

July 11, 2022

Mr. Matthew Hubicki
Project Manager, Remedial Bureau C
Division of Environmental Remediation
New York State Department of Environmental Conservation (NYSDEC)
625 Broadway
Albany, NY 12233-7014

Re: NYSDEC Site No. 360174
June 2022 – July 2022 Monthly Progress Report
Implementation of Interim Remedial Measure (IRM)
Westchester County Airport, 240 Airport Road
White Plains, New York 10604

Dear Mr. Hubicki:

Actions Taken/Accomplishments (June-July 2022)

A schedule of planned operations is included as Appendix A.

1. Inspected portions of the OF-7 storm sewer system to assess water flow in the storm sewer system. Identified daylighting of groundwater to drains near the former burn pit at drains 7015.1, 7014.1, 7014.2, and 7024.1 as shown in Figure 1.
2. Continue to review and analyze North Parcel investigation and 2022 performance results as well as monitoring of surface water laboratory at OF-7 and New York City Department Environmental Protection (NYCDEP) gauging station (E-10). The laboratory reports are included in Appendix B. Laboratory results Tables will be provided during the next monthly status submission.
3. Submitted the draft Remedial Investigation Work Plan (RIWP) to the County.
4. At the request of the NYSDEC, First Environment updated the Citizen Participation Plan (CPP). This plan will be included in the RIWP submission to the NYSDEC.
5. Monitor surface water flow and PFAS concentrations leaving the end-of-pipe at OF-7 and at NYCDEP gauging station (E-10) while collecting water levels in temporary wells along Airport Road and New King Street to evaluate the presence of a gaining or losing stream leading to E-10.
6. On July 6, First Environment measured end-of-pipe flow leaving OF-7 storm sewer at approximately 1 gallon per minute (gpm) compared to an average flow of 54 gpm measured from July 8-13, 2019. This reduced flow is the result of the new stormwater system completed at OF-7 despite continued

daylighting of groundwater with elevated PFAS levels to surface drains inlets 7015.1, 7014.1, 7014.2, and 7024.1, as shown in Figure 1. The daylighting issue is being evaluated by County engineers with assistance from First Environment.

7. Although it is early in the performance monitoring at OF-7, the initial performance results identify elevated PFAS levels at OF-7 end-of-pipe resulting from daylighting of surface water to 7015.1, 7014.1, 7014.2, and 7024.1, as shown in Figure 1. The newly constructed system has reduced flow of PFAS impacted water leaving the Airport at OF-7 and will be monitored further as performance monitoring continues at OF-7 and E-10

July & August Activities

1. Submit Remedial Investigation Work Plan (RIWP) to NYSDEC.
2. Continued monthly performance monitoring for PFAS in surface water at OF-7 and E-10.
3. First Environment plans to conduct bench/pilot scale test using Cetco's Fluor-sorb to reduce PFAS in surface water in water daylighting to storm drains as well as at OF-7.
4. Awaiting NYSDEC review of the Waterline Construction New King Street Workplan. The purpose of the workplan describes handling of soil and groundwater containing per- and polyfluoroalkyl substance (PFAS), soil sampling as well as provisions for environmental oversight and air monitoring conducted during construction, and installation of a water supply pipeline from Westchester Joint Water Works (WJWW).
5. Continue to evaluate the practicality and calculate associated costs to remove the PFAS source at the former New York Air National Guard (NYANG) Burn Pit.
6. Submit a pilot test proposal to the County to reduce PFAS levels in groundwater and a downgradient location of NYANG Burn Pit.
7. Decontaminate the existing frac tanks remaining on-site.
8. Assess and remove all sediment from newly installed storm sewer.

If you have any questions, please do not hesitate to call.

Regards,

FIRST ENVIRONMENT, INC.



Scott R. Green, P.G.
Director, Insurance Consulting
Service Group

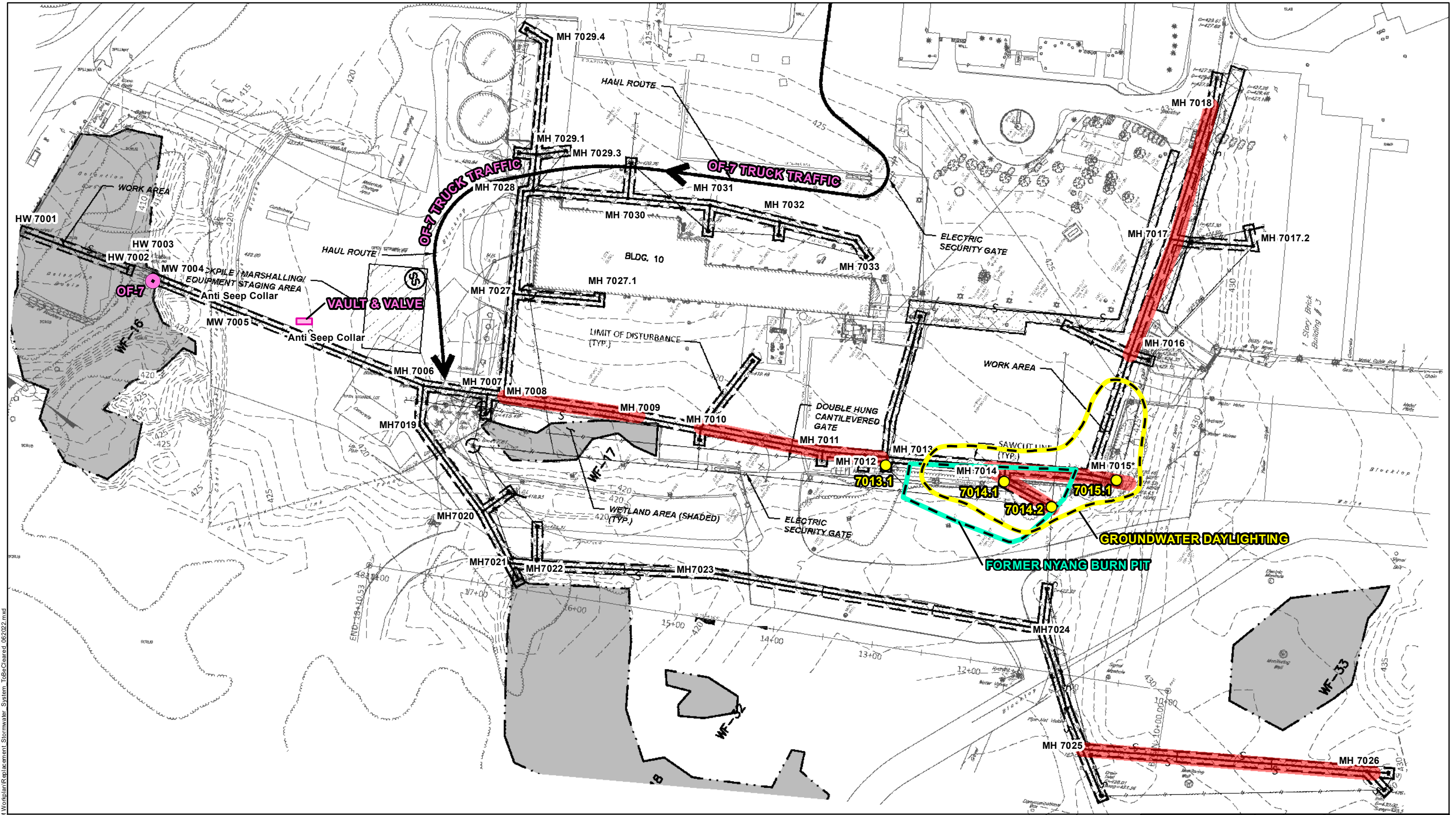


David Luer
Project Manager/Field Team Leader

Att.

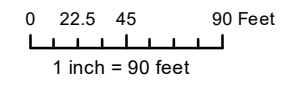
c: B. Tod Delaney, Ph.D., P.E., BCEE - First Environment, Inc.
Arthur Clarke, J.D. - First Environment, Inc.
Hugh Greechan, Jr. P.E. - Westchester County (hjg7@westchestergov.com)
John Nonna - Westchester County (jnonna@westchestergov.com)
April Gasparri – Westchester County (axgc@westchestergov.com)
John Inserra - Westchester County Airport (jhi1@westchestergov.com)
John Benvegna - WSP (john.benvegna@wsp.com)
G. Heitzman
S. Crisafulli
M. Murphy
J. Brown
J. Carpenter
M. Schuck – NYSDOH
K. Kulow – NYSDOH

FIGURES



I:\WESTCHESTERAIRPORT\IR\Worplan\Replacement_Stormwater_System_ToBeCleared_06/20/22.mxd

- Legend**
- Section of Pipe Requiring Clearing
 - Wetland



	NYSDEC SITE NO. 360174 WESTCHESTER COUNTY AIRPORT White Plains, Westchester County, New York FIGURE 1 OF-7 STORM SEWER SEDIMENT CLEAN OUT			
	10 Park Place, Bldg 1A, Suite 504 Butler, NJ 07405	Revised ES	Drawn ES	Checked DL
				Date 6/15/2022

Source: Provident Design Engineering PLLC, 2020 100% OF-7 Storm Sewer Design

APPENDIX A

**APPENDIX A
Work Activity Schedule
2022**

Milestone	Estimated Completion Date	Estimated Completion Percentage
OF-7 Storm Sewer Installation	May 13, 2022	100%
OF-7 Performance Monitoring	2 nd Quarter 2023	16%
New King Street Workplan	January 24	100%
Execution of New King Street Workplan	April 2022	100%
Waterline Workplan	April 1	100%
Execution of Waterline Workplan	April 2022	100%
OF-4 IRM Pilot Test*	Summer 2022	0%
Remedial Investigation Workplan**	June 2022	95%
GW IRM Workplan & Pilot Test	Summer-Fall 2022	50%

*Pilot test CETCO Fluor sorb at OF-7 before testing at OF-4. Evaluate the effectiveness of Flour sorb reducing PFOS and PFOA in surface water.

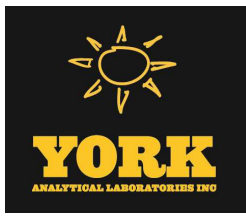
** RIWP submitted to the County. Submit RIWP to NYSDEC in July.

Estimated task durations and completions are tentative and are subject to modification based on site work, progress, weather delays, and other considerations such as contractor availability or Airport access.

Monthly progress reports will provide task initiation date for next month activity.

Implementation of reactive core mat and PFAS filter box using CETCO called FLUOR-SORB for a pilot test to reduce PFAS in surface water.

APPENDIX B



Technical Report

prepared for:

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Report Date: 05/03/2022
Client Project ID: 31402220.002 Westchester County Airport
York Project (SDG) No.: 22D0961

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 05/03/2022
Client Project ID: 31402220.002 Westchester County Airport
York Project (SDG) No.: 22D0961

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 20, 2022 and listed below. The project was identified as your project: **31402220.002 Westchester County Airport**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
22D0961-01	TRIB 1 SW	Water	04/19/2022	04/20/2022
22D0961-02	FIELD DUPLICATE	Water	04/19/2022	04/20/2022
22D0961-03	TRIB 1 SED	Soil	04/19/2022	04/20/2022
22D0961-04	NKS 2 SW	Water	04/19/2022	04/20/2022
22D0961-05	NKS 2 SED	Soil	04/19/2022	04/20/2022
22D0961-06	NKS 2 SOIL	Soil	04/19/2022	04/20/2022
22D0961-07	TRIB 2 SW	Water	04/19/2022	04/20/2022
22D0961-08	TRIB 2 SED	Soil	04/19/2022	04/20/2022
22D0961-09	FIELD BLANK SW	Water	04/19/2022	04/20/2022
22D0961-10	FIELD BLANK SOIL	Water	04/19/2022	04/20/2022

General Notes for York Project (SDG) No.: 22D0961

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 05/03/2022

Cassie L. Mosher
Laboratory Manager





Sample Information

Client Sample ID: TRIB 1 SW

York Sample ID: 22D0961-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22D0961	31402220.002 Westchester County Airport	Water	April 19, 2022 12:15 pm	04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	5.68	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	3.11		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	3.40		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	6.23		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	5.98		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	9.95		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	6.18		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	11.5		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	6.76		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:13	WL

Surrogate Recoveries

Result

Acceptance Range



Sample Information

Client Sample ID: TRIB 1 SW

York Sample ID: 22D0961-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 12:15 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFBS	97.6 %			25-150					
	Surrogate: M5PFHxA	91.5 %			25-150					
	Surrogate: M4PFHpA	102 %			25-150					
	Surrogate: M3PFHxS	113 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	92.1 %			25-150					
	Surrogate: M6PFDA	99.8 %			25-150					
	Surrogate: M7PFUdA	101 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	89.4 %			25-150					
	Surrogate: M2PFTeDA	93.7 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	40.3 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	103 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	83.4 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	33.2 %			10-150					
	Surrogate: d3-N-MeFOSAA	96.3 %			25-150					
	Surrogate: d5-N-EtFOSAA	120 %			25-150					
	Surrogate: M2-6:2 FTS	147 %			25-200					
	Surrogate: M2-8:2 FTS	217 %	PFSu-H		25-200					
	Surrogate: M9PFNA	92.0 %			25-150					

Sample Information

Client Sample ID: FIELD DUPLICATE

York Sample ID: 22D0961-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 12:30 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.81	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL



Sample Information

Client Sample ID: FIELD DUPLICATE

York Sample ID: 22D0961-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 12:30 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2355-31-9	* N-MeFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	3.08		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	3.52		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	8.00		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	6.35		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	8.67		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	8.98		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	11.4		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	7.77		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 17:52	WL
	Surrogate Recoveries	Result								Acceptance Range
	Surrogate: M3PFBS	90.3 %								25-150
	Surrogate: M5PFHxA	88.8 %								25-150
	Surrogate: M4PFHpA	98.9 %								25-150
	Surrogate: M3PFHxS	106 %								25-150
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	90.7 %								25-150
	Surrogate: M6PFDA	94.8 %								25-150



Sample Information

Client Sample ID: FIELD DUPLICATE

York Sample ID: 22D0961-02

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 19, 2022 12:30 pm	<u>Date Received</u> 04/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M7PFUdA	96.1 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	89.8 %			25-150					
	Surrogate: M2PFTeDA	87.9 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	33.4 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	101 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	77.9 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	30.2 %			10-150					
	Surrogate: d3-N-MeFOSAA	88.8 %			25-150					
	Surrogate: d5-N-EtFOSAA	115 %			25-150					
	Surrogate: M2-6:2 FTS	156 %			25-200					
	Surrogate: M2-8:2 FTS	209 %	PFSu-H		25-200					
	Surrogate: M9PFNA	87.3 %			25-150					

Sample Information

Client Sample ID: TRIB 1 SED

York Sample ID: 22D0961-03

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 19, 2022 12:30 pm	<u>Date Received</u> 04/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL



Sample Information

Client Sample ID: TRIB 1 SED

York Sample ID: 22D0961-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Soil

April 19, 2022 12:30 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.780		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:28	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	80.0 %	25-150
Surrogate: M5PFHxA	78.8 %	25-150
Surrogate: M4PFHpA	91.5 %	25-150
Surrogate: M3PFHxS	85.3 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	81.0 %	25-150
Surrogate: M6PFDA	81.8 %	25-150
Surrogate: M7PFUdA	71.4 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	69.2 %	25-150
Surrogate: M2PFTeDA	54.4 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	78.7 %	25-150



Sample Information

Client Sample ID: TRIB 1 SED	York Sample ID: 22D0961-03			
<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 19, 2022 12:30 pm	<u>Date Received</u> 04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	68.7 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	73.9 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	63.1 %			10-150					
	Surrogate: d3-N-MeFOSAA	82.9 %			25-150					
	Surrogate: d5-N-EtFOSAA	97.0 %			25-150					
	Surrogate: M2-6:2 FTS	121 %			25-200					
	Surrogate: M2-8:2 FTS	152 %			25-200					
	Surrogate: M9PFNA	80.1 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	75.4		%	0.100	1	SM 2540G	04/22/2022 15:16	04/22/2022 15:21	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: NKS 2 SW	York Sample ID: 22D0961-04			
<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 19, 2022 2:00 pm	<u>Date Received</u> 04/20/2022

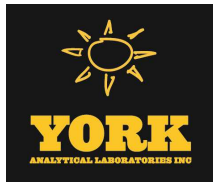
PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.48		ng/L	1.79	1	EPA 537m	04/29/2022 11:30	05/02/2022 18:13	WL
							Certifications:			
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	49.5		ng/L	4.46	1	EPA 537m	04/29/2022 11:30	05/02/2022 18:13	WL
							Certifications:			
2991-50-6	* N-EtFOSAA	ND		ng/L	1.79	1	EPA 537m	04/29/2022 11:30	05/02/2022 18:13	WL
							Certifications:			
2355-31-9	* N-MeFOSAA	ND		ng/L	1.79	1	EPA 537m	04/29/2022 11:30	05/02/2022 18:13	WL
							Certifications:			
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.79	1	EPA 537m	04/29/2022 11:30	05/02/2022 18:13	WL
							Certifications:			



Sample Information

Client Sample ID: NKS 2 SW

York Sample ID: 22D0961-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 2:00 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	18.8		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	2.66		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	18.2		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	4.64		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	58.1		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	349		ng/L	17.9	10	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 11:43	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	76.3		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	38.5		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
375-95-1	* Perfluorononanoic acid (PFNA)	73.3		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	837		ng/L	17.9	10	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 11:43	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	100		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	123		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	10.7		ng/L	1.79	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:13	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	91.5 %	25-150
Surrogate: M3PFBS	105 %	25-150
Surrogate: M5PFHxA	80.9 %	25-150
Surrogate: M5PFHxA	93.2 %	25-150
Surrogate: M4PFHpA	105 %	25-150
Surrogate: M4PFHpA	94.7 %	25-150
Surrogate: M3PFHxS	95.4 %	25-150
Surrogate: M3PFHxS	95.5 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	82.5 %	25-150



Sample Information

Client Sample ID: NKS 2 SW					York Sample ID: 22D0961-04
<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 19, 2022 2:00 pm	<u>Date Received</u> 04/20/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	76.0 %				25-150				
	Surrogate: M6PFDA	83.1 %				25-150				
	Surrogate: M6PFDA	94.5 %				25-150				
	Surrogate: M7PFUdA	72.4 %				25-150				
	Surrogate: M7PFUdA	98.9 %				25-150				
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	87.4 %				25-150				
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	87.7 %				25-150				
	Surrogate: M2PFTeDA	73.5 %				10-150				
	Surrogate: M2PFTeDA	89.6 %				10-150				
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	35.4 %				25-150				
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	47.0 %				25-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	78.9 %				25-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	88.6 %				25-150				
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	80.3 %				25-150				
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	83.8 %				25-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	41.2 %				10-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	49.4 %				10-150				
	Surrogate: d3-N-MeFOSAA	70.9 %				25-150				
	Surrogate: d3-N-MeFOSAA	94.0 %				25-150				
	Surrogate: d5-N-EtFOSAA	87.0 %				25-150				
	Surrogate: d5-N-EtFOSAA	118 %				25-150				
	Surrogate: M2-6:2 FTS	110 %				25-200				
	Surrogate: M2-6:2 FTS	198 %				25-200				
	Surrogate: M2-8:2 FTS	111 %				25-200				
	Surrogate: M2-8:2 FTS	321 %	PFSu-H			25-200				
	Surrogate: M9PFNA	81.8 %				25-150				
	Surrogate: M9PFNA	82.7 %				25-150				



Sample Information

Client Sample ID: NKS 2 SED

York Sample ID: 22D0961-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Soil

April 19, 2022 2:15 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.501		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	0.392		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	3.07		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	0.931		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	0.705		ug/kg dry	0.338	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:41	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS

74.5 %

25-150

Surrogate: M5PFHxA

71.2 %

25-150



Sample Information

Client Sample ID: NKS 2 SED

York Sample ID: 22D0961-05

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 19, 2022 2:15 pm	<u>Date Received</u> 04/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	86.8 %			25-150					
	Surrogate: M3PFHxS	81.1 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	76.0 %			25-150					
	Surrogate: M6PFDA	79.3 %			25-150					
	Surrogate: M7PFUdA	68.8 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	65.8 %			25-150					
	Surrogate: M2PFTeDA	53.1 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	73.6 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	69.5 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	69.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	60.8 %			10-150					
	Surrogate: d3-N-MeFOSAA	73.5 %			25-150					
	Surrogate: d5-N-EtFOSAA	82.5 %			25-150					
	Surrogate: M2-6:2 FTS	106 %			25-200					
	Surrogate: M2-8:2 FTS	120 %			25-200					
	Surrogate: M9PFNA	77.1 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	73.0		%	0.100	1	SM 2540G Certifications: CTDOH	04/22/2022 15:16	04/22/2022 15:21	YR

