SD of Detected Logged Data	0.697

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.928	d2max (for USL)	3.199

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.808	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	3.385E-12	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.137	**Lilliefors GOF Test**	

1% Lilliefors Critical Value	0.123	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.2	KM SD	0.146
95% UTL95% Coverage	0.481	95% KM UPL (t)	0.444
90% KM Percentile (z)	0.387	95% KM Percentile (z)	0.44
99% KM Percentile (z)	0.54	95% KM USL	0.667

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.21	SD	0.144
95% UTL95% Coverage	0.488	95% UPL (t)	0.451
90% Percentile (z)	0.395	95% Percentile (z)	0.448
99% Percentile (z)	0.546	95% USL	0.672

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.637	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.761	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0845	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.108	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.318	k star (bias corrected MLE)	2.227
Theta hat (MLE)	0.0946	Theta star (bias corrected MLE)	0.0985
nu hat (MLE)	319.9	nu star (bias corrected)	307.3
MLE Mean (bias corrected)	0.219		
MLE Sd (bias corrected)	0.147	95% Percentile of Chisquare (2kstar)	10.22

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.042	Mean	0.197
Maximum	1.1	Median	0.162
SD	0.142	CV	0.724
k hat (MLE)	2.708	k star (bias corrected MLE)	2.631
Theta hat (MLE)	0.0726	Theta star (bias corrected MLE)	0.0748
nu hat (MLE)	525.3	nu star (bias corrected)	510.4
MLE Mean (bias corrected)	0.197	MLE Sd (bias corrected)	0.121
95% Percentile of Chisquare (2kstar)	11.47	90% Percentile	0.359
95% Percentile	0.429	99% Percentile	0.581

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.482	0.491	95% Approx. Gamma UPL	0.428	0.432
95% Gamma USL	0.815	0.87			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.2	SD (KM)	0.146

Variance (KM)	0.0214	SE of Mean (KM)	0.0158
k hat (KM)	1.862	k star (KM)	1.812
nu hat (KM)	361.3	nu star (KM)	351.5
theta hat (KM)	0.107	theta star (KM)	0.11
80% gamma percentile (KM)	0.302	90% gamma percentile (KM)	0.397
95% gamma percentile (KM)	0.488	99% gamma percentile (KM)	0.692

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.508	0.52	95% Approx. Gamma UPL	0.448	0.455
95% KM Gamma Percentile	0.443	0.449	95% Gamma USL	0.876	0.947

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.965	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	0.143	Detected Data appear Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.101	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0975	Data Not Lognormal at 10% Significance Level	

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.196	Mean in Log Scale	-1.824
SD in Original Scale	0.142	SD in Log Scale	0.612
95% UTL95% Coverage	0.526	95% BCA UTL95% Coverage	0.48
95% Bootstrap (%) UTL95% Coverage	0.48	95% UPL (t)	0.449
90% Percentile (z)	0.354	95% Percentile (z)	0.442
99% Percentile (z)	0.671	95% USL	1.145

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.834	95% KM UTL (Lognormal)95% Coverage	0.583
KM SD of Logged Data	0.671	95% KM UPL (Lognormal)	0.49
95% KM Percentile Lognormal (z)	0.482	95% KM USL (Lognormal)	1.367

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.21	Mean in Log Scale	-1.748
SD in Original Scale	0.144	SD in Log Scale	0.617
95% UTL95% Coverage	0.572	95% UPL (t)	0.488
90% Percentile (z)	0.384	95% Percentile (z)	0.481
99% Percentile (z)	0.732	95% USL	1.254

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	95	95% UTL with95% Coverage	0.84
Approx, f used to compute achieved CC	1.667	Approximate Actual Confidence Coefficient achieved by UTL	0.869
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.581
95% USL	1.1	95% KM Chebyshev UPL	0.84

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.

The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorodecanoic acid (PFDA)

General Statistics

Total Number of Observations	96	Number of Missing Observations	3
Number of Distinct Observations	40		
Number of Detects	59	Number of Non-Detects	37
Number of Distinct Detects	31	Number of Distinct Non-Detects	16
Minimum Detect	0.09	Minimum Non-Detect	0.22
Maximum Detect	0.95	Maximum Non-Detect	0.45
Variance Detected	0.0489	Percent Non-Detects	38.54%
Mean Detected	0.282	SD Detected	0.221
Mean of Detected Logged Data	-1.487	SD of Detected Logged Data	0.631

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.93	d2max (for USL)	3.196

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.741	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	1.785E-13	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.236	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.133	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.237	KM SD	0.184
95% UTL95% Coverage	0.592	95% KM UPL (t)	0.544
90% KM Percentile (z)	0.473	95% KM Percentile (z)	0.539
99% KM Percentile (z)	0.665	95% KM USL	0.824

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.231	SD	0.185
95% UTL95% Coverage	0.588	95% UPL (t)	0.54
90% Percentile (z)	0.468	95% Percentile (z)	0.535
99% Percentile (z)	0.662	95% USL	0.823

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.49	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.761	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.17	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.117	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.406	k star (bias corrected MLE)	2.295
Theta hat (MLE)	0.117	Theta star (bias corrected MLE)	0.123
nu hat (MLE)	284	nu star (bias corrected)	270.9
MLE Mean (bias corrected)	0.282		
MLE Sd (bias corrected)	0.186	95% Percentile of Chisquare (2kstar)	10.43

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.052	Mean	0.236
Maximum	0.95	Median	0.18
SD	0.187	CV	0.794
k hat (MLE)	2.55	k star (bias corrected MLE)	2.477
Theta hat (MLE)	0.0924	Theta star (bias corrected MLE)	0.0951
nu hat (MLE)	489.6	nu star (bias corrected)	475.6
MLE Mean (bias corrected)	0.236	MLE Sd (bias corrected)	0.15
95% Percentile of Chisquare (2kstar)	11	90% Percentile	0.436
95% Percentile	0.523	99% Percentile	0.714

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.587	0.592	95% Approx. Gamma UPL	0.52	0.52
95% Gamma USL	1.002	1.055			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.237	SD (KM)	0.184
Variance (KM)	0.0337	SE of Mean (KM)	0.0193
k hat (KM)	1.669	k star (KM)	1.624
nu hat (KM)	320.4	nu star (KM)	311.7
theta hat (KM)	0.142	theta star (KM)	0.146
80% gamma percentile (KM)	0.364	90% gamma percentile (KM)	0.485
95% gamma percentile (KM)	0.602	99% gamma percentile (KM)	0.865

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.567	0.566	95% Approx. Gamma UPL	0.504	0.501
95% KM Gamma Percentile	0.498	0.495	95% Gamma USL	0.946	0.981

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.914	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	3.1266E-4	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.128	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.105	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.241	Mean in Log Scale	-1.598
SD in Original Scale	0.183	SD in Log Scale	0.537
95% UTL95% Coverage	0.57	95% BCA UTL95% Coverage	0.9
95% Bootstrap (%) UTL95% Coverage	0.9	95% UPL (t)	0.496
90% Percentile (z)	0.402	95% Percentile (z)	0.489
99% Percentile (z)	0.705	95% USL	1.124

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.625	95% KM UTL (Lognormal)95% Coverage	0.573

KM SD of Logged Data	0.553	95% KM UPL (Lognormal)	0.496
95% KM Percentile Lognormal (z)	0.489	95% KM USL (Lognormal)	1.153

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.231	Mean in Log Scale	-1.653
SD in Original Scale	0.185	SD in Log Scale	0.545
95% UTL95% Coverage	0.548	95% UPL (t)	0.475
90% Percentile (z)	0.385	95% Percentile (z)	0.469
99% Percentile (z)	0.68	95% USL	1.091

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	94	95% UTL with95% Coverage	0.93
Approx, f used to compute achieved CC	1.649	Approximate Actual Confidence Coefficient achieved by UTL	0.864
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.752
95% USL	0.95	95% KM Chebyshev UPL	1.042

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluoropentanoic acid (PFPeA)

General Statistics

Total Number of Observations	93	Number of Missing Observations	6
Number of Distinct Observations	61		
Number of Detects	56	Number of Non-Detects	37
Number of Distinct Detects	40	Number of Distinct Non-Detects	25
Minimum Detect	0.1	Minimum Non-Detect	0.46
Maximum Detect	3	Maximum Non-Detect	0.93
Variance Detected	0.435	Percent Non-Detects	39.78%
Mean Detected	0.523	SD Detected	0.659
Mean of Detected Logged Data	-1.1	SD of Detected Logged Data	0.853

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.935	d2max (for USL)	3.185

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.608	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.311	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.136	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.418	KM SD	0.529
95% UTL95% Coverage	1.441	95% KM UPL (t)	1.301
90% KM Percentile (z)	1.095	95% KM Percentile (z)	1.287

99% KM Percentile (z)	1.647	95% KM USL	2.101

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.437	SD	0.522
95% UTL95% Coverage	1.447	95% UPL (t)	1.309
90% Percentile (z)	1.106	95% Percentile (z)	1.296
99% Percentile (z)	1.652	95% USL	2.1

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	4.083	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.774	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.205	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.122	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.245	k star (bias corrected MLE)	1.19
Theta hat (MLE)	0.42	Theta star (bias corrected MLE)	0.44
nu hat (MLE)	139.4	nu star (bias corrected)	133.3
MLE Mean (bias corrected)	0.523		
MLE Sd (bias corrected)	0.48	95% Percentile of Chisquare (2kstar)	6.709

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.405
Maximum	3	Median	0.226
SD	0.537	CV	1.327
k hat (MLE)	1.234	k star (bias corrected MLE)	1.201
Theta hat (MLE)	0.328	Theta star (bias corrected MLE)	0.337
nu hat (MLE)	229.5	nu star (bias corrected)	223.4
MLE Mean (bias corrected)	0.405	MLE Sd (bias corrected)	0.369
95% Percentile of Chisquare (2kstar)	6.749	90% Percentile	0.891
95% Percentile	1.137	99% Percentile	1.702

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.286	1.302	95% Approx. Gamma UPL	1.092	1.091
95% Gamma USL	2.513	2.736			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.418	SD (KM)	0.529
Variance (KM)	0.28	SE of Mean (KM)	0.0562
k hat (KM)	0.624	k star (KM)	0.611
nu hat (KM)	116	nu star (KM)	113.6
theta hat (KM)	0.67	theta star (KM)	0.684
80% gamma percentile (KM)	0.688	90% gamma percentile (KM)	1.082
95% gamma percentile (KM)	1.493	99% gamma percentile (KM)	2.486

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.224	1.208	95% Approx. Gamma UPL	1.052	1.029
95% KM Gamma Percentile	1.036	1.013	95% Gamma USL	2.295	2.39

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.886	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	1.5052E-5	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.137	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.108	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.422	Mean in Log Scale	-1.198
SD in Original Scale	0.527	SD in Log Scale	0.689
95% UTL95% Coverage	1.145	95% BCA UTL95% Coverage	2.5
95% Bootstrap (%) UTL95% Coverage	2.5	95% UPL (t)	0.954
90% Percentile (z)	0.73	95% Percentile (z)	0.937
99% Percentile (z)	1.499	95% USL	2.708

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.241	95% KM UTL (Lognormal)95% Coverage	1.192
KM SD of Logged Data	0.732	95% KM UPL (Lognormal)	0.982
95% KM Percentile Lognormal (z)	0.964	95% KM USL (Lognormal)	2.976

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.437	Mean in Log Scale	-1.141
SD in Original Scale	0.522	SD in Log Scale	0.671
95% UTL95% Coverage	1.171	95% UPL (t)	0.981
90% Percentile (z)	0.755	95% Percentile (z)	0.964
99% Percentile (z)	1.523	95% USL	2.708

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	91	95% UTL with95% Coverage	2.6
Approx, f used to compute achieved CC	1.596	Approximate Actual Confidence Coefficient achieved by UTL	0.85
Approximate Sample Size needed to achieve specified CC	93	95% UPL	1.89
95% USL	3	95% KM Chebyshev UPL	2.734

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorobutanoic acid (PFBA)

General Statistics

Total Number of Observations	58	Number of Missing Observations	40

Number of Distinct Observations	25		
Number of Detects	24	Number of Non-Detects	34
Number of Distinct Detects	21	Number of Distinct Non-Detects	10
Minimum Detect	0.22	Minimum Non-Detect	0.94
Maximum Detect	1.8	Maximum Non-Detect	1.8
Variance Detected	0.201	Percent Non-Detects	58.62%
Mean Detected	0.836	SD Detected	0.448
Mean of Detected Logged Data	-0.341	SD of Detected Logged Data	0.615

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.024	d2max (for USL)	3.014

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.949	**Shapiro Wilk GOF Test**
1% Shapiro Wilk Critical Value	0.884	Detected Data appear Normal at 1% Significance Level
Lilliefors Test Statistic	0.148	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.205	Detected Data appear Normal at 1% Significance Level

Detected Data appear Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.706	KM SD	0.366
95% UTL95% Coverage	1.446	95% KM UPL (t)	1.323
90% KM Percentile (z)	1.175	95% KM Percentile (z)	1.308
99% KM Percentile (z)	1.557	95% KM USL	1.808

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.705	SD	0.316
95% UTL95% Coverage	1.344	95% UPL (t)	1.238
90% Percentile (z)	1.11	95% Percentile (z)	1.224
99% Percentile (z)	1.44	95% USL	1.657

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.335	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.751	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.111	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.179	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.25	k star (bias corrected MLE)	2.871
Theta hat (MLE)	0.257	Theta star (bias corrected MLE)	0.291
nu hat (MLE)	156	nu star (bias corrected)	137.8
MLE Mean (bias corrected)	0.836		
MLE Sd (bias corrected)	0.493	95% Percentile of Chisquare (2kstar)	12.21

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.22	Mean	0.699

Maximum	1.8	Median	0.644
SD	0.338	CV	0.484
k hat (MLE)	4.774	k star (bias corrected MLE)	4.538
Theta hat (MLE)	0.146	Theta star (bias corrected MLE)	0.154
nu hat (MLE)	553.7	nu star (bias corrected)	526.4
MLE Mean (bias corrected)	0.699	MLE Sd (bias corrected)	0.328
95% Percentile of Chisquare (2kstar)	17.03	90% Percentile	1.139
95% Percentile	1.311	99% Percentile	1.678

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.493	1.52	95% Approx. Gamma UPL	1.319	1.333
95% Gamma USL	2.088	2.18			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.706	SD (KM)	0.366
Variance (KM)	0.134	SE of Mean (KM)	0.0659
k hat (KM)	3.734	k star (KM)	3.553
nu hat (KM)	433.2	nu star (KM)	412.1
theta hat (KM)	0.189	theta star (KM)	0.199
80% gamma percentile (KM)	0.988	90% gamma percentile (KM)	1.209
95% gamma percentile (KM)	1.414	99% gamma percentile (KM)	1.854

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.644	1.693	95% Approx. Gamma UPL	1.433	1.46
95% KM Gamma Percentile	1.408	1.433	95% Gamma USL	2.382	2.536

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.94	**Shapiro Wilk GOF Test**
10% Shapiro Wilk Critical Value	0.93	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.143	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.162	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.679	Mean in Log Scale	-0.5
SD in Original Scale	0.342	SD in Log Scale	0.478
95% UTL95% Coverage	1.598	95% BCA UTL95% Coverage	1.63
95% Bootstrap (%) UTL95% Coverage	1.63	95% UPL (t)	1.359
90% Percentile (z)	1.12	95% Percentile (z)	1.332
99% Percentile (z)	1.846	95% USL	2.566

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.493	95% KM UTL (Lognormal)95% Coverage	1.906
KM SD of Logged Data	0.562	95% KM UPL (Lognormal)	1.576
95% KM Percentile Lognormal (z)	1.54	95% KM USL (Lognormal)	3.325

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.705	Mean in Log Scale	-0.437
SD in Original Scale	0.316	SD in Log Scale	0.418
95% UTL95% Coverage	1.505	95% UPL (t)	1.307

90% Percentile (z)	1.104	95% Percentile (z)	1.284
99% Percentile (z)	1.707	95% USL	2.275

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	58	95% UTL with95% Coverage	1.8
Approx, f used to compute achieved CC	3.053	Approximate Actual Confidence Coefficient achieved by UTL	0.949
Approximate Sample Size needed to achieve specified CC	59	95% UPL	1.8
95% USL	1.8	95% KM Chebyshev UPL	2.314