Sample Information

Client Sample ID: NKS 2 SOIL

York Sample ID: 22D0961-06

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 19, 2022 2:30 pm	<u>Date Received</u> 04/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: NKS 2 SOIL

York Sample ID: 22D0961-06

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 19, 2022 2:30 pm	<u>Date Received</u> 04/20/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.581		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	2.93		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	6.76		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	2.82		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	5.42		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
375-95-1	* Perfluorononanoic acid (PFNA)	0.836		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	21.1		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	1.43		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	7.13		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	2.54		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	2.04		ug/kg dry	0.469	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 01:54	WL
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		87.9 %	25-150							



Sample Information

Client Sample ID: NKS 2 SOIL

York Sample ID: 22D0961-06

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 19, 2022 2:30 pm	<u>Date Received</u> 04/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M5PFHxA	83.0 %			25-150					
	Surrogate: M4PFHpA	83.5 %			25-150					
	Surrogate: M3PFHxS	85.6 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	69.1 %			25-150					
	Surrogate: M6PFDA	62.6 %			25-150					
	Surrogate: M7PFUdA	53.7 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	49.4 %			25-150					
	Surrogate: M2PFTeDA	36.6 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	58.4 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	59.4 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	73.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	44.6 %			10-150					
	Surrogate: d3-N-MeFOSAA	54.2 %			25-150					
	Surrogate: d5-N-EtFOSAA	67.0 %			25-150					
	Surrogate: M2-6:2 FTS	178 %			25-200					
	Surrogate: M2-8:2 FTS	145 %			25-200					
	Surrogate: M9PFNA	55.9 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	52.1		%	0.100	1	SM 2540G	04/22/2022 15:16	04/22/2022 15:21	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: TRIB 2 SW

York Sample ID: 22D0961-07

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 19, 2022 2:50 pm	<u>Date Received</u> 04/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: TRIB 2 SW

York Sample ID: 22D0961-07

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 19, 2022 2:50 pm	<u>Date Received</u> 04/20/2022
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Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.73	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	3.00		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	2.56		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	3.61		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	9.38		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	3.21		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	8.43		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	6.29		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:26	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	88.4 %	25-150
Surrogate: M5PFHxA	84.4 %	25-150



Sample Information

Client Sample ID: TRIB 2 SW **York Sample ID:** 22D0961-07

York Project (SDG) No.: 22D0961 **Client Project ID:** 31402220.002 Westchester County Airport **Matrix:** Water **Collection Date/Time:** April 19, 2022 2:50 pm **Date Received:** 04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	98.9 %			25-150					
	Surrogate: M3PFHxS	105 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	91.0 %			25-150					
	Surrogate: M6PFDA	101 %			25-150					
	Surrogate: M7PFUdA	94.8 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	92.8 %			25-150					
	Surrogate: M2PFTeDA	80.5 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	30.9 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	94.2 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	32.6 %			10-150					
	Surrogate: d3-N-MeFOSAA	91.0 %			25-150					
	Surrogate: d5-N-EtFOSAA	104 %			25-150					
	Surrogate: M2-6:2 FTS	136 %			25-200					
	Surrogate: M2-8:2 FTS	151 %			25-200					
	Surrogate: M9PFNA	91.0 %			25-150					

Sample Information

Client Sample ID: TRIB 2 SED **York Sample ID:** 22D0961-08

York Project (SDG) No.: 22D0961 **Client Project ID:** 31402220.002 Westchester County Airport **Matrix:** Soil **Collection Date/Time:** April 19, 2022 3:00 pm **Date Received:** 04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL



Sample Information

Client Sample ID: TRIB 2 SED

York Sample ID: 22D0961-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Soil

April 19, 2022 3:00 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.328	1	EPA 537m Certifications:	04/22/2022 12:26	04/29/2022 02:07	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	71.2 %	25-150
Surrogate: M5PFHxA	70.0 %	25-150
Surrogate: M4PFHpA	87.7 %	25-150
Surrogate: M3PFHxS	77.9 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	75.7 %	25-150
Surrogate: M6PFDA	70.3 %	25-150
Surrogate: M7PFUDA	64.6 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	65.1 %	25-150



Sample Information

Client Sample ID: TRIB 2 SED

York Sample ID: 22D0961-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Soil

April 19, 2022 3:00 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M2PFTeDA	55.1 %								
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	74.5 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	67.1 %								
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	69.5 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	63.1 %								
	Surrogate: d3-N-MeFOSAA	67.0 %								
	Surrogate: d5-N-EtFOSAA	90.2 %								
	Surrogate: M2-6:2 FTS	89.3 %								
	Surrogate: M2-8:2 FTS	112 %								
	Surrogate: M9PFNA	68.5 %								

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	72.0		%	0.100	1	SM 2540G Certifications: CTDOH	04/22/2022 15:16	04/22/2022 15:21	YR

Sample Information

Client Sample ID: FIELD BLANK SW

York Sample ID: 22D0961-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 3:30 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE EXT-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.63	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL



Sample Information

Client Sample ID: FIELD BLANK SW

York Sample ID: 22D0961-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 3:30 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.85	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 18:52	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	86.8 %	25-150
Surrogate: M5PFHxA	90.6 %	25-150
Surrogate: M4PFHpA	107 %	25-150
Surrogate: M3PFHxS	94.0 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	94.8 %	25-150
Surrogate: M6PFDA	87.4 %	25-150
Surrogate: M7PFUDA	79.2 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	69.5 %	25-150



Sample Information

Client Sample ID: FIELD BLANK SW

York Sample ID: 22D0961-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 3:30 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M2PFTeDA	52.3 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	90.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	85.6 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	84.1 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	36.9 %			10-150					
	Surrogate: d3-N-MeFOSAA	57.6 %			25-150					
	Surrogate: d5-N-EtFOSAA	61.9 %			25-150					
	Surrogate: M2-6:2 FTS	98.7 %			25-200					
	Surrogate: M2-8:2 FTS	135 %			25-200					
	Surrogate: M9PFNA	99.9 %			25-150					

Sample Information

Client Sample ID: FIELD BLANK SOIL

York Sample ID: 22D0961-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 3:45 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.73	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL



Sample Information

Client Sample ID: FIELD BLANK SOIL

York Sample ID: 22D0961-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D0961

31402220.002 Westchester County Airport

Water

April 19, 2022 3:45 pm

04/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 19:06	WL

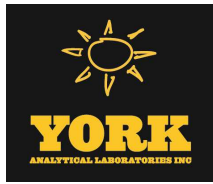
Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	87.5 %	25-150
Surrogate: M5PFHxA	87.7 %	25-150
Surrogate: M4PFHpA	109 %	25-150
Surrogate: M3PFHxS	95.6 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	92.0 %	25-150
Surrogate: M6PFDA	91.0 %	25-150
Surrogate: M7PFUdA	79.4 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	66.6 %	25-150
Surrogate: M2PFTeDA	59.1 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	90.5 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	97.0 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	83.7 %	25-150





Sample Information

Client Sample ID: FIELD BLANK SOIL

York Sample ID: 22D0961-10

<u>York Project (SDG) No.</u> 22D0961	<u>Client Project ID</u> 31402220.002 Westchester County Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 19, 2022 3:45 pm	<u>Date Received</u> 04/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-1- [13C8]octanesulfonamide (M8FOSA)	33.4 %			10-150					
	Surrogate: d3-N-MeFOSAA	55.7 %			25-150					
	Surrogate: d5-N-EtFOSAA	61.6 %			25-150					
	Surrogate: M2-6:2 FTS	89.7 %			25-200					
	Surrogate: M2-8:2 FTS	157 %			25-200					
	Surrogate: M9PFNA	90.8 %			25-150					



Analytical Batch Summary

Batch ID: BD21377 **Preparation Method:** SPE PFAS Extraction-Soil-EPA 537m **Prepared By:** WEL

YORK Sample ID	Client Sample ID	Preparation Date
22D0961-03	TRIB 1 SED	04/22/22
22D0961-05	NKS 2 SED	04/22/22
22D0961-06	NKS 2 SOIL	04/22/22
22D0961-08	TRIB 2 SED	04/22/22
BD21377-BLK1	Blank	04/22/22
BD21377-BS1	LCS	04/22/22
BD21377-MS1	Matrix Spike	04/22/22
BD21377-MSD1	Matrix Spike Dup	04/22/22

Batch ID: BD21403 **Preparation Method:** % Solids Prep **Prepared By:** YR

YORK Sample ID	Client Sample ID	Preparation Date
22D0961-03	TRIB 1 SED	04/22/22
22D0961-05	NKS 2 SED	04/22/22
22D0961-06	NKS 2 SOIL	04/22/22
22D0961-08	TRIB 2 SED	04/22/22
BD21403-DUP1	Duplicate	04/22/22

Batch ID: BD21784 **Preparation Method:** SPE Ext-PFAS-EPA 537.1M **Prepared By:** WEL

YORK Sample ID	Client Sample ID	Preparation Date
22D0961-01	TRIB 1 SW	04/29/22
22D0961-02	FIELD DUPLICATE	04/29/22
22D0961-04	NKS 2 SW	04/29/22
22D0961-04RE1	NKS 2 SW	04/29/22
22D0961-07	TRIB 2 SW	04/29/22
22D0961-09	FIELD BLANK SW	04/29/22
22D0961-10	FIELD BLANK SOIL	04/29/22
BD21784-BLK1	Blank	04/29/22
BD21784-BS1	LCS	04/29/22
BD21784-MS1	Matrix Spike	04/29/22
BD21784-MSD1	Matrix Spike Dup	04/29/22



PFAS Target compounds by LC/MS-MS - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting	Units	Spike Level	Source*	%REC	%REC	Flag	RPD	RPD	Limit	Flag
		Limit			Result	Limits	Limit					

Batch BD21377 - SPE PFAS Extraction-Soil-EPA 537m

Blank (BD21377-BLK1)

Prepared: 04/22/2022 Analyzed: 04/29/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	0.232	ug/kg wet									
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	0.232	"									
N-EtFOSAA	ND	0.232	"									
N-MeFOSAA	ND	0.232	"									
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.232	"									
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.232	"									
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.232	"									
Perfluorobutanesulfonic acid (PFBS)	ND	0.232	"									
Perfluorodecanoic acid (PFDA)	ND	0.232	"									
Perfluorododecanoic acid (PFDoA)	ND	0.232	"									
Perfluoroheptanoic acid (PFHpA)	ND	0.232	"									
Perfluorohexanesulfonic acid (PFHxS)	ND	0.232	"									
Perfluorohexanoic acid (PFHxA)	ND	0.232	"									
Perfluoro-n-butanoic acid (PFBA)	ND	0.232	"									
Perfluorononanoic acid (PFNA)	ND	0.232	"									
Perfluorooctanesulfonic acid (PFOS)	ND	0.232	"									
Perfluorooctanoic acid (PFOA)	ND	0.232	"									
Perfluoropentanoic acid (PFPeA)	ND	0.232	"									
Perfluorotetradecanoic acid (PFTA)	ND	0.232	"									
Perfluorotridecanoic acid (PFTTrDA)	ND	0.232	"									
Perfluoroundecanoic acid (PFUnA)	ND	0.232	"									
Surrogate: M3PFBS	3.17		"	4.31		73.6	25-150					
Surrogate: M5PFHxA	3.33		"	4.64		71.7	25-150					
Surrogate: M4PFHpA	4.20		"	4.64		90.5	25-150					
Surrogate: M3PFHxS	3.74		"	4.39		85.1	25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.48		"	4.64		74.9	25-150					
Surrogate: M6PFDA	3.36		"	4.64		72.4	25-150					
Surrogate: M7PFUdA	3.27		"	4.64		70.4	25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.05		"	4.64		65.7	25-150					
Surrogate: M2PFTeDA	2.78		"	4.64		59.9	10-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.52		"	4.64		75.8	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.19		"	4.44		71.8	25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.34		"	4.64		72.0	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.71		"	4.64		58.4	10-150					
Surrogate: d3-N-MeFOSAA	3.58		"	4.64		77.1	25-150					
Surrogate: d5-N-EtFOSAA	3.78		"	4.64		81.5	25-150					
Surrogate: M2-6:2 FTS	3.66		"	4.41		83.0	25-200					
Surrogate: M2-8:2 FTS	5.11		"	4.45		115	25-200					
Surrogate: M9PFNA	3.95		"	4.64		85.0	25-150					



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21377 - SPE PFAS Extraction-Soil-EPA 537m

LCS (BD21377-BS1)

Prepared: 04/22/2022 Analyzed: 04/29/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.13	0.242	ug/kg wet	4.65		110	50-200				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	3.90	0.242	"	4.61		84.7	50-200				
N-EtFOSAA	4.84	0.242	"	4.85		99.9	50-130				
N-MeFOSAA	4.84	0.242	"	4.85		99.9	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	4.80	0.242	"	4.68		103	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.35	0.242	"	4.63		116	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	5.70	0.242	"	4.85		118	50-130				
Perfluorobutanesulfonic acid (PFBS)	4.58	0.242	"	4.29		107	50-130				
Perfluorodecanoic acid (PFDA)	5.50	0.242	"	4.85		113	50-130				
Perfluorododecanoic acid (PFDoA)	5.17	0.242	"	4.85		107	50-130				
Perfluoroheptanoic acid (PFHpA)	4.70	0.242	"	4.85		97.0	50-130				
Perfluorohexanesulfonic acid (PFHxS)	5.87	0.242	"	4.41		133	50-130	High Bias			
Perfluorohexanoic acid (PFHxA)	5.40	0.242	"	4.85		111	50-130				
Perfluoro-n-butanoic acid (PFBA)	5.45	0.242	"	4.85		112	50-130				
Perfluorononanoic acid (PFNA)	5.74	0.242	"	4.85		118	50-130				
Perfluorooctanesulfonic acid (PFOS)	4.91	0.242	"	4.48		109	50-130				
Perfluorooctanoic acid (PFOA)	5.62	0.242	"	4.85		116	50-130				
Perfluoropentanoic acid (PFPeA)	5.65	0.242	"	4.85		117	50-130				
Perfluorotetradecanoic acid (PFTA)	5.81	0.242	"	4.85		120	50-130				
Perfluorotridecanoic acid (PFTrDA)	5.22	0.242	"	4.85		108	50-130				
Perfluoroundecanoic acid (PFUnA)	5.99	0.242	"	4.85		124	50-130				
Surrogate: M3PFBS	3.53		"	4.50		78.5	25-150				
Surrogate: M5PFHxA	3.59		"	4.85		74.0	25-150				
Surrogate: M4PFHpA	4.52		"	4.85		93.3	25-150				
Surrogate: M3PFHxS	3.64		"	4.59		79.5	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.94		"	4.85		81.3	25-150				
Surrogate: M6PFDA	3.67		"	4.85		75.6	25-150				
Surrogate: M7PFUdA	3.28		"	4.85		67.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.45		"	4.85		71.1	25-150				
Surrogate: M2PFTeDA	2.90		"	4.85		59.8	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.78		"	4.85		78.1	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.60		"	4.64		77.6	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.57		"	4.85		73.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.22		"	4.85		66.4	10-150				
Surrogate: d3-N-MeFOSAA	3.61		"	4.85		74.5	25-150				
Surrogate: d5-N-EtFOSAA	4.23		"	4.85		87.2	25-150				
Surrogate: M2-6:2 FTS	4.53		"	4.60		98.4	25-200				
Surrogate: M2-8:2 FTS	4.81		"	4.64		104	25-200				
Surrogate: M9PFNA	3.74		"	4.85		77.1	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21377 - SPE PFAS Extraction-Soil-EPA 537m

Matrix Spike (BD21377-MS1)	*Source sample: 22D1076-02 (Matrix Spike)						Prepared: 04/22/2022 Analyzed: 04/29/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	6.11	0.279	ug/kg dry	5.36	ND	114	25-200				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	5.01	0.279	"	5.31	ND	94.4	25-200				
N-EtFOSAA	6.17	0.279	"	5.59	ND	111	25-150				
N-MeFOSAA	6.92	0.279	"	5.59	ND	124	25-150				
Perfluoro-1-decanesulfonic acid (PFDS)	5.51	0.279	"	5.39	ND	102	25-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	6.92	0.279	"	5.33	ND	130	25-150				
Perfluoro-1-octanesulfonamide (FOSA)	6.74	0.279	"	5.59	ND	121	25-150				
Perfluorobutanesulfonic acid (PFBS)	5.22	0.279	"	4.94	ND	106	25-150				
Perfluorodecanoic acid (PFDA)	5.69	0.279	"	5.59	ND	102	25-150				
Perfluorododecanoic acid (PFDoA)	6.03	0.279	"	5.59	ND	108	25-150				
Perfluoroheptanoic acid (PFHpA)	5.68	0.279	"	5.59	ND	102	25-150				
Perfluorohexanesulfonic acid (PFHxS)	6.06	0.279	"	5.08	ND	119	25-150				
Perfluorohexanoic acid (PFHxA)	6.21	0.279	"	5.59	ND	111	25-150				
Perfluoro-n-butanoic acid (PFBA)	6.45	0.279	"	5.59	0.400	108	25-150				
Perfluorononanoic acid (PFNA)	6.11	0.279	"	5.59	ND	109	25-150				
Perfluorooctanesulfonic acid (PFOS)	6.64	0.279	"	5.17	0.526	118	25-150				
Perfluorooctanoic acid (PFOA)	6.64	0.279	"	5.59	ND	119	25-150				
Perfluoropentanoic acid (PFPeA)	6.46	0.279	"	5.59	ND	116	25-150				
Perfluorotetradecanoic acid (PFTA)	6.46	0.279	"	5.59	ND	116	25-150				
Perfluorotridecanoic acid (PFTrDA)	6.13	0.279	"	5.59	ND	110	25-150				
Perfluoroundecanoic acid (PFUnA)	6.33	0.279	"	5.59	ND	113	25-150				
Surrogate: M3PFBS	4.06		"	5.19		78.3	25-150				
Surrogate: M5PFHxA	4.23		"	5.59		75.7	25-150				
Surrogate: M4PFHpA	5.09		"	5.59		91.1	25-150				
Surrogate: M3PFHxS	4.57		"	5.28		86.5	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	4.52		"	5.59		81.0	25-150				
Surrogate: M6PFDA	4.37		"	5.59		78.2	25-150				
Surrogate: M7PFUdA	3.72		"	5.59		66.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.47		"	5.59		62.2	25-150				
Surrogate: M2PFTeDA	2.45		"	5.59		43.9	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.38		"	5.59		78.4	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.77		"	5.34		70.5	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.14		"	5.59		74.1	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.32		"	5.59		59.5	10-150				
Surrogate: d3-N-MeFOSAA	3.80		"	5.59		68.1	25-150				
Surrogate: d5-N-EtFOSAA	4.71		"	5.59		84.4	25-150				
Surrogate: M2-6:2 FTS	6.77		"	5.30		128	25-200				
Surrogate: M2-8:2 FTS	7.13		"	5.35		133	25-200				
Surrogate: M9PFNA	4.43		"	5.59		79.3	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21377 - SPE PFAS Extraction-Soil-EPA 537m