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Attachment E-5 ProUCL Outputs – 2-12 Inches

Background Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.2 2/12/2025 6:10:57 PM
From File	Copy of NYSDEC_Rural_PFAS_Habitat_Review_PROUCL_20250212 (002)_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Perfluorooctanesulfonic acid (PFOS)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	53		
Number of Detects	95	Number of Non-Detects	3
Number of Distinct Detects	53	Number of Distinct Non-Detects	2
Minimum Detect	0.069	Minimum Non-Detect	0.24
Maximum Detect	1.8	Maximum Non-Detect	0.28
Variance Detected	0.068	Percent Non-Detects	3.061%
Mean Detected	0.354	SD Detected	0.261
Mean of Detected Logged Data	-1.247	SD of Detected Logged Data	0.646

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.793	**Normal GOF Test on Detected Observations Only**
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.169	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.105	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.348	KM SD	0.258
95% UTL95% Coverage	0.844	95% KM UPL (t)	0.778
90% KM Percentile (z)	0.678	95% KM Percentile (z)	0.772
99% KM Percentile (z)	0.947	95% KM USL	1.173

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.347	SD	0.26
95% UTL95% Coverage	0.847	95% UPL (t)	0.78
90% Percentile (z)	0.68	95% Percentile (z)	0.774
99% Percentile (z)	0.951	95% USL	1.179

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.595	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.762	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0868	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0927	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.555	k star (bias corrected MLE)	2.481
Theta hat (MLE)	0.139	Theta star (bias corrected MLE)	0.143
nu hat (MLE)	485.4	nu star (bias corrected)	471.4
MLE Mean (bias corrected)	0.354		
MLE Sd (bias corrected)	0.225	95% Percentile of Chisquare (2kstar)	11.01

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.069	Mean	0.347
Maximum	1.8	Median	0.28
SD	0.259	CV	0.747
k hat (MLE)	2.505	k star (bias corrected MLE)	2.435
Theta hat (MLE)	0.139	Theta star (bias corrected MLE)	0.143
nu hat (MLE)	491.1	nu star (bias corrected)	477.4
MLE Mean (bias corrected)	0.347	MLE Sd (bias corrected)	0.223
95% Percentile of Chisquare (2kstar)	10.87	90% Percentile	0.645
95% Percentile	0.775	99% Percentile	1.06

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.873	0.891	95% Approx. Gamma UPL	0.773	0.782
95% Gamma USL	1.501	1.61			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.348	SD (KM)	0.258
Variance (KM)	0.0663	SE of Mean (KM)	0.0262
k hat (KM)	1.828	k star (KM)	1.778
nu hat (KM)	358.2	nu star (KM)	348.6
theta hat (KM)	0.191	theta star (KM)	0.196
80% gamma percentile (KM)	0.528	90% gamma percentile (KM)	0.696
95% gamma percentile (KM)	0.858	99% gamma percentile (KM)	1.218

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.869	0.886	95% Approx. Gamma UPL	0.769	0.778
95% KM Gamma Percentile	0.76	0.768	95% Gamma USL	1.487	1.594

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.983	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.717	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0608	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0834	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.348	Mean in Log Scale	-1.264
SD in Original Scale	0.259	SD in Log Scale	0.643
95% UTL95% Coverage	0.976	95% BCA UTL95% Coverage	0.934
95% Bootstrap (%) UTL95% Coverage	1	95% UPL (t)	0.827
90% Percentile (z)	0.644	95% Percentile (z)	0.814
99% Percentile (z)	1.262	95% USL	2.217

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.266	95% KM UTL (Lognormal)95% Coverage	0.976
KM SD of Logged Data	0.644	95% KM UPL (Lognormal)	0.827
95% KM Percentile Lognormal (z)	0.814	95% KM USL (Lognormal)	2.22

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.347	Mean in Log Scale	-1.272
SD in Original Scale	0.26	SD in Log Scale	0.651
95% UTL95% Coverage	0.983	95% UPL (t)	0.831
90% Percentile (z)	0.646	95% Percentile (z)	0.818
99% Percentile (z)	1.275	95% USL	2.257

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	1.3
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.775
95% USL	1.8	95% KM Chebyshev UPL	1.477

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorooctanoic acid (PFOA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	53		
Number of Detects	92	Number of Non-Detects	6
Number of Distinct Detects	53	Number of Distinct Non-Detects	3
Minimum Detect	0.11	Minimum Non-Detect	0.24
Maximum Detect	4.7	Maximum Non-Detect	0.27
Variance Detected	0.289	Percent Non-Detects	6.122%
Mean Detected	0.471	SD Detected	0.538
Mean of Detected Logged Data	-1.017	SD of Detected Logged Data	0.653

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.519	**Normal GOF Test on Detected Observations Only**
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.264	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.107	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.454	KM SD	0.523
95% UTL95% Coverage	1.461	95% KM UPL (t)	1.327
90% KM Percentile (z)	1.124	95% KM Percentile (z)	1.314
99% KM Percentile (z)	1.671	95% KM USL	2.129

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.451	SD	0.527
95% UTL95% Coverage	1.467	95% UPL (t)	1.331
90% Percentile (z)	1.126	95% Percentile (z)	1.318
99% Percentile (z)	1.678	95% USL	2.14

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.886	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.765	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.148	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0945	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.041	k star (bias corrected MLE)	1.982
Theta hat (MLE)	0.231	Theta star (bias corrected MLE)	0.238
nu hat (MLE)	375.6	nu star (bias corrected)	364.7
MLE Mean (bias corrected)	0.471		
MLE Sd (bias corrected)	0.335	95% Percentile of Chisquare (2kstar)	9.429

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.446
Maximum	4.7	Median	0.34
SD	0.531	CV	1.19

k hat (MLE)	1.576	k star (bias corrected MLE)	1.534
Theta hat (MLE)	0.283	Theta star (bias corrected MLE)	0.291
nu hat (MLE)	308.9	nu star (bias corrected)	300.7
MLE Mean (bias corrected)	0.446	MLE Sd (bias corrected)	0.36
95% Percentile of Chisquare (2kstar)	7.933	90% Percentile	0.924
95% Percentile	1.153	99% Percentile	1.668

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.295	1.331	95% Approx. Gamma UPL	1.121	1.138
95% Gamma USL	2.424	2.67			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.454	SD (KM)	0.523
Variance (KM)	0.274	SE of Mean (KM)	0.0531
k hat (KM)	0.753	k star (KM)	0.737
nu hat (KM)	147.6	nu star (KM)	144.4
theta hat (KM)	0.603	theta star (KM)	0.616
80% gamma percentile (KM)	0.745	90% gamma percentile (KM)	1.126
95% gamma percentile (KM)	1.517	99% gamma percentile (KM)	2.446

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.201	1.195	95% Approx. Gamma UPL	1.053	1.04
95% KM Gamma Percentile	1.039	1.026	95% Gamma USL	2.146	2.234

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.959	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.0236	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.085	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0847	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.454	Mean in Log Scale	-1.061
SD in Original Scale	0.526	SD in Log Scale	0.657
95% UTL95% Coverage	1.228	95% BCA UTL95% Coverage	1.36
95% Bootstrap (%) UTL95% Coverage	1.5	95% UPL (t)	1.037
90% Percentile (z)	0.804	95% Percentile (z)	1.02
99% Percentile (z)	1.597	95% USL	2.839

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.06	95% KM UTL (Lognormal)95% Coverage	1.222
KM SD of Logged Data	0.654	95% KM UPL (Lognormal)	1.033
95% KM Percentile Lognormal (z)	1.016	95% KM USL (Lognormal)	2.816

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.451	Mean in Log Scale	-1.078
SD in Original Scale	0.527	SD in Log Scale	0.678
95% UTL95% Coverage	1.255	95% UPL (t)	1.054
90% Percentile (z)	0.81	95% Percentile (z)	1.037
99% Percentile (z)	1.645	95% USL	2.979

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	1.7
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	1.205
95% USL	4.7	95% KM Chebyshev UPL	2.745

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers

and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluoroheptanoic acid (PFHpA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	39		
Number of Detects	86	Number of Non-Detects	12
Number of Distinct Detects	34	Number of Distinct Non-Detects	7
Minimum Detect	0.058	Minimum Non-Detect	0.24
Maximum Detect	0.55	Maximum Non-Detect	0.3
Variance Detected	0.00937	Percent Non-Detects	12.24%
Mean Detected	0.171	SD Detected	0.0968
Mean of Detected Logged Data	-1.892	SD of Detected Logged Data	0.49

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.822	**Normal GOF Test on Detected Observations Only**
1% Shapiro Wilk P Value	6.550E-15	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.162	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.111	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.168	KM SD	0.0924
95% UTL95% Coverage	0.346	95% KM UPL (t)	0.322
90% KM Percentile (z)	0.286	95% KM Percentile (z)	0.32
99% KM Percentile (z)	0.383	95% KM USL	0.464

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.166	SD	0.0916
95% UTL95% Coverage	0.343	95% UPL (t)	0.319
90% Percentile (z)	0.284	95% Percentile (z)	0.317
99% Percentile (z)	0.379	95% USL	0.46

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.304	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.756	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.113	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0968	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	4.113	k star (bias corrected MLE)	3.977
Theta hat (MLE)	0.0416	Theta star (bias corrected MLE)	0.043
nu hat (MLE)	707.5	nu star (bias corrected)	684.1
MLE Mean (bias corrected)	0.171		
MLE Sd (bias corrected)	0.0858	95% Percentile of Chisquare (2kstar)	15.44

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.058	Mean	0.168
Maximum	0.55	Median	0.14
SD	0.0918	CV	0.547
k hat (MLE)	4.479	k star (bias corrected MLE)	4.348
Theta hat (MLE)	0.0375	Theta star (bias corrected MLE)	0.0386
nu hat (MLE)	877.8	nu star (bias corrected)	852.3

MLE Mean (bias corrected)	0.168	MLE Sd (bias corrected)	0.0805
95% Percentile of Chisquare (2kstar)	16.49	90% Percentile	0.276
95% Percentile	0.318	99% Percentile	0.409

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.351	0.354	95% Approx. Gamma UPL	0.318	0.319
95% Gamma USL	0.544	0.566			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.168	SD (KM)	0.0924
Variance (KM)	0.00854	SE of Mean (KM)	0.0096
k hat (KM)	3.296	k star (KM)	3.202
nu hat (KM)	646	nu star (KM)	627.6
theta hat (KM)	0.0509	theta star (KM)	0.0524
80% gamma percentile (KM)	0.237	90% gamma percentile (KM)	0.294
95% gamma percentile (KM)	0.346	99% gamma percentile (KM)	0.458

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.354	0.357	95% Approx. Gamma UPL	0.321	0.322
95% KM Gamma Percentile	0.318	0.319	95% Gamma USL	0.552	0.575

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.965	**Shapiro Wilk GOF Test**	
10% Shapiro Wilk P Value	0.0849	Data Not Lognormal at 10% Significance Level	
Lilliefors Test Statistic	0.084	**Lilliefors GOF Test**	
10% Lilliefors Critical Value	0.0876	Detected Data appear Lognormal at 10% Significance Level	

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.168	Mean in Log Scale	-1.902
SD in Original Scale	0.0916	SD in Log Scale	0.465
95% UTL95% Coverage	0.365	95% BCA UTL95% Coverage	0.47
95% Bootstrap (%) UTL95% Coverage	0.47	95% UPL (t)	0.324
90% Percentile (z)	0.271	95% Percentile (z)	0.321
99% Percentile (z)	0.44	95% USL	0.661

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.906	95% KM UTL (Lognormal)95% Coverage	0.373
KM SD of Logged Data	0.477	95% KM UPL (Lognormal)	0.329
95% KM Percentile Lognormal (z)	0.326	95% KM USL (Lognormal)	0.684

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.166	Mean in Log Scale	-1.908
SD in Original Scale	0.0916	SD in Log Scale	0.462
95% UTL95% Coverage	0.361	95% UPL (t)	0.321
90% Percentile (z)	0.268	95% Percentile (z)	0.317
99% Percentile (z)	0.434	95% USL	0.651

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	0.5
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.382
95% USL	0.55	95% KM Chebyshev UPL	0.573

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorononanoic acid (PFNA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	44		
Number of Detects	80	Number of Non-Detects	18
Number of Distinct Detects	42	Number of Distinct Non-Detects	9
Minimum Detect	0.066	Minimum Non-Detect	0.22
Maximum Detect	0.69	Maximum Non-Detect	0.3
Variance Detected	0.0125	Percent Non-Detects	18.37%
Mean Detected	0.175	SD Detected	0.112
Mean of Detected Logged Data	-1.904	SD of Detected Logged Data	0.547

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.817	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	5.129E-14	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.168	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.115	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.167	KM SD	0.104
95% UTL95% Coverage	0.368	95% KM UPL (t)	0.341
90% KM Percentile (z)	0.3	95% KM Percentile (z)	0.338
99% KM Percentile (z)	0.409	95% KM USL	0.501

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.166	SD	0.103
95% UTL95% Coverage	0.364	95% UPL (t)	0.338
90% Percentile (z)	0.298	95% Percentile (z)	0.335
99% Percentile (z)	0.405	95% USL	0.495

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.362	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.758	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.117	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.1	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.301	k star (bias corrected MLE)	3.186
Theta hat (MLE)	0.0529	Theta star (bias corrected MLE)	0.0548
nu hat (MLE)	528.2	nu star (bias corrected)	509.7
MLE Mean (bias corrected)	0.175		
MLE Sd (bias corrected)	0.0978	95% Percentile of Chisquare (2kstar)	13.14

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.066	Mean	0.167
Maximum	0.69	Median	0.139
SD	0.104	CV	0.621
k hat (MLE)	3.649	k star (bias corrected MLE)	3.544
Theta hat (MLE)	0.0457	Theta star (bias corrected MLE)	0.0471
nu hat (MLE)	715.1	nu star (bias corrected)	694.6
MLE Mean (bias corrected)	0.167	MLE Sd (bias corrected)	0.0886
95% Percentile of Chisquare (2kstar)	14.19	90% Percentile	0.286
95% Percentile	0.334	99% Percentile	0.438

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.371	0.374	95% Approx. Gamma UPL	0.334	0.335
95% Gamma USL	0.596	0.622			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.167	SD (KM)	0.104
Variance (KM)	0.0109	SE of Mean (KM)	0.0109
k hat (KM)	2.564	k star (KM)	2.492
nu hat (KM)	502.5	nu star (KM)	488.4
theta hat (KM)	0.0651	theta star (KM)	0.067
80% gamma percentile (KM)	0.243	90% gamma percentile (KM)	0.309
95% gamma percentile (KM)	0.37	99% gamma percentile (KM)	0.504

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.374	0.378	95% Approx. Gamma UPL	0.336	0.338
95% KM Gamma Percentile	0.333	0.334	95% Gamma USL	0.604	0.633

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.951	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.011	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0976	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0907	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.167	Mean in Log Scale	-1.931
SD in Original Scale	0.103	SD in Log Scale	0.506
95% UTL95% Coverage	0.385	95% BCA UTL95% Coverage	0.45
95% Bootstrap (%) UTL95% Coverage	0.45	95% UPL (t)	0.338
90% Percentile (z)	0.277	95% Percentile (z)	0.333
99% Percentile (z)	0.471	95% USL	0.734

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.939	95% KM UTL (Lognormal)95% Coverage	0.395
KM SD of Logged Data	0.524	95% KM UPL (Lognormal)	0.345
95% KM Percentile Lognormal (z)	0.341	95% KM USL (Lognormal)	0.771

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.166	Mean in Log Scale	-1.93
SD in Original Scale	0.103	SD in Log Scale	0.498
95% UTL95% Coverage	0.379	95% UPL (t)	0.334
90% Percentile (z)	0.275	95% Percentile (z)	0.329
99% Percentile (z)	0.463	95% USL	0.716

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	0.49
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.391
95% USL	0.69	95% KM Chebyshev UPL	0.624

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorohexanoic acid (PFHxA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	44		
Number of Detects	70	Number of Non-Detects	28
Number of Distinct Detects	38	Number of Distinct Non-Detects	9
Minimum Detect	0.038	Minimum Non-Detect	0.24
Maximum Detect	0.58	Maximum Non-Detect	0.36
Variance Detected	0.00826	Percent Non-Detects	28.57%
Mean Detected	0.149	SD Detected	0.0909
Mean of Detected Logged Data	-2.055	SD of Detected Logged Data	0.546