Matrix Spike Dup (BD21377-MSD1)	*Source sample: 22D1076-02 (Matrix Spike Dup)						Prepared: 04/22/2022 Analyzed: 04/29/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.49	0.263	ug/kg dry	5.05	ND	109	25-200		10.8	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.62	0.263	"	5.00	ND	92.6	25-200		8.00	35	
N-EtFOSAA	5.95	0.263	"	5.26	ND	113	25-150		3.76	35	
N-MeFOSAA	5.61	0.263	"	5.26	ND	107	25-150		20.9	35	
Perfluoro-1-decanesulfonic acid (PFDS)	5.60	0.263	"	5.07	ND	110	25-150		1.65	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	7.84	0.263	"	5.02	ND	156	25-150	High Bias	12.4	35	
Perfluoro-1-octanesulfonamide (FOSA)	6.04	0.263	"	5.26	ND	115	25-150		11.0	35	
Perfluorobutanesulfonic acid (PFBS)	5.12	0.263	"	4.65	ND	110	25-150		2.01	35	
Perfluorodecanoic acid (PFDA)	5.95	0.263	"	5.26	ND	113	25-150		4.40	35	
Perfluorododecanoic acid (PFDoA)	5.71	0.263	"	5.26	ND	109	25-150		5.52	35	
Perfluoroheptanoic acid (PFHpA)	5.56	0.263	"	5.26	ND	106	25-150		2.28	35	
Perfluorohexanesulfonic acid (PFHxS)	5.98	0.263	"	4.79	ND	125	25-150		1.22	35	
Perfluorohexanoic acid (PFHxA)	5.97	0.263	"	5.26	ND	113	25-150		4.01	35	
Perfluoro-n-butanoic acid (PFBA)	6.04	0.263	"	5.26	0.400	107	25-150		6.45	35	
Perfluorononanoic acid (PFNA)	6.23	0.263	"	5.26	ND	118	25-150		1.94	35	
Perfluorooctanesulfonic acid (PFOS)	6.87	0.263	"	4.86	0.526	130	25-150		3.32	35	
Perfluorooctanoic acid (PFOA)	6.50	0.263	"	5.26	ND	124	25-150		2.14	35	
Perfluoropentanoic acid (PFPeA)	6.02	0.263	"	5.26	ND	115	25-150		6.93	35	
Perfluorotetradecanoic acid (PFTA)	6.00	0.263	"	5.26	ND	114	25-150		7.24	35	
Perfluorotridecanoic acid (PFTrDA)	6.56	0.263	"	5.26	ND	125	25-150		6.69	35	
Perfluoroundecanoic acid (PFUnA)	6.26	0.263	"	5.26	ND	119	25-150		1.01	35	
Surrogate: M3PFBS	3.84		"	4.89		78.6	25-150				
Surrogate: M5PFHxA	4.01		"	5.26		76.3	25-150				
Surrogate: M4PFHpA	4.66		"	5.26		88.6	25-150				
Surrogate: M3PFHxS	4.17		"	4.97		83.8	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	4.19		"	5.26		79.7	25-150				
Surrogate: M6PFDA	3.94		"	5.26		74.9	25-150				
Surrogate: M7PFUdA	3.54		"	5.26		67.2	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.40		"	5.26		64.7	25-150				
Surrogate: M2PFTeDA	2.71		"	5.26		51.5	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.13		"	5.26		78.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.18		"	5.03		63.3	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.93		"	5.26		74.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.18		"	5.26		60.6	10-150				
Surrogate: d3-N-MeFOSAA	3.98		"	5.26		75.8	25-150				
Surrogate: d5-N-EtFOSAA	4.58		"	5.26		87.1	25-150				
Surrogate: M2-6:2 FTS	6.85		"	4.99		137	25-200				
Surrogate: M2-8:2 FTS	7.82		"	5.04		155	25-200				
Surrogate: M9PFNA	3.97		"	5.26		75.5	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21784 - SPE Ext-PFAS-EPA 537.1M

Blank (BD21784-BLK1)

Prepared: 04/29/2022 Analyzed: 05/02/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	ng/L								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	5.00	"								
N-EtFOSAA	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"								
Perfluorobutanesulfonic acid (PFBS)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.00	"								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	2.00	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	2.00	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTrDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Surrogate: M3PFBS	61.8		"	74.3		83.1	25-150				
Surrogate: M5PFHxA	66.4		"	80.0		83.0	25-150				
Surrogate: M4PFHpA	73.3		"	80.0		91.6	25-150				
Surrogate: M3PFHxS	69.0		"	75.7		91.2	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	60.6		"	80.0		75.7	25-150				
Surrogate: M6PFDA	70.3		"	80.0		87.8	25-150				
Surrogate: M7PFUdA	64.6		"	80.0		80.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	55.4		"	80.0		69.3	25-150				
Surrogate: M2PFTeDA	48.7		"	80.0		60.8	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	65.2		"	80.0		81.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	64.1		"	76.6		83.8	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	62.2		"	80.0		77.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	29.9		"	80.0		37.4	10-150				
Surrogate: d3-N-MeFOSAA	50.3		"	80.0		62.9	25-150				
Surrogate: d5-N-EtFOSAA	71.4		"	80.0		89.2	25-150				
Surrogate: M2-6:2 FTS	72.7		"	75.9		95.8	25-200				
Surrogate: M2-8:2 FTS	132		"	76.6		172	25-200				
Surrogate: M9PFNA	67.3		"	80.0		84.2	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21784 - SPE Ext-PFAS-EPA 537.1M

LCS (BD21784-BS1)

Prepared: 04/29/2022 Analyzed: 05/02/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	78.7	2.00	ng/L	76.8		102	50-175				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	73.4	5.00	"	76.0		96.6	50-175				
N-EtFOSAA	84.6	2.00	"	80.0		106	50-130				
N-MeFOSAA	86.5	2.00	"	80.0		108	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	77.1	2.00	"	77.2		99.9	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	81.6	2.00	"	76.4		107	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	85.7	2.00	"	80.0		107	50-130				
Perfluorobutanesulfonic acid (PFBS)	102	2.00	"	70.8		145	50-130	High Bias			
Perfluorodecanoic acid (PFDA)	86.0	2.00	"	80.0		108	50-130				
Perfluorododecanoic acid (PFDoA)	75.9	2.00	"	80.0		94.9	50-130				
Perfluoroheptanoic acid (PFHpA)	72.1	2.00	"	80.0		90.1	50-130				
Perfluorohexanesulfonic acid (PFHxS)	88.5	2.00	"	72.8		122	50-130				
Perfluorohexanoic acid (PFHxA)	79.1	2.00	"	80.0		98.9	50-130				
Perfluoro-n-butanoic acid (PFBA)	81.5	2.00	"	80.0		102	50-130				
Perfluorononanoic acid (PFNA)	78.6	2.00	"	80.0		98.2	50-130				
Perfluorooctanesulfonic acid (PFOS)	56.8	2.00	"	74.0		76.7	50-130				
Perfluorooctanoic acid (PFOA)	84.7	2.00	"	80.0		106	50-130				
Perfluoropentanoic acid (PFPeA)	90.9	2.00	"	80.0		114	50-130				
Perfluorotetradecanoic acid (PFTA)	79.9	2.00	"	80.0		99.9	50-130				
Perfluorotridecanoic acid (PFTrDA)	67.1	2.00	"	80.0		83.9	50-130				
Perfluoroundecanoic acid (PFUnA)	81.9	2.00	"	80.0		102	50-130				
Surrogate: M3PFBS	42.4		"	74.3		57.0	25-150				
Surrogate: M5PFHxA	64.0		"	80.0		80.0	25-150				
Surrogate: M4PFHpA	76.3		"	80.0		95.4	25-150				
Surrogate: M3PFHxS	67.0		"	75.7		88.5	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	69.0		"	80.0		86.3	25-150				
Surrogate: M6PFDA	68.8		"	80.0		85.9	25-150				
Surrogate: M7PFUdA	71.9		"	80.0		89.9	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	65.1		"	80.0		81.4	25-150				
Surrogate: M2PFTeDA	60.9		"	80.0		76.1	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	63.4		"	80.0		79.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	70.4		"	76.6		92.0	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	36.7		"	80.0		45.9	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	11.1		"	80.0		13.9	10-150				
Surrogate: d3-N-MeFOSAA	61.9		"	80.0		77.4	25-150				
Surrogate: d5-N-EtFOSAA	65.3		"	80.0		81.7	25-150				
Surrogate: M2-6:2 FTS	78.7		"	75.9		104	25-200				
Surrogate: M2-8:2 FTS	128		"	76.6		167	25-200				
Surrogate: M9PFNA	72.2		"	80.0		90.2	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21784 - SPE Ext-PFAS-EPA 537.1M

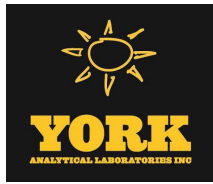
Matrix Spike (BD21784-MS1)	*Source sample: 22D0961-01 (TRIB 1 SW)						Prepared: 04/29/2022 Analyzed: 05/02/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	78.9	1.92	ng/L	73.8	ND	107	25-200				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	68.8	4.81	"	73.1	ND	94.1	25-200				
N-EtFOSAA	80.9	1.92	"	76.9	ND	105	25-150				
N-MeFOSAA	83.0	1.92	"	76.9	ND	108	25-150				
Perfluoro-1-decanesulfonic acid (PFDS)	72.2	1.92	"	74.2	ND	97.3	25-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	82.1	1.92	"	73.5	ND	112	25-150				
Perfluoro-1-octanesulfonamide (FOSA)	87.0	1.92	"	76.9	ND	113	25-150				
Perfluorobutanesulfonic acid (PFBS)	69.5	1.92	"	68.1	3.11	97.5	25-150				
Perfluorodecanoic acid (PFDA)	76.1	1.92	"	76.9	ND	98.9	25-150				
Perfluorododecanoic acid (PFDoA)	75.2	1.92	"	76.9	ND	97.7	25-150				
Perfluoroheptanoic acid (PFHpA)	72.3	1.92	"	76.9	3.40	89.5	25-150				
Perfluorohexanesulfonic acid (PFHxS)	91.7	1.92	"	70.0	6.23	122	25-150				
Perfluorohexanoic acid (PFHxA)	83.4	1.92	"	76.9	5.98	101	25-150				
Perfluoro-n-butanoic acid (PFBA)	87.1	1.92	"	76.9	9.95	100	25-150				
Perfluorononanoic acid (PFNA)	74.4	1.92	"	76.9	ND	96.7	25-150				
Perfluorooctanesulfonic acid (PFOS)	83.6	1.92	"	71.2	6.18	109	25-150				
Perfluorooctanoic acid (PFOA)	90.3	1.92	"	76.9	11.5	102	25-150				
Perfluoropentanoic acid (PFPeA)	88.6	1.92	"	76.9	6.76	106	25-150				
Perfluorotetradecanoic acid (PFTA)	74.6	1.92	"	76.9	ND	97.0	25-150				
Perfluorotridecanoic acid (PFTrDA)	72.2	1.92	"	76.9	ND	93.9	25-150				
Perfluoroundecanoic acid (PFUnA)	76.2	1.92	"	76.9	ND	99.0	25-150				
Surrogate: M3PFBS	71.4		"	71.5		99.9	25-150				
Surrogate: M5PFHxA	70.7		"	76.9		91.9	25-150				
Surrogate: M4PFHpA	78.7		"	76.9		102	25-150				
Surrogate: M3PFHxS	78.0		"	72.8		107	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	72.1		"	76.9		93.8	25-150				
Surrogate: M6PFDA	73.6		"	76.9		95.7	25-150				
Surrogate: M7PFUdA	74.4		"	76.9		96.8	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	70.2		"	76.9		91.3	25-150				
Surrogate: M2PFTeDA	70.0		"	76.9		91.0	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	26.5		"	76.9		34.4	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	75.0		"	73.6		102	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	62.8		"	76.9		81.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	43.1		"	76.9		56.0	10-150				
Surrogate: d3-N-MeFOSAA	70.5		"	76.9		91.6	25-150				
Surrogate: d5-N-EtFOSAA	75.3		"	76.9		97.9	25-150				
Surrogate: M2-6:2 FTS	121		"	73.0		166	25-200				
Surrogate: M2-8:2 FTS	109		"	73.7		148	25-200				
Surrogate: M9PFNA	73.7		"	76.9		95.9	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD21784 - SPE Ext-PFAS-EPA 537.1M											
Matrix Spike Dup (BD21784-MSD1)	*Source sample: 22D0961-01 (TRIB 1 SW)						Prepared: 04/29/2022 Analyzed: 05/02/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	71.4	2.00	ng/L	76.8	ND	93.0	25-200		9.91	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	75.6	5.00	"	76.0	ND	99.4	25-200		9.44	35	
N-EtFOSAA	76.4	2.00	"	80.0	ND	95.5	25-150		5.67	35	
N-MeFOSAA	81.1	2.00	"	80.0	ND	101	25-150		2.23	35	
Perfluoro-1-decanesulfonic acid (PFDS)	70.1	2.00	"	77.2	ND	90.8	25-150		2.99	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	78.7	2.00	"	76.4	ND	103	25-150		4.26	35	
Perfluoro-1-octanesulfonamide (FOSA)	55.0	2.00	"	80.0	ND	68.8	25-150		45.1	35	Non-dir.
Perfluorobutanesulfonic acid (PFBS)	70.5	2.00	"	70.8	3.11	95.2	25-150		1.45	35	
Perfluorodecanoic acid (PFDA)	82.0	2.00	"	80.0	ND	103	25-150		7.54	35	
Perfluorododecanoic acid (PFDoA)	75.7	2.00	"	80.0	ND	94.6	25-150		0.638	35	
Perfluoroheptanoic acid (PFHpA)	74.2	2.00	"	80.0	3.40	88.5	25-150		2.69	35	
Perfluorohexanesulfonic acid (PFHxS)	96.1	2.00	"	72.8	6.23	123	25-150		4.71	35	
Perfluorohexanoic acid (PFHxA)	83.7	2.00	"	80.0	5.98	97.1	25-150		0.357	35	
Perfluoro-n-butanoic acid (PFBA)	88.5	2.00	"	80.0	9.95	98.2	25-150		1.59	35	
Perfluorononanoic acid (PFNA)	76.3	2.00	"	80.0	ND	95.4	25-150		2.55	35	
Perfluorooctanesulfonic acid (PFOS)	76.8	2.00	"	74.0	6.18	95.4	25-150		8.44	35	
Perfluorooctanoic acid (PFOA)	96.8	2.00	"	80.0	11.5	107	25-150		6.92	35	
Perfluoropentanoic acid (PFPeA)	89.8	2.00	"	80.0	6.76	104	25-150		1.35	35	
Perfluorotetradecanoic acid (PFTA)	75.8	2.00	"	80.0	ND	94.8	25-150		1.62	35	
Perfluorotridecanoic acid (PFTrDA)	76.9	2.00	"	80.0	ND	96.1	25-150		6.25	35	
Perfluoroundecanoic acid (PFUnA)	80.9	2.00	"	80.0	ND	101	25-150		6.03	35	
Surrogate: M3PFBS	72.5		"	74.3		97.5	25-150				
Surrogate: M5PFHxA	73.7		"	80.0		92.1	25-150				
Surrogate: M4PFHpA	83.4		"	80.0		104	25-150				
Surrogate: M3PFHxS	82.8		"	75.7		109	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	74.8		"	80.0		93.5	25-150				
Surrogate: M6PFDA	74.7		"	80.0		93.4	25-150				
Surrogate: M7PFUdA	76.2		"	80.0		95.2	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	71.9		"	80.0		89.9	25-150				
Surrogate: M2PFTeDA	70.4		"	80.0		88.0	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	28.2		"	80.0		35.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	80.8		"	76.6		106	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	65.6		"	80.0		82.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.68		"	80.0		2.10	10-150				
Surrogate: d3-N-MeFOSAA	76.3		"	80.0		95.4	25-150				
Surrogate: d5-N-EtFOSAA	81.7		"	80.0		102	25-150				
Surrogate: M2-6:2 FTS	119		"	75.9		157	25-200				
Surrogate: M2-8:2 FTS	134		"	76.6		175	25-200				
Surrogate: M9PFNA	77.9		"	80.0		97.3	25-150				

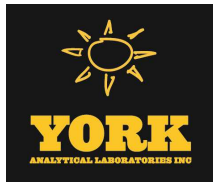


Miscellaneous Physical Parameters - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

Batch BD21403 - % Solids Prep

Duplicate (BD21403-DUP1)	*Source sample: 22D0884-01 (Duplicate)						Prepared & Analyzed: 04/22/2022					
% Solids	93.4	0.100	%		93.6				0.217	20		





Sample and Data Qualifiers Relating to This Work Order

- PFSu-L The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
- PFSu-H The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
- PF-LCS-H The LCS recovery was slightly above acceptable limits for the qualified compound. However, sample results are not biased high because results are corrected for isotope recovery.

Definitions and Other Explanations

- * Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
- ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
- RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
- LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
- LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
- MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
- Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
- NR Not reported
- RPD Relative Percent Difference
- Wet The data has been reported on an as-received (wet weight) basis
- Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

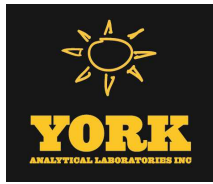
If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.





Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

120 Research Drive Stratford, CT 06615

132-02 89th Ave Queens, NY 11418

clientservices@yorklab.com

www.yorklab.com

800-306-YORK 800-306-9675

YORK Project No.

2200981

YOUR INFORMATION
Company: *WSP*
Address: *500 SUMMIT LAKE DR*
VACUOLA, NY
Phone: *914 561 2951*
Contact: *JOHN.BENVENGA@WSP.COM*
E-mail: *JOHN.BENVENGA@WSP.COM*

Report To:

Company: *← SAME*
Address: *← SAME*

Invoice To:

Company: *← SAME*
Address: *← SAME*

YOUR PROJECT NUMBER

3140 2220.002

Page *1* of *2*

Turn-Around Time

RUSH - Next Day
RUSH - Two Day
RUSH - Three Day
RUSH - Four Day
Standard (5-7 Day)

YOUR PROJECT NAME

*WESTCHESTER COUNTY
ALPAC*

YOUR PO#: 3140220-002

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

MICHAEL K. DEFELICE
[Signature]

Samples Collected by: (print AND sign your name)

Sample Identification

TRIB 1 SW
MS (TRIB 1 SW)
MSD (TRIB 1 SW)
FIELD DUPLICATE
TRIB 1 SED
~~*TRIB 1 SW*~~
NKS 2 SW
NKS 2 SED
NKS 2 SOIL

Matrix Codes

S - soil / solid
GW - groundwater
DW - drinking water
WW - wastewater
O - Oil
Other:

Samples From

New York
 New Jersey
 Connecticut
 Pennsylvania
Other:

Report / EDD Type (circle selections)

Summary Report
QA Report
NY ASP A Package
NY ASP B Package
Deliverables
NJDEP SRP HazSite
Other:

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Sample Matrix

W
↓
↓
S
S
S

Analysis Requested

TOTAL PFAS
↓
↓
↓
↓

Container Description

2 PCS. UNP.
↓
1 PCS UNP
~~*1 PCS UNP*~~
2 PCS. UNP.
1 PCS. UNP
↓

Comments:

Preservation: (check all that apply)

HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other: ___

Special Instruction

Field Filtered
Lab to Filter

1. Samples Relinquished by / Company

Date/Time

1. Samples Received by / Company

Date/Time

2. Samples Relinquished by / Company

Date/Time

2. Samples Relinquished by / Company

Date/Time

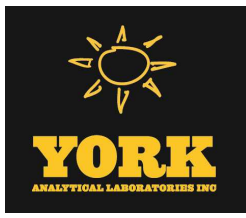
3. Samples Relinquished by / Company

Date/Time

3. Samples Received by / Company

Date/Time

WSP/KOM WS 4/30/22
Chie York 4/20/22 8:50
Chie York 4/20/22 11:15
4/20/22 11:15
Temperature *2.0*
Degrees C



Technical Report

prepared for:

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Report Date: 05/03/2022
Client Project ID: 31402220.002 Westchester County Airport (WCA)
York Project (SDG) No.: 22D1042

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
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132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 21, 2022 and listed below. The project was identified as your project: **31402220.002 Westchester County Airport (WCA)**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
22D1042-01	4A (0-0.5)	Soil	04/20/2022	04/21/2022
22D1042-02	4A (0.5-1)	Soil	04/20/2022	04/21/2022
22D1042-03	4A (4.5-5)	Soil	04/20/2022	04/21/2022
22D1042-04	4B (0-0.5)	Soil	04/20/2022	04/21/2022
22D1042-05	4B (0.5-1)	Soil	04/20/2022	04/21/2022
22D1042-07	4C (0-0.5)	Soil	04/20/2022	04/21/2022
22D1042-08	4C (0.5-1)	Soil	04/20/2022	04/21/2022
22D1042-09	4C (4.5-5)	Soil	04/20/2022	04/21/2022
22D1042-10	4D (0-0.5)	Soil	04/20/2022	04/21/2022
22D1042-11	4D (0.5-1)	Soil	04/20/2022	04/21/2022
22D1042-12	4D (2-2.5)	Soil	04/20/2022	04/21/2022
22D1042-13	4R (0-0.5)	Soil	04/20/2022	04/21/2022
22D1042-14	4R (0.5-1)	Soil	04/20/2022	04/21/2022
22D1042-15	4R (2-2.5)	Soil	04/20/2022	04/21/2022
22D1042-16	ES DS SED	Soil	04/20/2022	04/21/2022
22D1042-17	ES DS (0-0.5)	Soil	04/20/2022	04/21/2022
22D1042-18	FIELD BLANK	Water	04/20/2022	04/21/2022