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.842	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	4.186E-10	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.14	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.122	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.143	KM SD	0.0824
95% UTL95% Coverage	0.302	95% KM UPL (t)	0.281
90% KM Percentile (z)	0.249	95% KM Percentile (z)	0.279
99% KM Percentile (z)	0.335	95% KM USL	0.407

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.145	SD	0.0773
95% UTL95% Coverage	0.294	95% UPL (t)	0.274
90% Percentile (z)	0.244	95% Percentile (z)	0.272
99% Percentile (z)	0.325	95% USL	0.393

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.472	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.757	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.0833	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.107	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.473	k star (bias corrected MLE)	3.334
Theta hat (MLE)	0.0429	Theta star (bias corrected MLE)	0.0447
nu hat (MLE)	486.2	nu star (bias corrected)	466.7
MLE Mean (bias corrected)	0.149		
MLE Sd (bias corrected)	0.0816	95% Percentile of Chisquare (2kstar)	13.58

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.038	Mean	0.143
Maximum	0.58	Median	0.126
SD	0.0808	CV	0.566
k hat (MLE)	4.051	k star (bias corrected MLE)	3.934
Theta hat (MLE)	0.0352	Theta star (bias corrected MLE)	0.0363
nu hat (MLE)	794	nu star (bias corrected)	771
MLE Mean (bias corrected)	0.143	MLE Sd (bias corrected)	0.0719
95% Percentile of Chisquare (2kstar)	15.32	90% Percentile	0.239
95% Percentile	0.278	99% Percentile	0.36

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.307	0.311	95% Approx. Gamma UPL	0.278	0.28
95% Gamma USL	0.485	0.508			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.143	SD (KM)	0.0824
Variance (KM)	0.00679	SE of Mean (KM)	0.00912
k hat (KM)	3.022	k star (KM)	2.936
nu hat (KM)	592.3	nu star (KM)	575.5
theta hat (KM)	0.0474	theta star (KM)	0.0488
80% gamma percentile (KM)	0.205	90% gamma percentile (KM)	0.255
95% gamma percentile (KM)	0.302	99% gamma percentile (KM)	0.405

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.314	0.319	95% Approx. Gamma UPL	0.283	0.286
95% KM Gamma Percentile	0.281	0.283	95% Gamma USL	0.501	0.528

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.986	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.873	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0468	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0969	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.142	Mean in Log Scale	-2.078
SD in Original Scale	0.08	SD in Log Scale	0.49
95% UTL95% Coverage	0.322	95% BCA UTL95% Coverage	0.342
95% Bootstrap (%) UTL95% Coverage	0.35	95% UPL (t)	0.284
90% Percentile (z)	0.235	95% Percentile (z)	0.28
99% Percentile (z)	0.391	95% USL	0.601

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.082	95% KM UTL (Lognormal)95% Coverage	0.34
KM SD of Logged Data	0.521	95% KM UPL (Lognormal)	0.298
95% KM Percentile Lognormal (z)	0.294	95% KM USL (Lognormal)	0.662

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.145	Mean in Log Scale	-2.041
SD in Original Scale	0.0773	SD in Log Scale	0.464
95% UTL95% Coverage	0.317	95% UPL (t)	0.282
90% Percentile (z)	0.235	95% Percentile (z)	0.279
99% Percentile (z)	0.382	95% USL	0.574

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	0.39
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.35
95% USL	0.58	95% KM Chebyshev UPL	0.504

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluoropentanoic acid (PFPeA)

General Statistics

Total Number of Observations	92	Number of Missing Observations	7
Number of Distinct Observations	39		
Number of Detects	37	Number of Non-Detects	55
Number of Distinct Detects	21	Number of Distinct Non-Detects	19
Minimum Detect	0.092	Minimum Non-Detect	0.44
Maximum Detect	3.2	Maximum Non-Detect	1
Variance Detected	0.254	Percent Non-Detects	59.78%
Mean Detected	0.264	SD Detected	0.504
Mean of Detected Logged Data	-1.708	SD of Detected Logged Data	0.631

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.937	d2max (for USL)	3.181

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.291	**Shapiro Wilk GOF Test**
1% Shapiro Wilk Critical Value	0.814	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.395	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.168	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.212	KM SD	0.323
95% UTL95% Coverage	0.837	95% KM UPL (t)	0.751
90% KM Percentile (z)	0.626	95% KM Percentile (z)	0.743
99% KM Percentile (z)	0.963	95% KM USL	1.239

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.267	SD	0.318
95% UTL95% Coverage	0.883	95% UPL (t)	0.798
90% Percentile (z)	0.675	95% Percentile (z)	0.79
99% Percentile (z)	1.007	95% USL	1.279

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	4.688	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.767	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.29	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.148	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.468	k star (bias corrected MLE)	1.367
Theta hat (MLE)	0.18	Theta star (bias corrected MLE)	0.193
nu hat (MLE)	108.6	nu star (bias corrected)	101.1
MLE Mean (bias corrected)	0.264		
MLE Sd (bias corrected)	0.226	95% Percentile of Chisquare (2kstar)	7.348

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.215
Maximum	3.2	Median	0.151
SD	0.341	CV	1.584
k hat (MLE)	1.123	k star (bias corrected MLE)	1.094
Theta hat (MLE)	0.191	Theta star (bias corrected MLE)	0.197
nu hat (MLE)	206.6	nu star (bias corrected)	201.2
MLE Mean (bias corrected)	0.215	MLE Sd (bias corrected)	0.206
95% Percentile of Chisquare (2kstar)	6.349	90% Percentile	0.484
95% Percentile	0.624	99% Percentile	0.947

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.706	0.74	95% Approx. Gamma UPL	0.597	0.615
95% Gamma USL	1.394	1.599			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.212	SD (KM)	0.323
Variance (KM)	0.104	SE of Mean (KM)	0.0354
k hat (KM)	0.429	k star (KM)	0.422
nu hat (KM)	78.87	nu star (KM)	77.63
theta hat (KM)	0.493	theta star (KM)	0.501
80% gamma percentile (KM)	0.343	90% gamma percentile (KM)	0.592
95% gamma percentile (KM)	0.863	99% gamma percentile (KM)	1.54

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.505	0.483	95% Approx. Gamma UPL	0.447	0.427
95% KM Gamma Percentile	0.441	0.422	95% Gamma USL	0.848	0.826

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.765	**Shapiro Wilk GOF Test**
10% Shapiro Wilk Critical Value	0.946	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.176	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.132	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.214	Mean in Log Scale	-1.742
SD in Original Scale	0.322	SD in Log Scale	0.467
95% UTL95% Coverage	0.433	95% BCA UTL95% Coverage	0.35
95% Bootstrap (%) UTL95% Coverage	0.41	95% UPL (t)	0.382
90% Percentile (z)	0.319	95% Percentile (z)	0.378
99% Percentile (z)	0.519	95% USL	0.774

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.77	95% KM UTL (Lognormal)95% Coverage	0.442
KM SD of Logged Data	0.492	95% KM UPL (Lognormal)	0.387
95% KM Percentile Lognormal (z)	0.383	95% KM USL (Lognormal)	0.814

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.267	Mean in Log Scale	-1.479
SD in Original Scale	0.318	SD in Log Scale	0.45
95% UTL95% Coverage	0.545	95% UPL (t)	0.483
90% Percentile (z)	0.406	95% Percentile (z)	0.478
99% Percentile (z)	0.649	95% USL	0.954

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	91	95% UTL with95% Coverage	3.2
Approx, f used to compute achieved CC	2.395	Approximate Actual Confidence Coefficient achieved by UTL	0.948
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.63
95% USL	3.2	95% KM Chebyshev UPL	1.627

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorobutanoic acid (PFBA)

General Statistics

Total Number of Observations	71	Number of Missing Observations	27
Number of Distinct Observations	36		
Number of Detects	25	Number of Non-Detects	46
Number of Distinct Detects	23	Number of Distinct Non-Detects	13
Minimum Detect	0.15	Minimum Non-Detect	0.9
Maximum Detect	3.2	Maximum Non-Detect	1.4
Variance Detected	0.347	Percent Non-Detects	64.79%
Mean Detected	0.536	SD Detected	0.589
Mean of Detected Logged Data	-0.885	SD of Detected Logged Data	0.648

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.983	d2max (for USL)	3.089

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.509	**Shapiro Wilk GOF Test**
1% Shapiro Wilk Critical Value	0.886	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.291	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.201	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.464	KM SD	0.381
95% UTL95% Coverage	1.219	95% KM UPL (t)	1.103
90% KM Percentile (z)	0.952	95% KM Percentile (z)	1.09
99% KM Percentile (z)	1.35	95% KM USL	1.64

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.534	SD	0.348
95% UTL95% Coverage	1.225	95% UPL (t)	1.119
90% Percentile (z)	0.981	95% Percentile (z)	1.107
99% Percentile (z)	1.344	95% USL	1.61

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.084	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.756	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.163	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.177	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.072	k star (bias corrected MLE)	1.85
Theta hat (MLE)	0.258	Theta star (bias corrected MLE)	0.289
nu hat (MLE)	103.6	nu star (bias corrected)	92.51
MLE Mean (bias corrected)	0.536		
MLE Sd (bias corrected)	0.394	95% Percentile of Chisquare (2kstar)	8.998

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.472
Maximum	3.2	Median	0.392
SD	0.42	CV	0.89
k hat (MLE)	1.723	k star (bias corrected MLE)	1.659
Theta hat (MLE)	0.274	Theta star (bias corrected MLE)	0.285
nu hat (MLE)	244.6	nu star (bias corrected)	235.6
MLE Mean (bias corrected)	0.472	MLE Sd (bias corrected)	0.367
95% Percentile of Chisquare (2kstar)	8.36	90% Percentile	0.96
95% Percentile	1.189	99% Percentile	1.704

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.387	1.471	95% Approx. Gamma UPL	1.178	1.228
95% Gamma USL	2.354	2.67			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.464	SD (KM)	0.381
Variance (KM)	0.145	SE of Mean (KM)	0.0566
k hat (KM)	1.482	k star (KM)	1.429
nu hat (KM)	210.4	nu star (KM)	202.9
theta hat (KM)	0.313	theta star (KM)	0.325
80% gamma percentile (KM)	0.721	90% gamma percentile (KM)	0.978
95% gamma percentile (KM)	1.228	99% gamma percentile (KM)	1.794

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.1	1.104	95% Approx. Gamma UPL	0.964	0.962
95% KM Gamma Percentile	0.95	0.947	95% Gamma USL	1.699	1.759

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.927	**Shapiro Wilk GOF Test**
10% Shapiro Wilk Critical Value	0.931	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.11	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.159	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.464	Mean in Log Scale	-0.923
SD in Original Scale	0.378	SD in Log Scale	0.512
95% UTL95% Coverage	1.095	95% BCA UTL95% Coverage	0.927
95% Bootstrap (%) UTL95% Coverage	0.927	95% UPL (t)	0.938
90% Percentile (z)	0.765	95% Percentile (z)	0.922
99% Percentile (z)	1.306	95% USL	1.929

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.94	95% KM UTL (Lognormal)95% Coverage	1.153
KM SD of Logged Data	0.546	95% KM UPL (Lognormal)	0.977
95% KM Percentile Lognormal (z)	0.959	95% KM USL (Lognormal)	2.109

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.534	Mean in Log Scale	-0.722
SD in Original Scale	0.348	SD in Log Scale	0.408
95% UTL95% Coverage	1.09	95% UPL (t)	0.963
90% Percentile (z)	0.819	95% Percentile (z)	0.95
99% Percentile (z)	1.254	95% USL	1.711

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	70	95% UTL with95% Coverage	3.2
Approx, f used to compute achieved CC	1.842	Approximate Actual Confidence Coefficient achieved by UTL	0.876
Approximate Sample Size needed to achieve specified CC	59	95% UPL	1.3
95% USL	3.2	95% KM Chebyshev UPL	2.136

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluoroundecanoic acid (PFUnA)

General Statistics

Total Number of Observations	98	Number of Missing Observations	1
Number of Distinct Observations	30		
Number of Detects	29	Number of Non-Detects	69
Number of Distinct Detects	19	Number of Distinct Non-Detects	13
Minimum Detect	0.084	Minimum Non-Detect	0.22
Maximum Detect	0.58	Maximum Non-Detect	0.36
Variance Detected	0.0132	Percent Non-Detects	70.41%
Mean Detected	0.156	SD Detected	0.115
Mean of Detected Logged Data	-2.007	SD of Detected Logged Data	0.483

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.927	d2max (for USL)	3.203

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.589	**Shapiro Wilk GOF Test**
1% Shapiro Wilk Critical Value	0.898	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.278	**Lilliefors GOF Test**
1% Lilliefors Critical Value	0.189	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.132	KM SD	0.0704
95% UTL95% Coverage	0.268	95% KM UPL (t)	0.25
90% KM Percentile (z)	0.223	95% KM Percentile (z)	0.248
99% KM Percentile (z)	0.296	95% KM USL	0.358

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.138	SD	0.0641
95% UTL95% Coverage	0.261	95% UPL (t)	0.245
90% Percentile (z)	0.22	95% Percentile (z)	0.243
99% Percentile (z)	0.287	95% USL	0.343

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.587	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.751	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.249	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.164	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.566	k star (bias corrected MLE)	3.22
Theta hat (MLE)	0.0437	Theta star (bias corrected MLE)	0.0483
nu hat (MLE)	206.8	nu star (bias corrected)	186.8
MLE Mean (bias corrected)	0.156		
MLE Sd (bias corrected)	0.0867	95% Percentile of Chisquare (2kstar)	13.25

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0354	Mean	0.136
Maximum	0.58	Median	0.122
SD	0.0787	CV	0.581
k hat (MLE)	4.208	k star (bias corrected MLE)	4.086
Theta hat (MLE)	0.0322	Theta star (bias corrected MLE)	0.0332
nu hat (MLE)	824.8	nu star (bias corrected)	800.9
MLE Mean (bias corrected)	0.136	MLE Sd (bias corrected)	0.0671
95% Percentile of Chisquare (2kstar)	15.75	90% Percentile	0.225
95% Percentile	0.261	99% Percentile	0.338

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.288	0.291	95% Approx. Gamma UPL	0.261	0.262
95% Gamma USL	0.452	0.472			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.132	SD (KM)	0.0704
Variance (KM)	0.00496	SE of Mean (KM)	0.00926
k hat (KM)	3.541	k star (KM)	3.439
nu hat (KM)	694	nu star (KM)	674.1
theta hat (KM)	0.0374	theta star (KM)	0.0385
80% gamma percentile (KM)	0.186	90% gamma percentile (KM)	0.228
95% gamma percentile (KM)	0.268	99% gamma percentile (KM)	0.352

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.246	0.244	95% Approx. Gamma UPL	0.226	0.224
95% KM Gamma Percentile	0.225	0.222	95% Gamma USL	0.357	0.36

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.801	**Shapiro Wilk GOF Test**
10% Shapiro Wilk Critical Value	0.937	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.217	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.148	Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.136	Mean in Log Scale	-2.072
SD in Original Scale	0.0703	SD in Log Scale	0.359
95% UTL95% Coverage	0.251	95% BCA UTL95% Coverage	0.25
95% Bootstrap (%) UTL95% Coverage	0.262	95% UPL (t)	0.229
90% Percentile (z)	0.199	95% Percentile (z)	0.227
99% Percentile (z)	0.29	95% USL	0.397

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.098	95% KM UTL (Lognormal)95% Coverage	0.24
KM SD of Logged Data	0.347	95% KM UPL (Lognormal)	0.219
95% KM Percentile Lognormal (z)	0.217	95% KM USL (Lognormal)	0.373

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.138	Mean in Log Scale	-2.031
SD in Original Scale	0.0641	SD in Log Scale	0.275
95% UTL95% Coverage	0.223	95% UPL (t)	0.208
90% Percentile (z)	0.187	95% Percentile (z)	0.206
99% Percentile (z)	0.249	95% USL	0.317

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	96	95% UTL with95% Coverage	0.5
Approx, f used to compute achieved CC	1.684	Approximate Actual Confidence Coefficient achieved by UTL	0.873
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.341
95% USL	0.58	95% KM Chebyshev UPL	0.441