General Notes for York Project (SDG) No.: 22D1042

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 05/03/2022

Cassie L. Mosher
Laboratory Manager





Sample Information

Client Sample ID: 4A (0-0.5)

York Sample ID: 22D1042-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 9:40 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	0.327		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.470		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.668		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	1.27		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	0.366		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	04/25/2022 11:52	05/02/2022 23:11	WL

Surrogate Recoveries

Result

Acceptance Range



Sample Information

Client Sample ID: 4A (0-0.5)					York Sample ID: 22D1042-01
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 9:40 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFBS	69.4 %			25-150					
	Surrogate: M5PFHxA	69.2 %			25-150					
	Surrogate: M4PFHpA	82.2 %			25-150					
	Surrogate: M3PFHxS	81.7 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	65.7 %			25-150					
	Surrogate: M6PFDA	59.8 %			25-150					
	Surrogate: M7PFUdA	62.9 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	62.9 %			25-150					
	Surrogate: M2PFTeDA	50.4 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	70.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	60.6 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	64.9 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	54.9 %			10-150					
	Surrogate: d3-N-MeFOSAA	70.4 %			25-150					
	Surrogate: d5-N-EtFOSAA	89.8 %			25-150					
	Surrogate: M2-6:2 FTS	133 %			25-200					
	Surrogate: M2-8:2 FTS	125 %			25-200					
	Surrogate: M9PFNA	66.0 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	81.9		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4A (0.5-1)					York Sample ID: 22D1042-02
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 9:50 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: 4A (0.5-1)

York Sample ID: 22D1042-02

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 9:50 am	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:04	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	70.0 %	25-150
Surrogate: M5PFHxA	67.4 %	25-150
Surrogate: M4PFHpA	75.9 %	25-150



Sample Information

Client Sample ID: 4A (0.5-1)

York Sample ID: 22D1042-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 9:50 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	69.7 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	61.8 %			25-150					
	Surrogate: M6PFDA	64.7 %			25-150					
	Surrogate: M7PFUdA	62.0 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	62.4 %			25-150					
	Surrogate: M2PFTeDA	50.7 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	68.8 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	59.0 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	64.9 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	47.3 %			10-150					
	Surrogate: d3-N-MeFOSAA	66.6 %			25-150					
	Surrogate: d5-N-EtFOSAA	85.9 %			25-150					
	Surrogate: M2-6:2 FTS	123 %			25-200					
	Surrogate: M2-8:2 FTS	131 %			25-200					
	Surrogate: M9PFNA	56.7 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	81.0		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4A (4.5-5)

York Sample ID: 22D1042-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 10:10 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: 4A (4.5-5)

York Sample ID: 22D1042-03

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 10:10 am	<u>Date Received</u> 04/21/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
375-95-1	* Perfluorononanoic acid (PFNA)	0.563		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	0.311		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.276	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:17	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	72.4 %	25-150



Sample Information

Client Sample ID: 4A (4.5-5) **York Sample ID:** 22D1042-03

York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 10:10 am **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M5PFHxA	71.2 %			25-150					
	Surrogate: M4PFHpA	91.5 %			25-150					
	Surrogate: M3PFHxS	77.0 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	72.1 %			25-150					
	Surrogate: M6PFDA	70.2 %			25-150					
	Surrogate: M7PFUdA	61.3 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	67.1 %			25-150					
	Surrogate: M2PFTeDA	49.7 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	72.6 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	61.9 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	67.7 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	54.8 %			10-150					
	Surrogate: d3-N-MeFOSAA	68.1 %			25-150					
	Surrogate: d5-N-EtFOSAA	95.9 %			25-150					
	Surrogate: M2-6:2 FTS	81.3 %			25-200					
	Surrogate: M2-8:2 FTS	97.4 %			25-200					
	Surrogate: M9PFNA	72.7 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	88.6		%	0.100	1	SM 2540G Certifications: CTDOH	04/26/2022 15:53	04/26/2022 15:57	YR

Sample Information

Client Sample ID: 4B (0-0.5) **York Sample ID:** 22D1042-04

York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 10:30 am **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: 4B (0-0.5)

York Sample ID: 22D1042-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 10:30 am	04/21/2022

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	0.340		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	0.421		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.958		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
375-95-1	* Perfluorononanoic acid (PFNA)	1.05		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	4.76		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	1.41		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	0.966		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	0.577		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	0.403		ug/kg dry	0.326	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:29	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	81.4 %	25-150
Surrogate: M5PFHxA	72.0 %	25-150



Sample Information

Client Sample ID: 4B (0-0.5)					York Sample ID: 22D1042-04
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 10:30 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	82.4 %			25-150					
	Surrogate: M3PFHxS	71.8 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	60.3 %			25-150					
	Surrogate: M6PFDA	62.7 %			25-150					
	Surrogate: M7PFUdA	59.0 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	62.0 %			25-150					
	Surrogate: M2PFTeDA	51.9 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	70.3 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	62.3 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	70.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	49.0 %			10-150					
	Surrogate: d3-N-MeFOSAA	71.1 %			25-150					
	Surrogate: d5-N-EtFOSAA	81.3 %			25-150					
	Surrogate: M2-6:2 FTS	157 %			25-200					
	Surrogate: M2-8:2 FTS	150 %			25-200					
	Surrogate: M9PFNA	58.6 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	76.4		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4B (0.5-1)					York Sample ID: 22D1042-05
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 10:40 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: 4B (0.5-1)

York Sample ID: 22D1042-05

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 10:40 am	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.436		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
375-95-1	* Perfluorononanoic acid (PFNA)	0.307		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	3.42		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.454		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	0.359		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:42	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	73.3 %	25-150
Surrogate: M5PFHxA	73.4 %	25-150



Sample Information

Client Sample ID: 4B (0.5-1)

York Sample ID: 22D1042-05

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 10:40 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	91.9 %			25-150					
	Surrogate: M3PFHxS	80.0 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	68.6 %			25-150					
	Surrogate: M6PFDA	64.3 %			25-150					
	Surrogate: M7PFUdA	55.9 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	47.6 %			25-150					
	Surrogate: M2PFTeDA	25.7 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	80.1 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	63.8 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	50.8 %			10-150					
	Surrogate: d3-N-MeFOSAA	51.8 %			25-150					
	Surrogate: d5-N-EtFOSAA	63.1 %			25-150					
	Surrogate: M2-6:2 FTS	84.6 %			25-200					
	Surrogate: M2-8:2 FTS	79.0 %			25-200					
	Surrogate: M9PFNA	66.2 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	83.3		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications: CTDOH			

Sample Information

Client Sample ID: 4C (0-0.5)

York Sample ID: 22D1042-07

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:00 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: 4C (0-0.5)

York Sample ID: 22D1042-07

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:00 am	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.394		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
375-95-1	* Perfluorononanoic acid (PFNA)	0.540		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	1.01		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.347		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.318	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 00:55	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	71.3 %	25-150
Surrogate: M5PFHxA	69.8 %	25-150
Surrogate: M4PFHpA	83.0 %	25-150



Sample Information

Client Sample ID: 4C (0-0.5) **York Sample ID:** 22D1042-07

York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 11:00 am **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	78.5 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	66.4 %			25-150					
	Surrogate: M6PFDA	65.2 %			25-150					
	Surrogate: M7PFUdA	62.5 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	68.7 %			25-150					
	Surrogate: M2PFTeDA	52.1 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	70.7 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	64.6 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	66.7 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	51.6 %			10-150					
	Surrogate: d3-N-MeFOSAA	69.4 %			25-150					
	Surrogate: d5-N-EtFOSAA	89.3 %			25-150					
	Surrogate: M2-6:2 FTS	149 %			25-200					
	Surrogate: M2-8:2 FTS	134 %			25-200					
	Surrogate: M9PFNA	66.1 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	76.8		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4C (0.5-1) **York Sample ID:** 22D1042-08

York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 11:10 am **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: 4C (0.5-1)

York Sample ID: 22D1042-08

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:10 am	<u>Date Received</u> 04/21/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.379		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.425		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	1.07		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.313	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:08	WL
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		78.8 %	25-150							



Sample Information

Client Sample ID: 4C (0.5-1)					York Sample ID: 22D1042-08
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:10 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M5PFHxA	70.5 %			25-150					
	Surrogate: M4PFHpA	89.0 %			25-150					
	Surrogate: M3PFHxS	75.8 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	73.0 %			25-150					
	Surrogate: M6PFDA	64.2 %			25-150					
	Surrogate: M7PFUdA	61.5 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	69.0 %			25-150					
	Surrogate: M2PFTeDA	54.2 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	74.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	69.3 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	67.9 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	49.7 %			10-150					
	Surrogate: d3-N-MeFOSAA	64.1 %			25-150					
	Surrogate: d5-N-EtFOSAA	92.0 %			25-150					
	Surrogate: M2-6:2 FTS	147 %			25-200					
	Surrogate: M2-8:2 FTS	142 %			25-200					
	Surrogate: M9PFNA	63.4 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	78.5		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4C (4.5-5)					York Sample ID: 22D1042-09
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:15 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: 4C (4.5-5)

York Sample ID: 22D1042-09

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:15 am	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:21	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	79.0 %	25-150
Surrogate: M5PFHxA	74.9 %	25-150
Surrogate: M4PFHpA	103 %	25-150



Sample Information

Client Sample ID: 4C (4.5-5) **York Sample ID:** 22D1042-09

York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 11:15 am **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	82.4 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	79.5 %			25-150					
	Surrogate: M6PFDA	70.9 %			25-150					
	Surrogate: M7PFUdA	67.6 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	73.5 %			25-150					
	Surrogate: M2PFTeDA	57.9 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	77.3 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	66.5 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.8 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	65.6 %			10-150					
	Surrogate: d3-N-MeFOSAA	71.4 %			25-150					
	Surrogate: d5-N-EtFOSAA	67.0 %			25-150					
	Surrogate: M2-6:2 FTS	75.8 %			25-200					
	Surrogate: M2-8:2 FTS	79.1 %			25-200					
	Surrogate: M9PFNA	81.0 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	89.8		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4D (0-0.5) **York Sample ID:** 22D1042-10

York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 11:20 am **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: 4D (0-0.5)

York Sample ID: 22D1042-10

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:20 am	<u>Date Received</u> 04/21/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.537		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.916		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.322		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.299	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 01:34	WL
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		71.7 %	25-150							



Sample Information

Client Sample ID: 4D (0-0.5)					York Sample ID: 22D1042-10
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:20 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M5PFHxA	67.1 %			25-150					
	Surrogate: M4PFHpA	85.2 %			25-150					
	Surrogate: M3PFHxS	77.6 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	62.8 %			25-150					
	Surrogate: M6PFDA	56.9 %			25-150					
	Surrogate: M7PFUdA	57.3 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	57.5 %			25-150					
	Surrogate: M2PFTeDA	49.0 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	70.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	45.2 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	65.7 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	45.4 %			10-150					
	Surrogate: d3-N-MeFOSAA	60.5 %			25-150					
	Surrogate: d5-N-EtFOSAA	70.4 %			25-150					
	Surrogate: M2-6:2 FTS	139 %			25-200					
	Surrogate: M2-8:2 FTS	115 %			25-200					
	Surrogate: M9PFNA	58.9 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	77.4		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4D (0.5-1)					York Sample ID: 22D1042-11
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:25 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: 4D (0.5-1)

York Sample ID: 22D1042-11

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:25 am	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.374		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.757		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	0.318		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:00	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	71.0 %	25-150
Surrogate: M5PFHxA	65.8 %	25-150
Surrogate: M4PFHpA	80.8 %	25-150



Sample Information

Client Sample ID: 4D (0.5-1) **York Sample ID:** 22D1042-11
York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 11:25 am **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	69.1 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	64.6 %			25-150					
	Surrogate: M6PFDA	61.7 %			25-150					
	Surrogate: M7PFUdA	59.8 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	62.9 %			25-150					
	Surrogate: M2PFTeDA	52.5 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	69.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	52.1 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	63.4 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	50.3 %			10-150					
	Surrogate: d3-N-MeFOSAA	66.7 %			25-150					
	Surrogate: d5-N-EtFOSAA	89.5 %			25-150					
	Surrogate: M2-6:2 FTS	118 %			25-200					
	Surrogate: M2-8:2 FTS	100 %			25-200					
	Surrogate: M9PFNA	63.7 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	78.4		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4D (2-2.5) **York Sample ID:** 22D1042-12
York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 11:30 am **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: 4D (2-2.5)

York Sample ID: 22D1042-12

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:30 am	<u>Date Received</u> 04/21/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.308	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:13	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	68.3 %	25-150



Sample Information

Client Sample ID: 4D (2-2.5)

York Sample ID: 22D1042-12

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:30 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M5PFHxA	67.7 %			25-150					
	Surrogate: M4PFHpA	85.2 %			25-150					
	Surrogate: M3PFHxS	71.9 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	71.5 %			25-150					
	Surrogate: M6PFDA	61.8 %			25-150					
	Surrogate: M7PFUdA	63.2 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	64.7 %			25-150					
	Surrogate: M2PFTeDA	64.7 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	74.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	50.4 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	69.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	49.2 %			10-150					
	Surrogate: d3-N-MeFOSAA	60.3 %			25-150					
	Surrogate: d5-N-EtFOSAA	78.2 %			25-150					
	Surrogate: M2-6:2 FTS	75.6 %			25-200					
	Surrogate: M2-8:2 FTS	62.0 %			25-200					
	Surrogate: M9PFNA	67.0 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	80.4		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4R (0-0.5)

York Sample ID: 22D1042-13

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:35 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: 4R (0-0.5)

York Sample ID: 22D1042-13

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:35 am	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	0.326		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	0.665		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
375-95-1	* Perfluorononanoic acid (PFNA)	2.44		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	15.1		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	0.357		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	1.93		ug/kg dry	0.309	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:26	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	74.1 %	25-150
Surrogate: M5PFHxA	72.6 %	25-150



Sample Information

Client Sample ID: 4R (0-0.5)					York Sample ID: 22D1042-13
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:35 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	93.7 %			25-150					
	Surrogate: M3PFHxS	83.0 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	73.3 %			25-150					
	Surrogate: M6PFDA	66.7 %			25-150					
	Surrogate: M7PFUdA	58.7 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	68.4 %			25-150					
	Surrogate: M2PFTeDA	58.4 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	77.6 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	62.0 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	69.9 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	54.5 %			10-150					
	Surrogate: d3-N-MeFOSAA	63.4 %			25-150					
	Surrogate: d5-N-EtFOSAA	87.3 %			25-150					
	Surrogate: M2-6:2 FTS	145 %			25-200					
	Surrogate: M2-8:2 FTS	99.0 %			25-200					
	Surrogate: M9PFNA	75.8 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	79.8		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4R (0.5-1)					York Sample ID: 22D1042-14
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:40 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: 4R (0.5-1)

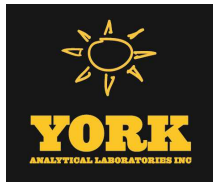
York Sample ID: 22D1042-14

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:40 am	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
375-95-1	* Perfluorononanoic acid (PFNA)	1.17		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	4.04		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	0.544		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
72629-94-8	* Perfluorotridecanoic acid (PFTriDA)	ND		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	1.55		ug/kg dry	0.296	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:39	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	66.3 %	25-150
Surrogate: M5PFHxA	66.3 %	25-150
Surrogate: M4PFHpA	90.1 %	25-150



Sample Information

Client Sample ID: 4R (0.5-1)

York Sample ID: 22D1042-14

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:40 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	75.0 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	71.7 %			25-150					
	Surrogate: M6PFDA	68.1 %			25-150					
	Surrogate: M7PFUdA	61.3 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	58.2 %			25-150					
	Surrogate: M2PFTeDA	51.0 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	69.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	60.7 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	65.1 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	47.8 %			10-150					
	Surrogate: d3-N-MeFOSAA	54.6 %			25-150					
	Surrogate: d5-N-EtFOSAA	87.2 %			25-150					
	Surrogate: M2-6:2 FTS	63.0 %			25-200					
	Surrogate: M2-8:2 FTS	70.7 %			25-200					
	Surrogate: M9PFNA	61.7 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	82.2		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: 4R (2-2.5)

York Sample ID: 22D1042-15

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:50 am	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: 4R (2-2.5)

York Sample ID: 22D1042-15

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 11:50 am	<u>Date Received</u> 04/21/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.396		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 02:52	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	72.7 %	25-150



Sample Information

Client Sample ID: 4R (2-2.5)					York Sample ID: 22D1042-15
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 11:50 am	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M5PFHxA	76.4 %			25-150					
	Surrogate: M4PFHpA	95.4 %			25-150					
	Surrogate: M3PFHxS	78.7 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	79.3 %			25-150					
	Surrogate: M6PFDA	74.7 %			25-150					
	Surrogate: M7PFUdA	64.8 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	68.2 %			25-150					
	Surrogate: M2PFTeDA	81.2 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	78.4 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	71.4 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	71.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	58.4 %			10-150					
	Surrogate: d3-N-MeFOSAA	31.0 %			25-150					
	Surrogate: d5-N-EtFOSAA	39.3 %			25-150					
	Surrogate: M2-6:2 FTS	67.2 %			25-200					
	Surrogate: M2-8:2 FTS	57.7 %			25-200					
	Surrogate: M9PFNA	83.5 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	88.5		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: ES DS SED					York Sample ID: 22D1042-16
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>	
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 12:20 pm	04/21/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: ES DS SED

York Sample ID: 22D1042-16

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 12:20 pm	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.829		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.798		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.473		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
72629-94-8	* Perfluorotridecanoic acid (PFTriDA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.425	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:05	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	76.2 %	25-150
Surrogate: M5PFHxA	69.6 %	25-150
Surrogate: M4PFHpA	81.8 %	25-150



Sample Information

Client Sample ID: ES DS SED **York Sample ID:** 22D1042-16
York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 12:20 pm **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	77.4 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	67.6 %			25-150					
	Surrogate: M6PFDA	66.8 %			25-150					
	Surrogate: M7PFUdA	58.1 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	63.0 %			25-150					
	Surrogate: M2PFTeDA	51.5 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	63.3 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	64.8 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	67.4 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	56.4 %			10-150					
	Surrogate: d3-N-MeFOSAA	73.0 %			25-150					
	Surrogate: d5-N-EtFOSAA	77.2 %			25-150					
	Surrogate: M2-6:2 FTS	168 %			25-200					
	Surrogate: M2-8:2 FTS	155 %			25-200					
	Surrogate: M9PFNA	62.8 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	58.2		%	0.100	1	SM 2540G	04/26/2022 15:53	04/26/2022 15:57	YR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: ES DS (0-0.5) **York Sample ID:** 22D1042-17
York Project (SDG) No.: 22D1042 **Client Project ID:** 31402220.002 Westchester County Airport (WCA) **Matrix:** Soil **Collection Date/Time:** April 20, 2022 12:30 pm **Date Received:** 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: ES DS (0-0.5)

York Sample ID: 22D1042-17

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Soil	April 20, 2022 12:30 pm	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.939		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.311	1	EPA 537m Certifications:	04/25/2022 11:52	05/03/2022 03:18	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	67.4 %	25-150



Sample Information

Client Sample ID: ES DS (0-0.5)	York Sample ID: 22D1042-17			
<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 20, 2022 12:30 pm	<u>Date Received</u> 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M5PFHxA	67.7 %			25-150					
	Surrogate: M4PFHpA	91.5 %			25-150					
	Surrogate: M3PFHxS	80.9 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	70.4 %			25-150					
	Surrogate: M6PFDA	66.2 %			25-150					
	Surrogate: M7PFUdA	60.0 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	67.5 %			25-150					
	Surrogate: M2PFTeDA	51.7 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	69.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	58.0 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	66.4 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	55.3 %			10-150					
	Surrogate: d3-N-MeFOSAA	58.0 %			25-150					
	Surrogate: d5-N-EtFOSAA	77.5 %			25-150					
	Surrogate: M2-6:2 FTS	81.7 %			25-200					
	Surrogate: M2-8:2 FTS	84.3 %			25-200					
	Surrogate: M9PFNA	70.7 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	78.3		%	0.100	1	SM 2540G Certifications: CTDOH	04/26/2022 15:53	04/26/2022 15:57	YR