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Attachment E-6 ProUCL Outputs – 2-12 Inches – Minus Outliers

Background Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.2 2/17/2025 1:13:18 PM
From File	NYSDEC_Rural_PFAS_Habitat_Review_PROUCL_20250212_NO OUTLIERS_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Perfluorooctanesulfonic acid (PFOS)

General Statistics

Total Number of Observations	97	Number of Missing Observations	2
Number of Distinct Observations	52		
Number of Detects	94	Number of Non-Detects	3
Number of Distinct Detects	52	Number of Distinct Non-Detects	2
Minimum Detect	0.069	Minimum Non-Detect	0.24
Maximum Detect	1.3	Maximum Non-Detect	0.28
Variance Detected	0.046	Percent Non-Detects	3.093%
Mean Detected	0.339	SD Detected	0.214
Mean of Detected Logged Data	-1.267	SD of Detected Logged Data	0.62

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.928	d2max (for USL)	3.199

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.879	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	1.614E-10	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.149	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.106	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.333	KM SD	0.212
95% UTL95% Coverage	0.743	95% KM UPL (t)	0.688
90% KM Percentile (z)	0.605	95% KM Percentile (z)	0.682
99% KM Percentile (z)	0.827	95% KM USL	1.012

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.332	SD	0.214
95% UTL95% Coverage	0.745	95% UPL (t)	0.69
90% Percentile (z)	0.607	95% Percentile (z)	0.684
99% Percentile (z)	0.83	95% USL	1.017

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.357	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.76	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.0699	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.093	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.883	k star (bias corrected MLE)	2.798
Theta hat (MLE)	0.117	Theta star (bias corrected MLE)	0.121
nu hat (MLE)	541.9	nu star (bias corrected)	526
MLE Mean (bias corrected)	0.339		
MLE Sd (bias corrected)	0.202	95% Percentile of Chisquare (2kstar)	11.98

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.069	Mean	0.333
Maximum	1.3	Median	0.28
SD	0.214	CV	0.641
k hat (MLE)	2.852	k star (bias corrected MLE)	2.771
Theta hat (MLE)	0.117	Theta star (bias corrected MLE)	0.12
nu hat (MLE)	553.3	nu star (bias corrected)	537.5
MLE Mean (bias corrected)	0.333	MLE Sd (bias corrected)	0.2
95% Percentile of Chisquare (2kstar)	11.9	90% Percentile	0.601
95% Percentile	0.715	99% Percentile	0.963

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.805	0.824	95% Approx. Gamma UPL	0.716	0.727
95% Gamma USL	1.348	1.448			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.333	SD (KM)	0.212
Variance (KM)	0.0451	SE of Mean (KM)	0.0217
k hat (KM)	2.464	k star (KM)	2.395
nu hat (KM)	478	nu star (KM)	464.5
theta hat (KM)	0.135	theta star (KM)	0.139
80% gamma percentile (KM)	0.488	90% gamma percentile (KM)	0.622
95% gamma percentile (KM)	0.747	99% gamma percentile (KM)	1.024

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.802	0.821	95% Approx. Gamma UPL	0.714	0.725
95% KM Gamma Percentile	0.706	0.716	95% Gamma USL	1.342	1.441

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.979	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.501	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0604	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0838	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.333	Mean in Log Scale	-1.283
SD in Original Scale	0.213	SD in Log Scale	0.618

95% UTL95% Coverage	0.913	95% BCA UTL95% Coverage	0.87
95% Bootstrap (%) UTL95% Coverage	0.87	95% UPL (t)	0.778
90% Percentile (z)	0.612	95% Percentile (z)	0.766
99% Percentile (z)	1.167	95% USL	2.002

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.285	95% KM UTL (Lognormal)95% Coverage	0.913
KM SD of Logged Data	0.619	95% KM UPL (Lognormal)	0.778
95% KM Percentile Lognormal (z)	0.766	95% KM USL (Lognormal)	2.007

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.332	Mean in Log Scale	-1.291
SD in Original Scale	0.214	SD in Log Scale	0.626
95% UTL95% Coverage	0.92	95% UPL (t)	0.782
90% Percentile (z)	0.613	95% Percentile (z)	0.77
99% Percentile (z)	1.18	95% USL	2.039

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	95	95% UTL with95% Coverage	1
Approx, f used to compute achieved CC	1.667	Approximate Actual Confidence Coefficient achieved by UTL	0.869
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.77
95% USL	1.3	95% KM Chebyshev UPL	1.263

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluorooctanoic acid (PFOA)

General Statistics

Total Number of Observations	97	Number of Missing Observations	2
Number of Distinct Observations	52		
Number of Detects	91	Number of Non-Detects	6
Number of Distinct Detects	52	Number of Distinct Non-Detects	3
Minimum Detect	0.11	Minimum Non-Detect	0.24
Maximum Detect	1.7	Maximum Non-Detect	0.27
Variance Detected	0.0917	Percent Non-Detects	6.186%
Mean Detected	0.425	SD Detected	0.303
Mean of Detected Logged Data	-1.045	SD of Detected Logged Data	0.597

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.928	d2max (for USL)	3.199

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.779	**Normal GOF Test on Detected Observations Only**	
1% Shapiro Wilk P Value	0	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.182	**Lilliefors GOF Test**	

1% Lilliefors Critical Value	0.108	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.41	KM SD	0.298
95% UTL95% Coverage	0.984	95% KM UPL (t)	0.907
90% KM Percentile (z)	0.791	95% KM Percentile (z)	0.9
99% KM Percentile (z)	1.102	95% KM USL	1.362

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.407	SD	0.302
95% UTL95% Coverage	0.988	95% UPL (t)	0.91
90% Percentile (z)	0.793	95% Percentile (z)	0.903
99% Percentile (z)	1.109	95% USL	1.372

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.416	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.76	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0966	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.0945	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.802	k star (bias corrected MLE)	2.717
Theta hat (MLE)	0.152	Theta star (bias corrected MLE)	0.156
nu hat (MLE)	510	nu star (bias corrected)	494.6
MLE Mean (bias corrected)	0.425		
MLE Sd (bias corrected)	0.258	95% Percentile of Chisquare (2kstar)	11.74

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0531	Mean	0.407
Maximum	1.7	Median	0.34
SD	0.302	CV	0.743
k hat (MLE)	2.513	k star (bias corrected MLE)	2.443
Theta hat (MLE)	0.162	Theta star (bias corrected MLE)	0.166
nu hat (MLE)	487.6	nu star (bias corrected)	473.9
MLE Mean (bias corrected)	0.407	MLE Sd (bias corrected)	0.26
95% Percentile of Chisquare (2kstar)	10.89	90% Percentile	0.755
95% Percentile	0.907	99% Percentile	1.239

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.022	1.04	95% Approx. Gamma UPL	0.904	0.912
95% Gamma USL	1.752	1.873			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.41	SD (KM)	0.298

Variance (KM)	0.0886	SE of Mean (KM)	0.0304
k hat (KM)	1.899	k star (KM)	1.847
nu hat (KM)	368.4	nu star (KM)	358.3
theta hat (KM)	0.216	theta star (KM)	0.222
80% gamma percentile (KM)	0.62	90% gamma percentile (KM)	0.813
95% gamma percentile (KM)	0.998	99% gamma percentile (KM)	1.41

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.998	1.011	95% Approx. Gamma UPL	0.887	0.891
95% KM Gamma Percentile	0.877	0.88	95% Gamma USL	1.684	1.782

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.969	**Shapiro Wilk GOF Test**
10% Shapiro Wilk P Value	0.139	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.0607	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.0852	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.41	Mean in Log Scale	-1.086
SD in Original Scale	0.299	SD in Log Scale	0.602
95% UTL95% Coverage	1.078	95% BCA UTL95% Coverage	1.3
95% Bootstrap (%) UTL95% Coverage	1.3	95% UPL (t)	0.922
90% Percentile (z)	0.73	95% Percentile (z)	0.909
99% Percentile (z)	1.369	95% USL	2.315

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.087	95% KM UTL (Lognormal)95% Coverage	1.076
KM SD of Logged Data	0.601	95% KM UPL (Lognormal)	0.921
95% KM Percentile Lognormal (z)	0.907	95% KM USL (Lognormal)	2.309

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.407	Mean in Log Scale	-1.106
SD in Original Scale	0.302	SD in Log Scale	0.626
95% UTL95% Coverage	1.106	95% UPL (t)	0.941
90% Percentile (z)	0.738	95% Percentile (z)	0.926
99% Percentile (z)	1.419	95% USL	2.449

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	95	95% UTL with95% Coverage	1.5
Approx, f used to compute achieved CC	1.667	Approximate Actual Confidence Coefficient achieved by UTL	0.869
Approximate Sample Size needed to achieve specified CC	93	95% UPL	1.2
95% USL	1.7	95% KM Chebyshev UPL	1.714

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.