Sample Information

Client Sample ID: FIELD BLANK	York Sample ID: 22D1042-18			
<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 20, 2022 1:30 pm	<u>Date Received</u> 04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: FIELD BLANK

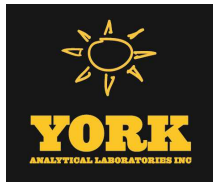
York Sample ID: 22D1042-18

<u>York Project (SDG) No.</u> 22D1042	<u>Client Project ID</u> 31402220.002 Westchester County Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 20, 2022 1:30 pm	<u>Date Received</u> 04/21/2022
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Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.73	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/28/2022 11:25	04/29/2022 17:10	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	77.6 %	25-150
Surrogate: M5PFHxA	76.1 %	25-150
Surrogate: M4PFHpA	90.4 %	25-150



Sample Information

Client Sample ID: FIELD BLANK

York Sample ID: 22D1042-18

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1042	31402220.002 Westchester County Airport (WCA)	Water	April 20, 2022 1:30 pm	04/21/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	83.6 %				25-150				
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	80.1 %				25-150				
	Surrogate: M6PFDA	86.0 %				25-150				
	Surrogate: M7PFUdA	87.9 %				25-150				
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	78.1 %				25-150				
	Surrogate: M2PFTeDA	63.8 %				10-150				
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	78.7 %				25-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	87.3 %				25-150				
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	72.7 %				25-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	49.9 %				10-150				
	Surrogate: d3-N-MeFOSAA	77.2 %				25-150				
	Surrogate: d5-N-EtFOSAA	87.8 %				25-150				
	Surrogate: M2-6:2 FTS	73.1 %				25-200				
	Surrogate: M2-8:2 FTS	118 %				25-200				
	Surrogate: M9PFNA	86.4 %				25-150				



Analytical Batch Summary

Batch ID: BD21465 **Preparation Method:** SPE PFAS Extraction-Soil-EPA 537m **Prepared By:** WEL

YORK Sample ID	Client Sample ID	Preparation Date
22D1042-01	4A (0-0.5)	04/25/22
22D1042-02	4A (0.5-1)	04/25/22
22D1042-03	4A (4.5-5)	04/25/22
22D1042-04	4B (0-0.5)	04/25/22
22D1042-05	4B (0.5-1)	04/25/22
22D1042-07	4C (0-0.5)	04/25/22
22D1042-08	4C (0.5-1)	04/25/22
22D1042-09	4C (4.5-5)	04/25/22
22D1042-10	4D (0-0.5)	04/25/22
22D1042-11	4D (0.5-1)	04/25/22
22D1042-12	4D (2-2.5)	04/25/22
22D1042-13	4R (0-0.5)	04/25/22
22D1042-14	4R (0.5-1)	04/25/22
22D1042-15	4R (2-2.5)	04/25/22
22D1042-16	ES DS SED	04/25/22
22D1042-17	ES DS (0-0.5)	04/25/22
BD21465-BLK1	Blank	04/25/22
BD21465-BS1	LCS	04/25/22
BD21465-MS1	Matrix Spike	04/25/22
BD21465-MSD1	Matrix Spike Dup	04/25/22

Batch ID: BD21584 **Preparation Method:** % Solids Prep **Prepared By:** YR

YORK Sample ID	Client Sample ID	Preparation Date
22D1042-01	4A (0-0.5)	04/26/22
22D1042-02	4A (0.5-1)	04/26/22
22D1042-03	4A (4.5-5)	04/26/22
22D1042-04	4B (0-0.5)	04/26/22
22D1042-05	4B (0.5-1)	04/26/22
22D1042-07	4C (0-0.5)	04/26/22
22D1042-08	4C (0.5-1)	04/26/22
22D1042-09	4C (4.5-5)	04/26/22
22D1042-10	4D (0-0.5)	04/26/22
22D1042-11	4D (0.5-1)	04/26/22
22D1042-12	4D (2-2.5)	04/26/22
22D1042-13	4R (0-0.5)	04/26/22
22D1042-14	4R (0.5-1)	04/26/22
22D1042-15	4R (2-2.5)	04/26/22
22D1042-16	ES DS SED	04/26/22
22D1042-17	ES DS (0-0.5)	04/26/22
BD21584-DUP1	Duplicate	04/26/22

Batch ID: BD21706 **Preparation Method:** SPE Ext-PFAS-EPA 537.1M **Prepared By:** WEL

YORK Sample ID	Client Sample ID	Preparation Date
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22D1042-18	FIELD BLANK	04/28/22
BD21706-BLK1	Blank	04/28/22
BD21706-BS1	LCS	04/28/22
BD21706-MS1	Matrix Spike	04/28/22
BD21706-MSD1	Matrix Spike Dup	04/28/22



PFAS Target compounds by LC/MS-MS - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21465 - SPE PFAS Extraction-Soil-EPA 537m

Blank (BD21465-BLK1)

Prepared: 04/25/2022 Analyzed: 05/02/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	0.249	ug/kg wet								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	0.249	"								
N-EtFOSAA	ND	0.249	"								
N-MeFOSAA	ND	0.249	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.249	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.249	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.249	"								
Perfluorobutanesulfonic acid (PFBS)	ND	0.249	"								
Perfluorodecanoic acid (PFDA)	ND	0.249	"								
Perfluorododecanoic acid (PFDoA)	ND	0.249	"								
Perfluoroheptanoic acid (PFHpA)	ND	0.249	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	0.249	"								
Perfluorohexanoic acid (PFHxA)	ND	0.249	"								
Perfluoro-n-butanoic acid (PFBA)	ND	0.249	"								
Perfluorononanoic acid (PFNA)	ND	0.249	"								
Perfluorooctanesulfonic acid (PFOS)	ND	0.249	"								
Perfluorooctanoic acid (PFOA)	ND	0.249	"								
Perfluoropentanoic acid (PFPeA)	ND	0.249	"								
Perfluorotetradecanoic acid (PFTA)	ND	0.249	"								
Perfluorotridecanoic acid (PFTTrDA)	ND	0.249	"								
Perfluoroundecanoic acid (PFUnA)	ND	0.249	"								
Surrogate: M3PFBS	3.63		"	4.62		78.6	25-150				
Surrogate: M5PFHxA	3.82		"	4.97		76.8	25-150				
Surrogate: M4PFHpA	4.79		"	4.97		96.3	25-150				
Surrogate: M3PFHxS	3.92		"	4.70		83.3	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.96		"	4.97		79.6	25-150				
Surrogate: M6PFDA	4.05		"	4.97		81.4	25-150				
Surrogate: M7PFUdA	3.70		"	4.97		74.4	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.47		"	4.97		69.8	25-150				
Surrogate: M2PFTeDA	3.30		"	4.97		66.4	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.00		"	4.97		80.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.87		"	4.76		81.4	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.69		"	4.97		74.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.28		"	4.97		66.0	10-150				
Surrogate: d3-N-MeFOSAA	3.89		"	4.97		78.2	25-150				
Surrogate: d5-N-EtFOSAA	4.56		"	4.97		91.7	25-150				
Surrogate: M2-6:2 FTS	4.28		"	4.72		90.8	25-200				
Surrogate: M2-8:2 FTS	5.70		"	4.76		120	25-200				
Surrogate: M9PFNA	4.09		"	4.97		82.3	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD21465 - SPE PFAS Extraction-Soil-EPA 537m											
LCS (BD21465-BS1)											
Prepared: 04/25/2022 Analyzed: 05/02/2022											
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.82	0.239	ug/kg wet	4.60		105	50-200				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.18	0.239	"	4.55		92.0	50-200				
N-EtFOSAA	4.76	0.239	"	4.79		99.4	50-130				
N-MeFOSAA	4.78	0.239	"	4.79		99.9	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	3.83	0.239	"	4.62		82.9	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	4.80	0.239	"	4.57		105	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	4.61	0.239	"	4.79		96.3	50-130				
Perfluorobutanesulfonic acid (PFBS)	4.15	0.239	"	4.24		98.1	50-130				
Perfluorodecanoic acid (PFDA)	5.00	0.239	"	4.79		104	50-130				
Perfluorododecanoic acid (PFDoA)	4.66	0.239	"	4.79		97.3	50-130				
Perfluoroheptanoic acid (PFHpA)	3.92	0.239	"	4.79		81.8	50-130				
Perfluorohexanesulfonic acid (PFHxS)	5.07	0.239	"	4.36		116	50-130				
Perfluorohexanoic acid (PFHxA)	4.83	0.239	"	4.79		101	50-130				
Perfluoro-n-butanoic acid (PFBA)	4.90	0.239	"	4.79		102	50-130				
Perfluorononanoic acid (PFNA)	4.83	0.239	"	4.79		101	50-130				
Perfluorooctanesulfonic acid (PFOS)	4.32	0.239	"	4.43		97.5	50-130				
Perfluorooctanoic acid (PFOA)	5.17	0.239	"	4.79		108	50-130				
Perfluoropentanoic acid (PFPeA)	4.96	0.239	"	4.79		104	50-130				
Perfluorotetradecanoic acid (PFTA)	5.00	0.239	"	4.79		104	50-130				
Perfluorotridecanoic acid (PFTrDA)	3.94	0.239	"	4.79		82.2	50-130				
Perfluoroundecanoic acid (PFUnA)	4.77	0.239	"	4.79		99.7	50-130				
Surrogate: M3PFBS	3.35		"	4.45		75.4	25-150				
Surrogate: M5PFHxA	3.56		"	4.79		74.5	25-150				
Surrogate: M4PFHpA	4.58		"	4.79		95.7	25-150				
Surrogate: M3PFHxS	3.47		"	4.53		76.5	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.63		"	4.79		75.9	25-150				
Surrogate: M6PFDA	3.33		"	4.79		69.6	25-150				
Surrogate: M7PFUdA	3.46		"	4.79		72.4	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.28		"	4.79		68.6	25-150				
Surrogate: M2PFTeDA	3.04		"	4.79		63.5	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.63		"	4.79		75.9	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.58		"	4.58		78.2	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.48		"	4.79		72.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.11		"	4.79		65.0	10-150				
Surrogate: d3-N-MeFOSAA	3.49		"	4.79		73.0	25-150				
Surrogate: d5-N-EtFOSAA	3.48		"	4.79		72.6	25-150				
Surrogate: M2-6:2 FTS	3.53		"	4.54		77.7	25-200				
Surrogate: M2-8:2 FTS	3.73		"	4.59		81.4	25-200				
Surrogate: M9PFNA	3.87		"	4.79		80.8	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21465 - SPE PFAS Extraction-Soil-EPA 537m

Matrix Spike (BD21465-MS1)	*Source sample: 22D1042-01 (4A (0-0.5))						Prepared: 04/25/2022 Analyzed: 05/02/2022	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.84	0.284	ug/kg dry	5.44	ND	107	25-200	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.66	0.284	"	5.39	ND	86.5	25-200	
N-EtFOSAA	5.06	0.284	"	5.67	ND	89.3	25-150	
N-MeFOSAA	5.80	0.284	"	5.67	ND	102	25-150	
Perfluoro-1-decanesulfonic acid (PFDS)	4.87	0.284	"	5.47	ND	88.9	25-150	
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.54	0.284	"	5.42	ND	102	25-150	
Perfluoro-1-octanesulfonamide (FOSA)	5.60	0.284	"	5.67	ND	98.7	25-150	
Perfluorobutanesulfonic acid (PFBS)	4.85	0.284	"	5.02	ND	96.6	25-150	
Perfluorodecanoic acid (PFDA)	5.19	0.284	"	5.67	ND	91.5	25-150	
Perfluorododecanoic acid (PFDoA)	5.04	0.284	"	5.67	ND	88.8	25-150	
Perfluoroheptanoic acid (PFHpA)	4.89	0.284	"	5.67	ND	86.3	25-150	
Perfluorohexanesulfonic acid (PFHxS)	5.52	0.284	"	5.16	0.327	101	25-150	
Perfluorohexanoic acid (PFHxA)	5.55	0.284	"	5.67	0.295	92.7	25-150	
Perfluoro-n-butanoic acid (PFBA)	5.92	0.284	"	5.67	0.470	96.0	25-150	
Perfluorononanoic acid (PFNA)	5.73	0.284	"	5.67	ND	101	25-150	
Perfluorooctanesulfonic acid (PFOS)	4.97	0.284	"	5.25	0.668	82.1	25-150	
Perfluorooctanoic acid (PFOA)	6.46	0.284	"	5.67	1.27	91.5	25-150	
Perfluoropentanoic acid (PFPeA)	5.74	0.284	"	5.67	ND	101	25-150	
Perfluorotetradecanoic acid (PFTA)	5.46	0.284	"	5.67	ND	96.2	25-150	
Perfluorotridecanoic acid (PFTrDA)	4.90	0.284	"	5.67	0.366	79.9	25-150	
Perfluoroundecanoic acid (PFUnA)	5.44	0.284	"	5.67	ND	95.9	25-150	
Surrogate: M3PFBS	4.02		"	5.27		76.2	25-150	
Surrogate: M5PFHxA	4.05		"	5.67		71.4	25-150	
Surrogate: M4PFHpA	4.49		"	5.67		79.1	25-150	
Surrogate: M3PFHxS	3.88		"	5.37		72.4	25-150	
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.74		"	5.67		66.0	25-150	
Surrogate: M6PFDA	3.58		"	5.67		63.2	25-150	
Surrogate: M7PFUdA	3.42		"	5.67		60.3	25-150	
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.67		"	5.67		64.6	25-150	
Surrogate: M2PFTeDA	2.99		"	5.67		52.8	10-150	
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.99		"	5.67		70.3	25-150	
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.71		"	5.43		68.4	25-150	
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.90		"	5.67		68.8	25-150	
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.12		"	5.67		55.0	10-150	
Surrogate: d3-N-MeFOSAA	3.96		"	5.67		69.9	25-150	
Surrogate: d5-N-EtFOSAA	4.75		"	5.67		83.8	25-150	
Surrogate: M2-6:2 FTS	8.91		"	5.38		165	25-200	
Surrogate: M2-8:2 FTS	7.98		"	5.43		147	25-200	
Surrogate: M9PFNA	3.25		"	5.67		57.4	25-150	



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD21465 - SPE PFAS Extraction-Soil-EPA 537m											
Matrix Spike Dup (BD21465-MSD1)	*Source sample: 22D1042-01 (4A (0-0.5))						Prepared: 04/25/2022 Analyzed: 05/02/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	6.05	0.295	ug/kg dry	5.66	ND	107	25-200		3.62	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.78	0.295	"	5.61	ND	85.3	25-200		2.60	35	
N-EtFOSAA	5.28	0.295	"	5.90	ND	89.5	25-150		4.22	35	
N-MeFOSAA	5.26	0.295	"	5.90	ND	89.2	25-150		9.66	35	
Perfluoro-1-decanesulfonic acid (PFDS)	6.56	0.295	"	5.69	ND	115	25-150		29.6	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	7.13	0.295	"	5.63	ND	126	25-150		25.1	35	
Perfluoro-1-octanesulfonamide (FOSA)	6.64	0.295	"	5.90	ND	113	25-150		17.0	35	
Perfluorobutanesulfonic acid (PFBS)	5.20	0.295	"	5.22	ND	99.6	25-150		7.09	35	
Perfluorodecanoic acid (PFDA)	5.36	0.295	"	5.90	ND	90.9	25-150		3.31	35	
Perfluorododecanoic acid (PFDoA)	4.77	0.295	"	5.90	ND	80.8	25-150		5.49	35	
Perfluoroheptanoic acid (PFHpA)	4.95	0.295	"	5.90	ND	84.0	25-150		1.27	35	
Perfluorohexanesulfonic acid (PFHxS)	6.57	0.295	"	5.37	0.327	116	25-150		17.3	35	
Perfluorohexanoic acid (PFHxA)	5.87	0.295	"	5.90	ND	99.5	25-150		5.56	35	
Perfluoro-n-butanoic acid (PFBA)	6.19	0.295	"	5.90	0.470	96.9	25-150		4.49	35	
Perfluorononanoic acid (PFNA)	5.63	0.295	"	5.90	ND	95.4	25-150		1.79	35	
Perfluorooctanesulfonic acid (PFOS)	6.59	0.295	"	5.46	0.668	109	25-150		28.0	35	
Perfluorooctanoic acid (PFOA)	7.20	0.295	"	5.90	1.27	100	25-150		10.8	35	
Perfluoropentanoic acid (PFPeA)	6.01	0.295	"	5.90	ND	102	25-150		4.65	35	
Perfluorotetradecanoic acid (PFTA)	5.75	0.295	"	5.90	ND	97.4	25-150		5.19	35	
Perfluorotridecanoic acid (PFTrDA)	4.52	0.295	"	5.90	0.366	70.4	25-150		8.05	35	
Perfluoroundecanoic acid (PFUnA)	6.02	0.295	"	5.90	ND	102	25-150		10.2	35	
Surrogate: M3PFBS	4.13		"	5.48		75.4	25-150				
Surrogate: M5PFHxA	4.29		"	5.90		72.7	25-150				
Surrogate: M4PFHpA	4.99		"	5.90		84.6	25-150				
Surrogate: M3PFHxS	4.30		"	5.58		77.0	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.94		"	5.90		66.8	25-150				
Surrogate: M6PFDA	3.76		"	5.90		63.7	25-150				
Surrogate: M7PFUdA	3.66		"	5.90		62.0	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.83		"	5.90		64.9	25-150				
Surrogate: M2PFTeDA	2.63		"	5.90		44.6	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.29		"	5.90		72.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.05		"	5.65		54.0	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.18		"	5.90		70.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.83		"	5.90		47.9	10-150				
Surrogate: d3-N-MeFOSAA	4.63		"	5.90		78.5	25-150				
Surrogate: d5-N-EtFOSAA	5.21		"	5.90		88.4	25-150				
Surrogate: M2-6:2 FTS	9.60		"	5.60		172	25-200				
Surrogate: M2-8:2 FTS	8.15		"	5.65		144	25-200				
Surrogate: M9PFNA	3.57		"	5.90		60.5	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21706 - SPE Ext-PFAS-EPA 537.1M

Blank (BD21706-BLK1)

Prepared: 04/28/2022 Analyzed: 04/29/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	ng/L								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	5.00	"								
N-EtFOSAA	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"								
Perfluorobutanesulfonic acid (PFBS)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.00	"								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	2.00	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	2.00	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTrDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Surrogate: M3PFBS	62.0		"	74.3		83.5	25-150				
Surrogate: M5PFHxA	63.9		"	80.0		79.8	25-150				
Surrogate: M4PFHpA	84.5		"	80.0		106	25-150				
Surrogate: M3PFHxS	67.5		"	75.7		89.1	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	71.9		"	80.0		89.8	25-150				
Surrogate: M6PFDA	78.5		"	80.0		98.1	25-150				
Surrogate: M7PFUdA	73.3		"	80.0		91.6	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	65.2		"	80.0		81.5	25-150				
Surrogate: M2PFTeDA	60.7		"	80.0		75.9	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	68.2		"	80.0		85.3	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	67.7		"	76.6		88.4	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	65.2		"	80.0		81.4	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	24.8		"	80.0		31.1	10-150				
Surrogate: d3-N-MeFOSAA	76.8		"	80.0		96.0	25-150				
Surrogate: d5-N-EtFOSAA	93.8		"	80.0		117	25-150				
Surrogate: M2-6:2 FTS	79.8		"	75.9		105	25-200				
Surrogate: M2-8:2 FTS	112		"	76.6		146	25-200				
Surrogate: M9PFNA	76.0		"	80.0		95.0	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21706 - SPE Ext-PFAS-EPA 537.1M

LCS (BD21706-BS1)

Prepared: 04/28/2022 Analyzed: 04/29/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	77.4	2.00	ng/L	76.8		101	50-175				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	71.1	5.00	"	76.0		93.6	50-175				
N-EtFOSAA	70.9	2.00	"	80.0		88.6	50-130				
N-MeFOSAA	90.0	2.00	"	80.0		112	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	89.0	2.00	"	77.2		115	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	91.0	2.00	"	76.4		119	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	94.5	2.00	"	80.0		118	50-130				
Perfluorobutanesulfonic acid (PFBS)	71.4	2.00	"	70.8		101	50-130				
Perfluorodecanoic acid (PFDA)	81.9	2.00	"	80.0		102	50-130				
Perfluorododecanoic acid (PFDoA)	82.4	2.00	"	80.0		103	50-130				
Perfluoroheptanoic acid (PFHpA)	72.0	2.00	"	80.0		90.1	50-130				
Perfluorohexanesulfonic acid (PFHxS)	85.3	2.00	"	72.8		117	50-130				
Perfluorohexanoic acid (PFHxA)	81.8	2.00	"	80.0		102	50-130				
Perfluoro-n-butanoic acid (PFBA)	82.4	2.00	"	80.0		103	50-130				
Perfluorononanoic acid (PFNA)	83.3	2.00	"	80.0		104	50-130				
Perfluorooctanesulfonic acid (PFOS)	81.9	2.00	"	74.0		111	50-130				
Perfluorooctanoic acid (PFOA)	93.3	2.00	"	80.0		117	50-130				
Perfluoropentanoic acid (PFPeA)	85.0	2.00	"	80.0		106	50-130				
Perfluorotetradecanoic acid (PFTA)	78.6	2.00	"	80.0		98.3	50-130				
Perfluorotridecanoic acid (PFTrDA)	89.4	2.00	"	80.0		112	50-130				
Perfluoroundecanoic acid (PFUnA)	85.0	2.00	"	80.0		106	50-130				
Surrogate: M3PFBS	64.3		"	74.3		86.5	25-150				
Surrogate: M5PFHxA	68.2		"	80.0		85.3	25-150				
Surrogate: M4PFHpA	83.2		"	80.0		104	25-150				
Surrogate: M3PFHxS	68.1		"	75.7		90.0	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	69.2		"	80.0		86.5	25-150				
Surrogate: M6PFDA	75.9		"	80.0		94.9	25-150				
Surrogate: M7PFUdA	74.6		"	80.0		93.2	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	72.3		"	80.0		90.4	25-150				
Surrogate: M2PFTeDA	73.6		"	80.0		92.1	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	68.5		"	80.0		85.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	62.1		"	76.6		81.1	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	65.2		"	80.0		81.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	44.0		"	80.0		55.0	10-150				
Surrogate: d3-N-MeFOSAA	72.7		"	80.0		90.9	25-150				
Surrogate: d5-N-EtFOSAA	90.8		"	80.0		114	25-150				
Surrogate: M2-6:2 FTS	69.0		"	75.9		90.9	25-200				
Surrogate: M2-8:2 FTS	99.8		"	76.6		130	25-200				
Surrogate: M9PFNA	74.2		"	80.0		92.8	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21706 - SPE Ext-PFAS-EPA 537.1M

Matrix Spike (BD21706-MS1)	*Source sample: 22D0952-02 (Matrix Spike)						Prepared: 04/28/2022 Analyzed: 04/29/2022	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	74.1	1.85	ng/L	71.1	ND	104	25-200	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	69.6	4.63	"	70.4	20.2	70.2	25-200	
N-EtFOSAA	67.8	1.85	"	74.1	ND	91.6	25-150	
N-MeFOSAA	76.9	1.85	"	74.1	ND	104	25-150	
Perfluoro-1-decanesulfonic acid (PFDS)	66.9	1.85	"	71.5	ND	93.5	25-150	
Perfluoro-1-heptanesulfonic acid (PFHpS)	70.6	1.85	"	70.7	ND	99.8	25-150	
Perfluoro-1-octanesulfonamide (FOSA)	63.9	1.85	"	74.1	5.57	78.8	25-150	
Perfluorobutanesulfonic acid (PFBS)	72.0	1.85	"	65.6	9.08	96.0	25-150	
Perfluorodecanoic acid (PFDA)	83.6	1.85	"	74.1	5.77	105	25-150	
Perfluorododecanoic acid (PFDoA)	66.1	1.85	"	74.1	ND	89.2	25-150	
Perfluoroheptanoic acid (PFHpA)	89.5	1.85	"	74.1	17.1	97.7	25-150	
Perfluorohexanesulfonic acid (PFHxS)	85.7	1.85	"	67.4	5.53	119	25-150	
Perfluorohexanoic acid (PFHxA)	120	1.85	"	74.1	45.3	101	25-150	
Perfluoro-n-butanoic acid (PFBA)	111	1.85	"	74.1	30.2	109	25-150	
Perfluorononanoic acid (PFNA)	86.1	1.85	"	74.1	14.0	97.3	25-150	
Perfluorooctanesulfonic acid (PFOS)	116	1.85	"	68.5	57.8	84.7	25-150	
Perfluorooctanoic acid (PFOA)	132	1.85	"	74.1	47.0	114	25-150	
Perfluoropentanoic acid (PFPeA)	133	1.85	"	74.1	58.2	101	25-150	
Perfluorotetradecanoic acid (PFTA)	68.4	1.85	"	74.1	ND	92.3	25-150	
Perfluorotridecanoic acid (PFTrDA)	82.1	1.85	"	74.1	ND	111	25-150	
Perfluoroundecanoic acid (PFUnA)	73.2	1.85	"	74.1	ND	98.8	25-150	
Surrogate: M3PFBS	66.3		"	68.8		96.4	25-150	
Surrogate: M5PFHxA	70.2		"	74.1		94.7	25-150	
Surrogate: M4PFHpA	65.3		"	74.1		88.2	25-150	
Surrogate: M3PFHxS	69.4		"	70.1		99.0	25-150	
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	62.5		"	74.1		84.4	25-150	
Surrogate: M6PFDA	66.0		"	74.1		89.1	25-150	
Surrogate: M7PFUdA	70.7		"	74.1		95.5	25-150	
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	68.8		"	74.1		92.9	25-150	
Surrogate: M2PFTeDA	70.8		"	74.1		95.6	10-150	
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	19.7		"	74.1		26.6	25-150	
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	72.7		"	70.9		103	25-150	
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	56.4		"	74.1		76.1	25-150	
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.12		"	74.1		1.51	10-150	
Surrogate: d3-N-MeFOSAA	68.8		"	74.1		92.9	25-150	
Surrogate: d5-N-EtFOSAA	84.3		"	74.1		114	25-150	
Surrogate: M2-6:2 FTS	133		"	70.3		189	25-200	
Surrogate: M2-8:2 FTS	152		"	71.0		214	25-200	
Surrogate: M9PFNA	65.1		"	74.1		87.9	25-150	



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21706 - SPE Ext-PFAS-EPA 537.1M

Matrix Spike Dup (BD21706-MSD1)	*Source sample: 22D0952-02 (Matrix Spike Dup)						Prepared: 04/28/2022 Analyzed: 04/29/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	86.1	1.85	ng/L	71.1	ND	121	25-200		15.0	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	66.6	4.63	"	70.4	20.2	65.9	25-200		4.43	35	
N-EtFOSAA	71.9	1.85	"	74.1	ND	97.1	25-150		5.84	35	
N-MeFOSAA	82.1	1.85	"	74.1	ND	111	25-150		6.64	35	
Perfluoro-1-decanesulfonic acid (PFDS)	78.0	1.85	"	71.5	ND	109	25-150		15.4	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	80.7	1.85	"	70.7	ND	114	25-150		13.3	35	
Perfluoro-1-octanesulfonamide (FOSA)	55.4	1.85	"	74.1	5.57	67.3	25-150		14.3	35	
Perfluorobutanesulfonic acid (PFBS)	76.0	1.85	"	65.6	9.08	102	25-150		5.44	35	
Perfluorodecanoic acid (PFDA)	79.3	1.85	"	74.1	5.77	99.2	25-150		5.36	35	
Perfluorododecanoic acid (PFDoA)	75.8	1.85	"	74.1	ND	102	25-150		13.7	35	
Perfluoroheptanoic acid (PFHpA)	87.8	1.85	"	74.1	17.1	95.5	25-150		1.86	35	
Perfluorohexanesulfonic acid (PFHxS)	86.5	1.85	"	67.4	5.53	120	25-150		0.870	35	
Perfluorohexanoic acid (PFHxA)	124	1.85	"	74.1	45.3	106	25-150		2.93	35	
Perfluoro-n-butanoic acid (PFBA)	130	1.85	"	74.1	30.2	135	25-150		15.6	35	
Perfluorononanoic acid (PFNA)	85.9	1.85	"	74.1	14.0	97.1	25-150		0.186	35	
Perfluorooctanesulfonic acid (PFOS)	131	1.85	"	68.5	57.8	106	25-150		11.9	35	
Perfluorooctanoic acid (PFOA)	130	1.85	"	74.1	47.0	112	25-150		1.30	35	
Perfluoropentanoic acid (PFPeA)	136	1.85	"	74.1	58.2	105	25-150		2.16	35	
Perfluorotetradecanoic acid (PFTA)	73.1	1.85	"	74.1	ND	98.7	25-150		6.66	35	
Perfluorotridecanoic acid (PFTrDA)	70.0	1.85	"	74.1	ND	94.5	25-150		16.0	35	
Perfluoroundecanoic acid (PFUnA)	74.6	1.85	"	74.1	ND	101	25-150		1.92	35	
Surrogate: M3PFBS	64.8		"	68.8		94.2	25-150				
Surrogate: M5PFHxA	70.1		"	74.1		94.6	25-150				
Surrogate: M4PFHpA	68.7		"	74.1		92.7	25-150				
Surrogate: M3PFHxS	71.5		"	70.1		102	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	64.1		"	74.1		86.6	25-150				
Surrogate: M6PFDA	71.1		"	74.1		96.0	25-150				
Surrogate: M7PFUdA	72.5		"	74.1		97.9	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	66.5		"	74.1		89.8	25-150				
Surrogate: M2PFTeDA	66.2		"	74.1		89.3	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	19.6		"	74.1		26.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	66.2		"	70.9		93.3	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	56.7		"	74.1		76.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.50		"	74.1		2.02	10-150				
Surrogate: d3-N-MeFOSAA	62.1		"	74.1		83.8	25-150				
Surrogate: d5-N-EtFOSAA	80.5		"	74.1		109	25-150				
Surrogate: M2-6:2 FTS	139		"	70.3		198	25-200				
Surrogate: M2-8:2 FTS	132		"	71.0		186	25-200				
Surrogate: M9PFNA	68.2		"	74.1		92.1	25-150				



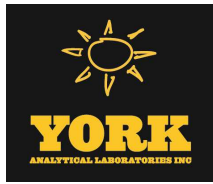
Miscellaneous Physical Parameters - Quality Control Data

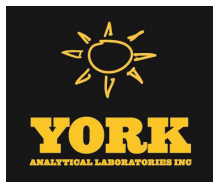
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21584 - % Solids Prep

Duplicate (BD21584-DUP1)	*Source sample: 22D1042-16 (ES DS SED)						Prepared & Analyzed: 04/26/2022				
% Solids	56.9	0.100	%		58.2				2.18	20	





Sample and Data Qualifiers Relating to This Work Order

PFSu-L The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.

PFSu-H The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



York Analytical Laboratories, Inc.
 120 Research Drive
 Stratford, CT 06615
 clientservices@yorklab.com
 www.yorklab.com



Field Chain-of-Custody Record

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.
22D1042

Page 1 of 2

YOUR INFORMATION		REPORT TO:		INVOICE TO:		YOUR PROJECT NUMBER		TURN-AROUND TIME	
Company: WSP	Address: 500 SUMMIT LAKE DR.	Company: SAME	Address: SAME	Company: SAME	Address: SAME	31402220.002	RUSH - Next Day	RUSH - Next Day	
Phone: 914 561 2951	Contact: MICHAEL K. DEBRIE	Phone: SAME	Contact: SAME	Phone: SAME	Contact: SAME	WESTCHESTER COUNTY	RUSH - Two Day	RUSH - Three Day	
E-mail: 504N.BENVENGA@WSP.COM	Signature: Michael K. DeBrie	E-mail: SAME	Signature: M M K DeBrie	E-mail: SAME	Signature: M M K DeBrie	ALBANY (OCA)	RUSH - Four Day	RUSH - Five Day	
Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.		Matrix Codes		Samples From		Report / EDD Type (circle selections)		YORK Reg. Comp.	
		S - soil / solid	New York	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)		
		GW - groundwater	New Jersey	QA Report	CT RCP DOA/DUE	EQUIS (Standard)			
		DW - drinking water	Connecticut	NY ASP A Package		NYSDEC EQUIS			
		WW - wastewater	Pennsylvania	NY ASP B Package		NJDEP Reduced Deliverables			
		O - Oil ; Other	Other			NJDEP SRP HazSite Other:			
Sample Identification		Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description				
4A (0-0.5)		S	4/20/22 0940	TOT. PFAS	PL, UNP				
4A (0.5-1)			0950						
4A (4.5-5)			1010						
4B (0-0.5)			1030						
4B (0.5-1)			1040						
4B (4.5-5)			1050	*HOLD!!	*HOLD!!				
4C (0-0.5)			1100						
4C (0.5-1)			1110						
4C (4.5-5)			1115						
Comments:									
Samples Relinquished by / Company		Samples Received by / Company		Preservation: (check all that apply)		Special Instruction			
M M K DeBrie WSP 4/21/22 4:20		Chloe York		HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___ ZnAc ___ Ascorbic Acid ___ Other: ___		Field Filtered ___ Lab to Filter ___			
Date/Time		Date/Time		Date/Time		Date/Time			
4/21/22 7:20		4-21-22 7:20		Chloe York		4-21-22 1:00			
Samples Relinquished by / Company									
Date/Time		Date/Time		Date/Time		Date/Time			
4/21/22 7:20		4/21/22 7:20		Chloe York		4-21-22 1:00			
Samples Relinquished by / Company									
Date/Time		Date/Time		Date/Time		Date/Time			
4/21/22 7:20		4/21/22 7:20		Chloe York		4-21-22 1:00			
Samples Relinquished by / Company									
Date/Time		Date/Time		Date/Time		Date/Time			
4/21/22 7:20		4/21/22 7:20		Chloe York		4-21-22 1:00			
Temp. Received at Lab									
4.5									



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 Stratford, CT 06615
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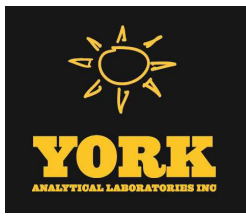
Field Chain-of-Custody Record

YORK Project No.
 22D1042

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

Page 2 of 2

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company:	WSP	Company:	← Same	Company:	← Same	31402220,002		RUSH - Next Day	
Address:	500 SUMMIT LAKE DR.	Address:		Address:		YOUR Project Name		RUSH - Two Day	
Phone:	VALHALLA NY	Phone:		Phone:		WESTCHESTER CO		RUSH - Three Day	
Contact:	914 561 2951	Contact:		Contact:		A. POPE (WCA)		RUSH - Four Day	
E-mail:	504 W. BENVENONA AVENUE	E-mail:		E-mail:		YOUR PO#: 31402220,002		Standard (5-7 Day)	
<p>Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.</p> <p>Michael DeFeice Samples Collected by: (print your name above and sign below)</p> <p>Michael DeFeice</p>									
Matrix Codes		Samples From		Report / EDD Type (circle selections)		YORK Reg. Comp.		Compared to the following Regulation(s): (please fill in)	
S - soil / solid	<input checked="" type="checkbox"/>	New York	Summary Report	Standard Excel EDD					
GW - groundwater	<input type="checkbox"/>	New Jersey	QA Report	EQUS (Standard)					
DW - drinking water	<input type="checkbox"/>	Connecticut	NY ASP A Package	NYSDEC EQUS					
WW - wastewater	<input type="checkbox"/>	Pennsylvania	NY ASP B Package	NJDEP Reduced Deliverables					
O - Oil ; Other	<input type="checkbox"/>	Other		NJDKQP					
Sample Matrix	S	Date/Time Sampled	Analysis Requested	TOTAL PFAS					
4D (0-0.5)		4/20/21 120		↓					
4D (0.5-1)		1125		↓					
4D (2-2.5)		1130		↓					
4R (0-0.5)		1135		↓					
4R (0.5-1)		1140		↓					
4R (2-2.5)		1150		↓					
ES DS SED		1220		↓					
ES DS (0-0.5)		1230		↓					
FIELD BLANK	DI	1330		↓					
<p>Comments:</p> <p>HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___ ZnAc ___ Ascorbic Acid ___ Other: ___</p> <p>Preservation: (check all that apply)</p>									
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Special Instruction					
WSP	4/20/21 120	Chie York	4-21-22 7:20	Field Filtered Lab to Filter					
Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Date/Time					
				4-21-22 1100					
Relinquished by / Company	Date/Time	Samples Received in LAB by	Date/Time	Temp. Received at Lab					
		WSP	4/21/22 1100	4.5					



Technical Report

prepared for:

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Report Date: 05/04/2022

Client Project ID: 31402220.002 Westchester Co. Airport (WCA)
York Project (SDG) No.: 22D1118

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
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132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 22, 2022 and listed below. The project was identified as your project: **31402220.002 Westchester Co. Airport (WCA)**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
22D1118-01	TRIB 1 GW	Water	04/21/2022	04/22/2022
22D1118-02	NKS 2 GW	Water	04/21/2022	04/22/2022
22D1118-03	TRIB 2 GW	Water	04/21/2022	04/22/2022
22D1118-04	E10 SOIL	Soil	04/21/2022	04/22/2022
22D1118-05	FIELD DUP 1	Soil	04/21/2022	04/22/2022
22D1118-06	E10 SED	Soil	04/21/2022	04/22/2022
22D1118-07	FIELD DUP 2	Soil	04/21/2022	04/22/2022
22D1118-08	E10 SW	Water	04/21/2022	04/22/2022
22D1118-09	E10 DS GW	Water	04/21/2022	04/22/2022
22D1118-10	4R GW	Water	04/21/2022	04/22/2022
22D1118-11	ES GW	Water	04/21/2022	04/22/2022
22D1118-12	ES SED	Soil	04/21/2022	04/22/2022
22D1118-13	ES SOIL	Soil	04/21/2022	04/22/2022
22D1118-14	E10 DS SED	Soil	04/21/2022	04/22/2022
22D1118-15	E10 DS SOIL	Soil	04/21/2022	04/22/2022
22D1118-16	FIELD BLANK GW	Water	04/21/2022	04/22/2022
22D1118-17	FIELD BLANK SOIL	Water	04/21/2022	04/22/2022

General Notes for York Project (SDG) No.: 22D1118

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 05/04/2022

Cassie L. Mosher
Laboratory Manager





Sample Information

Client Sample ID: TRIB 1 GW

York Sample ID: 22D1118-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1118	31402220.002 Westchester Co. Airport (WCA)	Water	April 21, 2022 9:40 am	04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.81	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
2991-50-6	* N-EtFOSAA	5.89		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	7.36		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	23.8		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	17.0		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	31.5		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	45.4		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
375-95-1	* Perfluorononanoic acid (PFNA)	21.5		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	38.3		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	99.1		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	55.2		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	7.58		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:10	WL



Sample Information

Client Sample ID: TRIB 1 GW

York Sample ID: 22D1118-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1118	31402220.002 Westchester Co. Airport (WCA)	Water	April 21, 2022 9:40 am	04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result		Acceptance Range						
	Surrogate: M3PFBS	94.0 %								
	Surrogate: M5PFHxA	93.1 %								
	Surrogate: M4PFHpA	102 %								
	Surrogate: M3PFHxS	111 %								
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	87.1 %								
	Surrogate: M6PFDA	96.4 %								
	Surrogate: M7PFUdA	79.9 %								
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	59.4 %								
	Surrogate: M2PFTeDA	37.9 %								
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	22.1 %	PFSu-L							
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	96.9 %								
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.5 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	%	PFSu-L							
	Surrogate: d3-N-MeFOSAA	87.9 %								
	Surrogate: d5-N-EtFOSAA	88.4 %								
	Surrogate: M2-6:2 FTS	189 %								
	Surrogate: M2-8:2 FTS	229 %	PFSu-H							
	Surrogate: M9PFNA	88.4 %								

Sample Information

Client Sample ID: NKS 2 GW

York Sample ID: 22D1118-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1118	31402220.002 Westchester Co. Airport (WCA)	Water	April 21, 2022 9:50 am	04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.81	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL



Sample Information

Client Sample ID: NKS 2 GW

York Sample ID: 22D1118-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Water

April 21, 2022 9:50 am

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2991-50-6	* N-EtFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	2.76		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	10.0		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	12.7		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	77.2		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	25.9		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	21.0		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
375-95-1	* Perfluorononanoic acid (PFNA)	4.15		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	63.7		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	17.0		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	47.6		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:23	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS

86.6 %

25-150

Surrogate: M5PFHxA

79.7 %

25-150

Surrogate: M4PFHpA

101 %

25-150

Surrogate: M3PFHxS

104 %

25-150

Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)