The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Perfluoroundecanoic acid (PFUnA)

General Statistics

Total Number of Observations	96	Number of Missing Observations	3
Number of Distinct Observations	28		
Number of Detects	27	Number of Non-Detects	69
Number of Distinct Detects	17	Number of Distinct Non-Detects	13
Minimum Detect	0.084	Minimum Non-Detect	0.22
Maximum Detect	0.25	Maximum Non-Detect	0.36
Variance Detected	0.0019	Percent Non-Detects	71.88%
Mean Detected	0.127	SD Detected	0.0436
Mean of Detected Logged Data	-2.11	SD of Detected Logged Data	0.302

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	1.93	d2max (for USL)	3.196

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.832	**Shapiro Wilk GOF Test**	
1% Shapiro Wilk Critical Value	0.894	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.215	**Lilliefors GOF Test**	
1% Lilliefors Critical Value	0.194	Data Not Normal at 1% Significance Level	

Data Not Normal at 1% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.124	KM SD	0.0387
95% UTL95% Coverage	0.199	95% KM UPL (t)	0.189
90% KM Percentile (z)	0.174	95% KM Percentile (z)	0.188
99% KM Percentile (z)	0.214	95% KM USL	0.248

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.13	SD	0.0262
95% UTL95% Coverage	0.18	95% UPL (t)	0.173
90% Percentile (z)	0.163	95% Percentile (z)	0.173
99% Percentile (z)	0.191	95% USL	0.213

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.108	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.744	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.172	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.168	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	10.68	k star (bias corrected MLE)	9.521
Theta hat (MLE)	0.0119	Theta star (bias corrected MLE)	0.0134
nu hat (MLE)	576.9	nu star (bias corrected)	514.1
MLE Mean (bias corrected)	0.127		
MLE Sd (bias corrected)	0.0412	95% Percentile of Chisquare (2kstar)	30.2

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0703	Mean	0.123
Maximum	0.25	Median	0.12
SD	0.0336	CV	0.273
k hat (MLE)	14.78	k star (bias corrected MLE)	14.33
Theta hat (MLE)	0.00834	Theta star (bias corrected MLE)	0.0086
nu hat (MLE)	2838	nu star (bias corrected)	2751
MLE Mean (bias corrected)	0.123	MLE Sd (bias corrected)	0.0326
95% Percentile of Chisquare (2kstar)	42.14	90% Percentile	0.166
95% Percentile	0.181	99% Percentile	0.211

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.193	0.194	95% Approx. Gamma UPL	0.182	0.182
95% Gamma USL	0.253	0.257			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.124	SD (KM)	0.0387
Variance (KM)	0.0015	SE of Mean (KM)	0.00715
k hat (KM)	10.28	k star (KM)	9.962
nu hat (KM)	1973	nu star (KM)	1913
theta hat (KM)	0.0121	theta star (KM)	0.0124
80% gamma percentile (KM)	0.155	90% gamma percentile (KM)	0.176
95% gamma percentile (KM)	0.195	99% gamma percentile (KM)	0.233

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.201	0.201	95% Approx. Gamma UPL	0.188	0.188
95% KM Gamma Percentile	0.187	0.187	95% Gamma USL	0.269	0.273

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.903	**Shapiro Wilk GOF Test**
10% Shapiro Wilk Critical Value	0.935	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.15	**Lilliefors GOF Test**
10% Lilliefors Critical Value	0.153	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Approximate Lognormal at 10% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.123	Mean in Log Scale	-2.128
SD in Original Scale	0.0316	SD in Log Scale	0.24
95% UTL95% Coverage	0.189	95% BCA UTL95% Coverage	0.192
95% Bootstrap (%) UTL95% Coverage	0.2	95% UPL (t)	0.178
90% Percentile (z)	0.162	95% Percentile (z)	0.177
99% Percentile (z)	0.208	95% USL	0.256

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.129	95% KM UTL (Lognormal)95% Coverage	0.203

KM SD of Logged Data	0.277	95% KM UPL (Lognormal)	0.189
95% KM Percentile Lognormal (z)	0.188	95% KM USL (Lognormal)	0.288

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.13	Mean in Log Scale	-2.061
SD in Original Scale	0.0262	SD in Log Scale	0.186
95% UTL95% Coverage	0.182	95% UPL (t)	0.174
90% Percentile (z)	0.162	95% Percentile (z)	0.173
99% Percentile (z)	0.196	95% USL	0.231

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	94	95% UTL with95% Coverage	0.35
Approx, f used to compute achieved CC	1.649	Approximate Actual Confidence Coefficient achieved by UTL	0.864
Approximate Sample Size needed to achieve specified CC	93	95% UPL	0.32
95% USL	0.36	95% KM Chebyshev UPL	0.293

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Attachment E-7 ProUCL Outputs – Distribution Testing for Combined 0-2 and 2-12 Inch Data Set

Goodness-of-Fit Test Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.2 3/7/2025 4:14:12 PM
From File	d_hab_w_weights_ProUCL.xls
Full Precision	OFF
Confidence Coefficient	0.95

PFOS

Raw Statistics

Number of Valid Observations	196
Number of Distinct Observations	89
Minimum	0.0263
Maximum	6.2
Mean of Raw Data	0.655
Standard Deviation of Raw Data	0.864
Khat	1.297
Theta hat	0.505
Kstar	1.281
Theta star	0.512
Mean of Log Transformed Data	-0.856
Standard Deviation of Log Transformed Data	0.895

Normal GOF Test Results

Correlation Coefficient R	0.73
Approximate Shapiro Wilk Test Statistic	0.553
Approximate Shapiro Wilk P Value	0
Lilliefors Test Statistic	0.234
Lilliefors Critical (0.05) Value	0.0637

Data not Normal at (0.05) Significance Level

Gamma GOF Test Results

Correlation Coefficient R	0.899
A-D Test Statistic	4.617
A-D Critical (0.05) Value	0.776
K-S Test Statistic	0.119
K-S Critical(0.05) Value	0.0662

Data not Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Correlation Coefficient R	0.99
Approximate Shapiro Wilk Test Statistic	0.977
Approximate Shapiro Wilk P Value	0.182
Lilliefors Test Statistic	0.0671
Lilliefors Critical (0.05) Value	0.0637

Data appear Approximate_Lognormal at (0.05) Significance Level

PFOA

Raw Statistics

Number of Valid Observations	196
Number of Distinct Observations	97
Minimum	0.0387
Maximum	4.7
Mean of Raw Data	0.523
Standard Deviation of Raw Data	0.61
Khat	1.271
Theta hat	0.412
Kstar	1.255
Theta star	0.417
Mean of Log Transformed Data	-1.09
Standard Deviation of Log Transformed Data	0.963

Normal GOF Test Results

Correlation Coefficient R	0.793
Approximate Shapiro Wilk Test Statistic	0.65
Approximate Shapiro Wilk P Value	0
Lilliefors Test Statistic	0.213
Lilliefors Critical (0.05) Value	0.0637

Data not Normal at (0.05) Significance Level

Gamma GOF Test Results

Correlation Coefficient R	0.942
A-D Test Statistic	2.022
A-D Critical (0.05) Value	0.777
K-S Test Statistic	0.0812
K-S Critical(0.05) Value	0.0662

Data not Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Correlation Coefficient R	0.989
Approximate Shapiro Wilk Test Statistic	0.963
Approximate Shapiro Wilk P Value	0.00129
Lilliefors Test Statistic	0.0583
Lilliefors Critical (0.05) Value	0.0637

Data appear Approximate_Lognormal at (0.05) Significance Level