80.7 %

25-150



Sample Information

Client Sample ID: NKS 2 GW

York Sample ID: 22D1118-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1118	31402220.002 Westchester Co. Airport (WCA)	Water	April 21, 2022 9:50 am	04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M6PFDA	92.3 %			25-150					
	Surrogate: M7PFUdA	89.2 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	82.0 %			25-150					
	Surrogate: M2PFTeDA	88.4 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	59.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	105 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.8 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	39.0 %			10-150					
	Surrogate: d3-N-MeFOSAA	87.1 %			25-150					
	Surrogate: d5-N-EtFOSAA	98.2 %			25-150					
	Surrogate: M2-6:2 FTS	112 %			25-200					
	Surrogate: M2-8:2 FTS	162 %			25-200					
	Surrogate: M9PFNA	87.1 %			25-150					

Sample Information

Client Sample ID: TRIB 2 GW

York Sample ID: 22D1118-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1118	31402220.002 Westchester Co. Airport (WCA)	Water	April 21, 2022 10:10 am	04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	118		ng/L	4.73	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL



Sample Information

Client Sample ID: TRIB 2 GW

York Sample ID: 22D1118-03

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 10:10 am	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	19.4		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	23.2		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	102		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	324		ng/L	18.9	10	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 12:08	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	219		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	145		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
375-95-1	* Perfluorononanoic acid (PFNA)	29.6		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	340		ng/L	18.9	10	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 12:08	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	135		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	755		ng/L	18.9	10	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 12:08	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:36	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	92.2 %	25-150
Surrogate: M3PFBS	88.4 %	25-150
Surrogate: M5PFHxA	74.4 %	25-150
Surrogate: M5PFHxA	76.2 %	25-150
Surrogate: M4PFHpA	101 %	25-150
Surrogate: M4PFHpA	97.5 %	25-150
Surrogate: M3PFHxS	96.7 %	25-150
Surrogate: M3PFHxS	99.8 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	82.9 %	25-150



Sample Information

Client Sample ID: TRIB 2 GW

York Sample ID: 22D1118-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Water

April 21, 2022 10:10 am

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	76.3 %				25-150				
	Surrogate: M6PFDA	74.6 %				25-150				
	Surrogate: M6PFDA	91.6 %				25-150				
	Surrogate: M7PFUdA	76.7 %				25-150				
	Surrogate: M7PFUdA	86.1 %				25-150				
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	71.6 %				25-150				
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	77.0 %				25-150				
	Surrogate: M2PFTeDA	73.9 %				10-150				
	Surrogate: M2PFTeDA	83.7 %				10-150				
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	80.5 %				25-150				
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	45.6 %				25-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	95.5 %				25-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	93.8 %				25-150				
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	44.3 %				25-150				
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	65.4 %				25-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	28.7 %				10-150				
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	28.4 %				10-150				
	Surrogate: d3-N-MeFOSAA	56.3 %				25-150				
	Surrogate: d3-N-MeFOSAA	81.7 %				25-150				
	Surrogate: d5-N-EtFOSAA	84.3 %				25-150				
	Surrogate: d5-N-EtFOSAA	93.3 %				25-150				
	Surrogate: M2-6:2 FTS	98.0 %				25-200				
	Surrogate: M2-6:2 FTS	123 %				25-200				
	Surrogate: M2-8:2 FTS	78.4 %				25-200				
	Surrogate: M2-8:2 FTS	161 %				25-200				
	Surrogate: M9PFNA	82.6 %				25-150				
	Surrogate: M9PFNA	81.7 %				25-150				



Sample Information

Client Sample ID: E10 SOIL

York Sample ID: 22D1118-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Soil

April 21, 2022 10:30 am

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.834		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	1.06		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	0.338		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	0.309		ug/kg dry	0.288	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 04:36	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS

72.1 %

25-150

Surrogate: M5PFHxA

70.3 %

25-150



Sample Information

Client Sample ID: E10 SOIL

York Sample ID: 22D1118-04

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 10:30 am	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	89.3 %			25-150					
	Surrogate: M3PFHxS	83.0 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	74.0 %			25-150					
	Surrogate: M6PFDA	72.8 %			25-150					
	Surrogate: M7PFUdA	70.1 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	67.8 %			25-150					
	Surrogate: M2PFTeDA	51.8 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	74.5 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	66.0 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	68.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	54.3 %			10-150					
	Surrogate: d3-N-MeFOSAA	65.4 %			25-150					
	Surrogate: d5-N-EtFOSAA	92.9 %			25-150					
	Surrogate: M2-6:2 FTS	84.8 %			25-200					
	Surrogate: M2-8:2 FTS	102 %			25-200					
	Surrogate: M9PFNA	71.2 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	85.4		%	0.100	1	SM 2540G Certifications: CTDOH	04/26/2022 14:36	04/27/2022 10:49	JTG

Sample Information

Client Sample ID: FIELD DUP 1

York Sample ID: 22D1118-05

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 3:00 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: FIELD DUP 1

York Sample ID: 22D1118-05

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 3:00 pm	<u>Date Received</u> 04/22/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.946		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	0.293		ug/kg dry	0.287	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:15	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	72.7 %	25-150
Surrogate: M5PFHxA	71.1 %	25-150
Surrogate: M4PFHpA	90.9 %	25-150



Sample Information

Client Sample ID: FIELD DUP 1

York Sample ID: 22D1118-05

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 3:00 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	77.1 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	68.9 %			25-150					
	Surrogate: M6PFDA	70.3 %			25-150					
	Surrogate: M7PFUdA	73.7 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	67.6 %			25-150					
	Surrogate: M2PFTeDA	55.2 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	73.2 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	64.8 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	67.7 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	62.9 %			10-150					
	Surrogate: d3-N-MeFOSAA	74.1 %			25-150					
	Surrogate: d5-N-EtFOSAA	88.9 %			25-150					
	Surrogate: M2-6:2 FTS	85.4 %			25-200					
	Surrogate: M2-8:2 FTS	84.6 %			25-200					
	Surrogate: M9PFNA	76.3 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.4		%	0.100	1	SM 2540G	04/26/2022 14:36	04/27/2022 10:49	JTG
							Certifications:	CTDOH		

Sample Information

Client Sample ID: E10 SED

York Sample ID: 22D1118-06

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 10:35 am	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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Sample Information

Client Sample ID: E10 SED

York Sample ID: 22D1118-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Soil

April 21, 2022 10:35 am

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.302		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	0.343		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
375-95-1	* Perfluorononanoic acid (PFNA)	0.416		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	3.38		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.328		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	0.499		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	0.713		ug/kg dry	0.301	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 05:28	WL

Surrogate Recoveries

Result

Acceptance Range



Sample Information

Client Sample ID: E10 SED

York Sample ID: 22D1118-06

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 10:35 am	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFBS	74.9 %			25-150					
	Surrogate: M5PFHxA	71.9 %			25-150					
	Surrogate: M4PFHpA	93.7 %			25-150					
	Surrogate: M3PFHxS	74.6 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	76.9 %			25-150					
	Surrogate: M6PFDA	72.6 %			25-150					
	Surrogate: M7PFUdA	66.8 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	65.4 %			25-150					
	Surrogate: M2PFTeDA	54.1 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	74.8 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	77.1 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	66.8 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	58.9 %			10-150					
	Surrogate: d3-N-MeFOSAA	69.9 %			25-150					
	Surrogate: d5-N-EtFOSAA	91.3 %			25-150					
	Surrogate: M2-6:2 FTS	101 %			25-200					
	Surrogate: M2-8:2 FTS	137 %			25-200					
	Surrogate: M9PFNA	71.6 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst	
solids	* % Solids	77.8		%	0.100	1	SM 2540G	04/26/2022 14:36	04/27/2022 10:49	JTG	
							Certifications:	CTDOH			

Sample Information

Client Sample ID: FIELD DUP 2

York Sample ID: 22D1118-07

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 3:00 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: FIELD DUP 2

York Sample ID: 22D1118-07

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 3:00 pm	<u>Date Received</u> 04/22/2022
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Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	2.10		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	0.666		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	0.498		ug/kg dry	0.320	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:07	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	74.5 %	25-150
Surrogate: M5PFHxA	71.4 %	25-150
Surrogate: M4PFHpA	94.6 %	25-150



Sample Information

Client Sample ID: FIELD DUP 2

York Sample ID: 22D1118-07

York Project (SDG) No. 22D1118 Client Project ID 31402220.002 Westchester Co. Airport (WCA) Matrix Soil Collection Date/Time April 21, 2022 3:00 pm Date Received 04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

Table with 11 columns: CAS No., Parameter, Result, Flag, Units, Reported to LOQ, Dilution, Reference Method, Date/Time Prepared, Date/Time Analyzed, Analyst. Lists various surrogate PFAS compounds and their results.

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

Table with 11 columns: CAS No., Parameter, Result, Flag, Units, Reported to LOQ, Dilution, Reference Method, Date/Time Prepared, Date/Time Analyzed, Analyst. Shows Total Solids result of 77.6%.

Sample Information

Client Sample ID: E10 SW

York Sample ID: 22D1118-08

York Project (SDG) No. 22D1118 Client Project ID 31402220.002 Westchester Co. Airport (WCA) Matrix Water Collection Date/Time April 21, 2022 10:40 am Date Received 04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE EXT-PFAS-EPA 537.1M

Table with 11 columns: CAS No., Parameter, Result, Flag, Units, Reported to LOQ, Dilution, Reference Method, Date/Time Prepared, Date/Time Analyzed, Analyst.



Sample Information

Client Sample ID: E10 SW

York Sample ID: 22D1118-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Water

April 21, 2022 10:40 am

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.16		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	55.2		ng/L	4.81	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	16.7		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	16.8		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	2.64		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	41.7		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	300		ng/L	9.62	5	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 12:21	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	70.3		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	31.8		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
375-95-1	* Perfluorononanoic acid (PFNA)	53.0		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	554		ng/L	9.62	5	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 12:21	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	93.7		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	108		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	4.76		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 20:49	WL



Sample Information

Client Sample ID: E10 SW

York Sample ID: 22D1118-08

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1118	31402220.002 Westchester Co. Airport (WCA)	Water	April 21, 2022 10:40 am	04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result		Acceptance Range						
	Surrogate: M3PFBS	90.8 %			25-150					
	Surrogate: M3PFBS	92.0 %			25-150					
	Surrogate: M5PFHxA	79.5 %			25-150					
	Surrogate: M5PFHxA	87.8 %			25-150					
	Surrogate: M4PFHpA	104 %			25-150					
	Surrogate: M4PFHpA	103 %			25-150					
	Surrogate: M3PFHxS	87.2 %			25-150					
	Surrogate: M3PFHxS	97.9 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	79.5 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	88.6 %			25-150					
	Surrogate: M6PFDA	84.9 %			25-150					
	Surrogate: M6PFDA	97.5 %			25-150					
	Surrogate: M7PFUdA	86.3 %			25-150					
	Surrogate: M7PFUdA	101 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	90.6 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	90.7 %			25-150					
	Surrogate: M2PFTeDA	85.7 %			10-150					
	Surrogate: M2PFTeDA	94.5 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	77.1 %			25-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	36.6 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	90.5 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	80.8 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	79.0 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	79.3 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	38.5 %			10-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	40.8 %			10-150					
	Surrogate: d3-N-MeFOSAA	83.8 %			25-150					
	Surrogate: d3-N-MeFOSAA	92.7 %			25-150					
	Surrogate: d5-N-EtFOSAA	104 %			25-150					
	Surrogate: d5-N-EtFOSAA	107 %			25-150					



Sample Information

Client Sample ID: E10 SW

York Sample ID: 22D1118-08

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 10:40 am	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M2-6:2 FTS	89.0 %			25-200					
	Surrogate: M2-6:2 FTS	148 %			25-200					
	Surrogate: M2-8:2 FTS	76.2 %			25-200					
	Surrogate: M2-8:2 FTS	158 %			25-200					
	Surrogate: M9PFNA	90.5 %			25-150					
	Surrogate: M9PFNA	83.8 %			25-150					

Sample Information

Client Sample ID: E10 DS GW

York Sample ID: 22D1118-09

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 11:20 am	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.73	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	1.92		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL



Sample Information

Client Sample ID: E10 DS GW

York Sample ID: 22D1118-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Water

April 21, 2022 11:20 am

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
307-24-4	* Perfluorohexanoic acid (PFHxA)	2.97		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	6.11		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
375-95-1	* Perfluorononanoic acid (PFNA)	2.42		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	6.14		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	8.23		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	3.19		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.89	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:15	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	92.1 %	25-150
Surrogate: M5PFHxA	80.2 %	25-150
Surrogate: M4PFHpA	100 %	25-150
Surrogate: M3PFHxS	104 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	84.5 %	25-150
Surrogate: M6PFDA	94.4 %	25-150
Surrogate: M7PFUdA	87.9 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	76.6 %	25-150
Surrogate: M2PFTeDA	82.2 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	65.9 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	95.8 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	76.0 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	43.0 %	10-150
Surrogate: d3-N-MeFOSAA	87.6 %	25-150
Surrogate: d5-N-EtFOSAA	94.4 %	25-150
Surrogate: M2-6:2 FTS	141 %	25-200
Surrogate: M2-8:2 FTS	159 %	25-200
Surrogate: M9PFNA	91.2 %	25-150



Sample Information

Client Sample ID: E10 DS GW

York Sample ID: 22D1118-09

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 11:20 am	<u>Date Received</u> 04/22/2022
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Sample Information

Client Sample ID: 4R GW

York Sample ID: 22D1118-10

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 12:20 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE EXT-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.46		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	5.11		ng/L	4.81	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	16.3		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	32.5		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	19.7		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	28.4		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	247		ng/L	19.2	10	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 12:34	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	66.7		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	55.7		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
375-95-1	* Perfluorononanoic acid (PFNA)	546		ng/L	19.2	10	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 12:34	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	1340		ng/L	19.2	10	EPA 537m Certifications:	04/29/2022 11:30	05/03/2022 12:34	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	53.8		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL



Sample Information

Client Sample ID: 4R GW

York Sample ID: 22D1118-10

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 12:20 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2706-90-3	* Perfluoropentanoic acid (PFPeA)	154		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	54.9		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:28	WL
Surrogate Recoveries		Result					Acceptance Range			
Surrogate: M3PFBS		93.7 %					25-150			
Surrogate: M3PFBS		96.6 %					25-150			
Surrogate: M5PFHxA		54.5 %					25-150			
Surrogate: M5PFHxA		89.1 %					25-150			
Surrogate: M4PFHpA		113 %					25-150			
Surrogate: M4PFHpA		110 %					25-150			
Surrogate: M3PFHxS		97.5 %					25-150			
Surrogate: M3PFHxS		104 %					25-150			
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)		96.5 %					25-150			
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)		91.4 %					25-150			
Surrogate: M6PFDA		91.7 %					25-150			
Surrogate: M6PFDA		97.2 %					25-150			
Surrogate: M7PFUdA		82.2 %					25-150			
Surrogate: M7PFUdA		94.1 %					25-150			
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)		83.8 %					25-150			
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)		90.3 %					25-150			
Surrogate: M2PFTeDA		73.3 %					10-150			
Surrogate: M2PFTeDA		87.8 %					10-150			
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)		42.3 %					25-150			
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)		90.9 %					25-150			
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)		62.9 %					25-150			
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)		69.5 %					25-150			
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)		80.9 %					25-150			
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)		81.2 %					25-150			



Sample Information

Client Sample ID: 4R GW

York Sample ID: 22D1118-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Water

April 21, 2022 12:20 pm

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	7.93 %		PFSu-L	10-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	8.10 %		PFSu-L	10-150					
	Surrogate: d3-N-MeFOSAA	80.5 %			25-150					
	Surrogate: d3-N-MeFOSAA	93.6 %			25-150					
	Surrogate: d5-N-EtFOSAA	90.4 %			25-150					
	Surrogate: d5-N-EtFOSAA	104 %			25-150					
	Surrogate: M2-6:2 FTS	101 %			25-200					
	Surrogate: M2-6:2 FTS	133 %			25-200					
	Surrogate: M2-8:2 FTS	77.4 %			25-200					
	Surrogate: M2-8:2 FTS	178 %			25-200					
	Surrogate: M9PFNA	84.9 %			25-150					
	Surrogate: M9PFNA	70.3 %			25-150					

Sample Information

Client Sample ID: ES GW

York Sample ID: 22D1118-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Water

April 21, 2022 12:30 pm

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	5.68	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	5.35		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	20.8		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL



Sample Information

Client Sample ID: ES GW

York Sample ID: 22D1118-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Water

April 21, 2022 12:30 pm

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	15.3		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	176		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	42.1		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	14.5		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
375-95-1	* Perfluorononanoic acid (PFNA)	107		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	114		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	41.7		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	62.9		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.27	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:41	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	83.7 %	25-150
Surrogate: M5PFHxA	81.9 %	25-150
Surrogate: M4PFHpA	101 %	25-150
Surrogate: M3PFHxS	89.4 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	83.5 %	25-150
Surrogate: M6PFDA	94.7 %	25-150
Surrogate: M7PFUdA	88.9 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	81.5 %	25-150
Surrogate: M2PFTeDA	79.8 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	53.8 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	88.1 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.7 %	25-150



Sample Information

Client Sample ID: ES GW

York Sample ID: 22D1118-11

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 12:30 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.65 %		PFSu-L		10-150				
	Surrogate: d3-N-MeFOSAA	85.1 %				25-150				
	Surrogate: d5-N-EtFOSAA	91.4 %				25-150				
	Surrogate: M2-6:2 FTS	115 %				25-200				
	Surrogate: M2-8:2 FTS	118 %				25-200				
	Surrogate: M9PFNA	86.6 %				25-150				

Sample Information

Client Sample ID: ES SED

York Sample ID: 22D1118-12

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 12:35 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	1.86		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL



Sample Information

Client Sample ID: ES SED

York Sample ID: 22D1118-12

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Soil

April 21, 2022 12:35 pm

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
307-24-4	* Perfluorohexanoic acid (PFHxA)	0.682		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	5.68		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
375-95-1	* Perfluorononanoic acid (PFNA)	5.17		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	16.2		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.823		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	2.14		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	1.35		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	0.638		ug/kg dry	0.561	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:20	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	76.9 %	25-150
Surrogate: M5PFHxA	71.6 %	25-150
Surrogate: M4PFHpA	88.2 %	25-150
Surrogate: M3PFHxS	85.5 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	68.9 %	25-150
Surrogate: M6PFDA	65.0 %	25-150
Surrogate: M7PFUdA	60.8 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	62.8 %	25-150
Surrogate: M2PFTeDA	52.2 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	63.8 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	57.0 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	69.9 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	53.1 %	10-150
Surrogate: d3-N-MeFOSAA	68.1 %	25-150
Surrogate: d5-N-EtFOSAA	83.3 %	25-150
Surrogate: M2-6:2 FTS	163 %	25-200
Surrogate: M2-8:2 FTS	134 %	25-200
Surrogate: M9PFNA	66.6 %	25-150



Sample Information

Client Sample ID: ES SED					York Sample ID: 22D1118-12
<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 12:35 pm	<u>Date Received</u> 04/22/2022	

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	44.5		%	0.100	1	SM 2540G Certifications: CTDOH	04/26/2022 14:36	04/27/2022 10:49	JTG

Sample Information

Client Sample ID: ES SOIL					York Sample ID: 22D1118-13
<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 12:40 pm	<u>Date Received</u> 04/22/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	0.496		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	0.511		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL



Sample Information

Client Sample ID: ES SOIL

York Sample ID: 22D1118-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Soil

April 21, 2022 12:40 pm

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	1.17		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	1.87		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	0.960		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	1.24		ug/kg dry	0.428	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:45	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	89.2 %	25-150
Surrogate: M5PFHxA	83.2 %	25-150
Surrogate: M4PFHpA	92.3 %	25-150
Surrogate: M3PFHxS	93.8 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	79.9 %	25-150
Surrogate: M6PFDA	74.1 %	25-150
Surrogate: M7PFUdA	58.8 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	58.9 %	25-150
Surrogate: M2PFTeDA	36.0 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	62.6 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	79.4 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	78.7 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.41 %	PFSu-L 10-150
Surrogate: d3-N-MeFOSAA	59.1 %	25-150
Surrogate: d5-N-EtFOSAA	73.7 %	25-150
Surrogate: M2-6:2 FTS	190 %	25-200
Surrogate: M2-8:2 FTS	208 %	PFSu-H 25-200
Surrogate: M9PFNA	74.5 %	25-150



Sample Information

Client Sample ID: ES SOIL

York Sample ID: 22D1118-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Soil

April 21, 2022 12:40 pm

04/22/2022

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	57.1		%	0.100	1	SM 2540G Certifications: CTDOH	04/26/2022 14:36	04/27/2022 10:49	JTG

Sample Information

Client Sample ID: E10 DS SED

York Sample ID: 22D1118-14

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Soil

April 21, 2022 1:20 pm

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.329		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL



Sample Information

Client Sample ID: E10 DS SED

York Sample ID: 22D1118-14

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 1:20 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	2.40		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	0.400		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	0.965		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	0.501		ug/kg dry	0.324	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 06:58	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	72.6 %	25-150
Surrogate: M5PFHxA	69.8 %	25-150
Surrogate: M4PFHpA	96.4 %	25-150
Surrogate: M3PFHxS	84.7 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	74.6 %	25-150
Surrogate: M6PFDA	78.8 %	25-150
Surrogate: M7PFUDA	68.5 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	65.1 %	25-150
Surrogate: M2PFTeDA	44.6 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	74.1 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	76.2 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	68.9 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	56.6 %	10-150
Surrogate: d3-N-MeFOSAA	68.4 %	25-150
Surrogate: d5-N-EtFOSAA	87.9 %	25-150
Surrogate: M2-6:2 FTS	82.3 %	25-200
Surrogate: M2-8:2 FTS	94.2 %	25-200
Surrogate: M9PFNA	74.9 %	25-150



Sample Information

Client Sample ID: E10 DS SED					York Sample ID: 22D1118-14
<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 1:20 pm	<u>Date Received</u> 04/22/2022	

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	75.2		%	0.100	1	SM 2540G Certifications: CTDOH	04/26/2022 14:36	04/27/2022 10:49	JTG

Sample Information

Client Sample ID: E10 DS SOIL					York Sample ID: 22D1118-15
<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 1:30 pm	<u>Date Received</u> 04/22/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.919		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.663		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	0.735		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	0.413		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	0.972		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	0.435		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL



Sample Information

Client Sample ID: E10 DS SOIL

York Sample ID: 22D1118-15

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Soil

April 21, 2022 1:30 pm

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	1.11		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
375-95-1	* Perfluorononanoic acid (PFNA)	1.03		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	9.92		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	1.27		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	1.09		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	2.09		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	2.96		ug/kg dry	0.400	1	EPA 537m Certifications:	04/26/2022 12:05	05/03/2022 07:11	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	79.0 %	25-150
Surrogate: M5PFHxA	72.7 %	25-150
Surrogate: M4PFHpA	91.0 %	25-150
Surrogate: M3PFHxS	85.5 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	72.1 %	25-150
Surrogate: M6PFDA	70.1 %	25-150
Surrogate: M7PFUdA	63.2 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	62.9 %	25-150
Surrogate: M2PFTeDA	52.9 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	72.2 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	70.0 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	70.4 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	46.5 %	10-150
Surrogate: d3-N-MeFOSAA	70.4 %	25-150
Surrogate: d5-N-EtFOSAA	77.3 %	25-150
Surrogate: M2-6:2 FTS	173 %	25-200
Surrogate: M2-8:2 FTS	177 %	25-200
Surrogate: M9PFNA	73.5 %	25-150



Sample Information

Client Sample ID: E10 DS SOIL					York Sample ID: 22D1118-15
<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Soil	<u>Collection Date/Time</u> April 21, 2022 1:30 pm	<u>Date Received</u> 04/22/2022	

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	62.4		%	0.100	1	SM 2540G Certifications: CTDOH	04/26/2022 14:36	04/27/2022 10:49	JTG

Sample Information

Client Sample ID: FIELD BLANK GW					York Sample ID: 22D1118-16
<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 2:00 pm	<u>Date Received</u> 04/22/2022	

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.81	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL



Sample Information

Client Sample ID: FIELD BLANK GW

York Sample ID: 22D1118-16

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22D1118	31402220.002 Westchester Co. Airport (WCA)	Water	April 21, 2022 2:00 pm	04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.92	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 21:54	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	83.2 %	25-150
Surrogate: M5PFHxA	84.6 %	25-150
Surrogate: M4PFHpA	107 %	25-150
Surrogate: M3PFHxS	95.0 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	90.0 %	25-150
Surrogate: M6PFDA	85.8 %	25-150
Surrogate: M7PFUdA	75.3 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	66.3 %	25-150
Surrogate: M2PFTeDA	58.0 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	87.7 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	90.2 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	79.7 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	31.5 %	10-150
Surrogate: d3-N-MeFOSAA	50.9 %	25-150
Surrogate: d5-N-EtFOSAA	50.0 %	25-150
Surrogate: M2-6:2 FTS	97.3 %	25-200
Surrogate: M2-8:2 FTS	160 %	25-200
Surrogate: M9PFNA	86.6 %	25-150



Sample Information

Client Sample ID: FIELD BLANK SOIL

York Sample ID: 22D1118-17

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22D1118

31402220.002 Westchester Co. Airport (WCA)

Water

April 21, 2022 2:30 pm

04/22/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	5.08	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.03	1	EPA 537m Certifications:	04/29/2022 11:30	05/02/2022 22:07	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS

87.8 %

25-150

Surrogate: M5PFHxA

87.0 %

25-150



Sample Information

Client Sample ID: FIELD BLANK SOIL

York Sample ID: 22D1118-17

<u>York Project (SDG) No.</u> 22D1118	<u>Client Project ID</u> 31402220.002 Westchester Co. Airport (WCA)	<u>Matrix</u> Water	<u>Collection Date/Time</u> April 21, 2022 2:30 pm	<u>Date Received</u> 04/22/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	107 %			25-150					
	Surrogate: M3PFHxS	93.5 %			25-150					
	Surrogate: Perfluoro-n- [13C8]octanoic acid (M8PFOA)	94.1 %			25-150					
	Surrogate: M6PFDA	95.6 %			25-150					
	Surrogate: M7PFUdA	80.1 %			25-150					
	Surrogate: Perfluoro-n- [1,2-13C2]dodecanoic acid (MPFDoA)	74.0 %			25-150					
	Surrogate: M2PFTeDA	63.6 %			10-150					
	Surrogate: Perfluoro-n- [13C4]butanoic acid (MPFBA)	88.4 %			25-150					
	Surrogate: Perfluoro-1- [13C8]octanesulfonic acid (M8PFOS)	93.0 %			25-150					
	Surrogate: Perfluoro-n- [13C5]pentanoic acid (M5PFPeA)	81.5 %			25-150					
	Surrogate: Perfluoro-1- [13C8]octanesulfonamide (M8FOSA)	28.2 %			10-150					
	Surrogate: d3-N-MeFOSAA	52.1 %			25-150					
	Surrogate: d5-N-EtFOSAA	61.1 %			25-150					
	Surrogate: M2-6:2 FTS	85.5 %			25-200					
	Surrogate: M2-8:2 FTS	121 %			25-200					
	Surrogate: M9PFNA	96.2 %			25-150					



Analytical Batch Summary

Batch ID: BD21552 **Preparation Method:** SPE PFAS Extraction-Soil-EPA 537m **Prepared By:** WEL

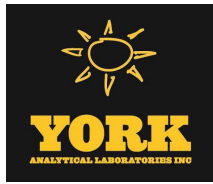
YORK Sample ID	Client Sample ID	Preparation Date
22D1118-04	E10 SOIL	04/26/22
22D1118-05	FIELD DUP 1	04/26/22
22D1118-06	E10 SED	04/26/22
22D1118-07	FIELD DUP 2	04/26/22
22D1118-12	ES SED	04/26/22
22D1118-13	ES SOIL	04/26/22
22D1118-14	E10 DS SED	04/26/22
22D1118-15	E10 DS SOIL	04/26/22
BD21552-BLK1	Blank	04/26/22
BD21552-BS1	LCS	04/26/22
BD21552-MS1	Matrix Spike	04/26/22
BD21552-MS2	Matrix Spike	04/26/22
BD21552-MSD1	Matrix Spike Dup	04/26/22
BD21552-MSD2	Matrix Spike Dup	04/26/22

Batch ID: BD21621 **Preparation Method:** % Solids Prep **Prepared By:** JTG

YORK Sample ID	Client Sample ID	Preparation Date
22D1118-04	E10 SOIL	04/26/22
22D1118-05	FIELD DUP 1	04/26/22
22D1118-06	E10 SED	04/26/22
22D1118-07	FIELD DUP 2	04/26/22
22D1118-12	ES SED	04/26/22
22D1118-13	ES SOIL	04/26/22
22D1118-14	E10 DS SED	04/26/22
22D1118-15	E10 DS SOIL	04/26/22
BD21621-DUP1	Duplicate	04/26/22

Batch ID: BD21784 **Preparation Method:** SPE Ext-PFAS-EPA 537.1M **Prepared By:** WEL

YORK Sample ID	Client Sample ID	Preparation Date
22D1118-01	TRIB 1 GW	04/29/22
22D1118-02	NKS 2 GW	04/29/22
22D1118-03	TRIB 2 GW	04/29/22
22D1118-03RE1	TRIB 2 GW	04/29/22
22D1118-08	E10 SW	04/29/22
22D1118-08RE1	E10 SW	04/29/22
22D1118-09	E10 DS GW	04/29/22
22D1118-10	4R GW	04/29/22
22D1118-10RE1	4R GW	04/29/22
22D1118-11	ES GW	04/29/22
22D1118-16	FIELD BLANK GW	04/29/22
22D1118-17	FIELD BLANK SOIL	04/29/22
BD21784-BLK1	Blank	04/29/22
BD21784-BS1	LCS	04/29/22



BD21784-MS1
BD21784-MSD1

Matrix Spike
Matrix Spike Dup

04/29/22
04/29/22



PFAS Target compounds by LC/MS-MS - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21552 - SPE PFAS Extraction-Soil-EPA 537m

Blank (BD21552-BLK1)

Prepared: 04/26/2022 Analyzed: 05/03/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	0.245	ug/kg wet								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	0.245	"								
N-EtFOSAA	ND	0.245	"								
N-MeFOSAA	ND	0.245	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.245	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.245	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.245	"								
Perfluorobutanesulfonic acid (PFBS)	ND	0.245	"								
Perfluorodecanoic acid (PFDA)	ND	0.245	"								
Perfluorododecanoic acid (PFDoA)	ND	0.245	"								
Perfluoroheptanoic acid (PFHpA)	ND	0.245	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	0.245	"								
Perfluorohexanoic acid (PFHxA)	ND	0.245	"								
Perfluoro-n-butanoic acid (PFBA)	ND	0.245	"								
Perfluorononanoic acid (PFNA)	ND	0.245	"								
Perfluorooctanesulfonic acid (PFOS)	ND	0.245	"								
Perfluorooctanoic acid (PFOA)	ND	0.245	"								
Perfluoropentanoic acid (PFPeA)	ND	0.245	"								
Perfluorotetradecanoic acid (PFTA)	ND	0.245	"								
Perfluorotridecanoic acid (PFTTrDA)	ND	0.245	"								
Perfluoroundecanoic acid (PFUnA)	ND	0.245	"								
Surrogate: M3PFBS	3.16		"	4.55		69.5	25-150				
Surrogate: M5PFHxA	3.46		"	4.90		70.6	25-150				
Surrogate: M4PFHpA	4.42		"	4.90		90.3	25-150				
Surrogate: M3PFHxS	3.62		"	4.63		78.2	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.55		"	4.90		72.6	25-150				
Surrogate: M6PFDA	3.68		"	4.90		75.2	25-150				
Surrogate: M7PFUdA	3.35		"	4.90		68.4	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.29		"	4.90		67.3	25-150				
Surrogate: M2PFTeDA	3.02		"	4.90		61.6	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.08		"	4.90		62.9	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.03		"	4.68		64.8	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.22		"	4.90		65.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.88		"	4.90		58.8	10-150				
Surrogate: d3-N-MeFOSAA	3.17		"	4.90		64.8	25-150				
Surrogate: d5-N-EtFOSAA	3.62		"	4.90		74.0	25-150				
Surrogate: M2-6:2 FTS	3.01		"	4.65		64.8	25-200				
Surrogate: M2-8:2 FTS	3.49		"	4.69		74.3	25-200				
Surrogate: M9PFNA	3.77		"	4.90		77.1	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21552 - SPE PFAS Extraction-Soil-EPA 537m

LCS (BD21552-BS1)

Prepared: 04/26/2022 Analyzed: 05/03/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.47	0.243	ug/kg wet	4.67		95.7	50-200				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.48	0.243	"	4.62		96.9	50-200				
N-EtFOSAA	4.56	0.243	"	4.86		93.8	50-130				
N-MeFOSAA	5.40	0.243	"	4.86		111	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	4.81	0.243	"	4.69		102	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.15	0.243	"	4.64		111	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	5.26	0.243	"	4.86		108	50-130				
Perfluorobutanesulfonic acid (PFBS)	4.27	0.243	"	4.30		99.2	50-130				
Perfluorodecanoic acid (PFDA)	5.18	0.243	"	4.86		106	50-130				
Perfluorododecanoic acid (PFDoA)	4.24	0.243	"	4.86		87.1	50-130				
Perfluoroheptanoic acid (PFHpA)	4.13	0.243	"	4.86		84.9	50-130				
Perfluorohexanesulfonic acid (PFHxS)	4.84	0.243	"	4.43		109	50-130				
Perfluorohexanoic acid (PFHxA)	4.82	0.243	"	4.86		99.0	50-130				
Perfluoro-n-butanoic acid (PFBA)	4.98	0.243	"	4.86		102	50-130				
Perfluorononanoic acid (PFNA)	4.81	0.243	"	4.86		98.9	50-130				
Perfluorooctanesulfonic acid (PFOS)	4.74	0.243	"	4.50		105	50-130				
Perfluorooctanoic acid (PFOA)	5.25	0.243	"	4.86		108	50-130				
Perfluoropentanoic acid (PFPeA)	5.18	0.243	"	4.86		107	50-130				
Perfluorotetradecanoic acid (PFTA)	5.02	0.243	"	4.86		103	50-130				
Perfluorotridecanoic acid (PFTrDA)	4.21	0.243	"	4.86		86.7	50-130				
Perfluoroundecanoic acid (PFUnA)	5.06	0.243	"	4.86		104	50-130				
Surrogate: M3PFBS	3.27		"	4.52		72.3	25-150				
Surrogate: M5PFHxA	3.46		"	4.86		71.2	25-150				
Surrogate: M4PFHpA	4.24		"	4.86		87.2	25-150				
Surrogate: M3PFHxS	3.45		"	4.60		75.0	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.62		"	4.86		74.5	25-150				
Surrogate: M6PFDA	3.31		"	4.86		68.1	25-150				
Surrogate: M7PFUdA	3.26		"	4.86		66.9	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.65		"	4.86		75.1	25-150				
Surrogate: M2PFTeDA	2.97		"	4.86		61.1	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.58		"	4.86		73.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	2.99		"	4.65		64.3	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.34		"	4.86		68.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.85		"	4.86		58.6	10-150				
Surrogate: d3-N-MeFOSAA	3.14		"	4.86		64.5	25-150				
Surrogate: d5-N-EtFOSAA	3.94		"	4.86		81.0	25-150				
Surrogate: M2-6:2 FTS	3.58		"	4.62		77.5	25-200				
Surrogate: M2-8:2 FTS	4.02		"	4.66		86.2	25-200				
Surrogate: M9PFNA	3.78		"	4.86		77.6	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21552 - SPE PFAS Extraction-Soil-EPA 537m

Matrix Spike (BD21552-MS1)	*Source sample: 22D1118-04 (E10 SOIL)						Prepared: 04/26/2022 Analyzed: 05/03/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.12	0.271	ug/kg dry	5.21	ND	98.4	25-200				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.94	0.271	"	5.15	ND	95.9	25-200				
N-EtFOSAA	4.20	0.271	"	5.42	ND	77.4	25-150				
N-MeFOSAA	4.93	0.271	"	5.42	ND	90.8	25-150				
Perfluoro-1-decanesulfonic acid (PFDS)	3.91	0.271	"	5.23	ND	74.8	25-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.20	0.271	"	5.18	ND	100	25-150				
Perfluoro-1-octanesulfonamide (FOSA)	5.42	0.271	"	5.42	ND	99.9	25-150				
Perfluorobutanesulfonic acid (PFBS)	4.26	0.271	"	4.80	ND	88.8	25-150				
Perfluorodecanoic acid (PFDA)	4.86	0.271	"	5.42	ND	89.7	25-150				
Perfluorododecanoic acid (PFDoA)	4.82	0.271	"	5.42	ND	88.9	25-150				
Perfluoroheptanoic acid (PFHpA)	4.26	0.271	"	5.42	ND	78.5	25-150				
Perfluorohexanesulfonic acid (PFHxS)	4.86	0.271	"	4.93	ND	98.6	25-150				
Perfluorohexanoic acid (PFHxA)	5.21	0.271	"	5.42	ND	96.1	25-150				
Perfluoro-n-butanoic acid (PFBA)	5.29	0.271	"	5.42	0.834	82.2	25-150				
Perfluorononanoic acid (PFNA)	5.32	0.271	"	5.42	ND	98.0	25-150				
Perfluorooctanesulfonic acid (PFOS)	5.33	0.271	"	5.02	1.06	85.1	25-150				
Perfluorooctanoic acid (PFOA)	6.12	0.271	"	5.42	ND	113	25-150				
Perfluoropentanoic acid (PFPeA)	5.46	0.271	"	5.42	ND	101	25-150				
Perfluorotetradecanoic acid (PFTA)	5.15	0.271	"	5.42	ND	94.9	25-150				
Perfluorotridecanoic acid (PFTrDA)	4.88	0.271	"	5.42	0.338	83.7	25-150				
Perfluoroundecanoic acid (PFUnA)	5.65	0.271	"	5.42	0.309	98.4	25-150				
Surrogate: M3PFBS	3.81		"	5.04		75.7	25-150				
Surrogate: M5PFHxA	3.83		"	5.42		70.7	25-150				
Surrogate: M4PFHpA	5.04		"	5.42		92.9	25-150				
Surrogate: M3PFHxS	4.32		"	5.13		84.1	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.81		"	5.42		70.3	25-150				
Surrogate: M6PFDA	4.08		"	5.42		75.2	25-150				
Surrogate: M7PFUdA	3.64		"	5.42		67.2	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.68		"	5.42		67.9	25-150				
Surrogate: M2PFTeDA	2.97		"	5.42		54.8	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.13		"	5.42		76.1	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	4.26		"	5.19		82.1	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.75		"	5.42		69.1	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.47		"	5.42		64.0	10-150				
Surrogate: d3-N-MeFOSAA	4.06		"	5.42		74.8	25-150				
Surrogate: d5-N-EtFOSAA	5.51		"	5.42		102	25-150				
Surrogate: M2-6:2 FTS	4.70		"	5.15		91.4	25-200				
Surrogate: M2-8:2 FTS	5.79		"	5.20		111	25-200				
Surrogate: M9PFNA	4.03		"	5.42		74.3	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21552 - SPE PFAS Extraction-Soil-EPA 537m

Matrix Spike (BD21552-MS2)	*Source sample: 22D1118-06 (E10 SED)						Prepared: 04/26/2022 Analyzed: 05/03/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	6.57	0.312	ug/kg dry	6.00	ND	110	25-200				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	5.30	0.312	"	5.94	ND	89.3	25-200				
N-EtFOSAA	5.09	0.312	"	6.25	ND	81.4	25-150				
N-MeFOSAA	6.21	0.312	"	6.25	ND	99.4	25-150				
Perfluoro-1-decanesulfonic acid (PFDS)	5.37	0.312	"	6.03	ND	89.0	25-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	6.50	0.312	"	5.97	ND	109	25-150				
Perfluoro-1-octanesulfonamide (FOSA)	6.70	0.312	"	6.25	ND	107	25-150				
Perfluorobutanesulfonic acid (PFBS)	5.38	0.312	"	5.53	ND	97.3	25-150				
Perfluorodecanoic acid (PFDA)	6.00	0.312	"	6.25	ND	96.0	25-150				
Perfluorododecanoic acid (PFDoA)	5.26	0.312	"	6.25	ND	84.2	25-150				
Perfluoroheptanoic acid (PFHpA)	5.07	0.312	"	6.25	ND	81.1	25-150				
Perfluorohexanesulfonic acid (PFHxS)	5.78	0.312	"	5.69	0.343	95.6	25-150				
Perfluorohexanoic acid (PFHxA)	6.48	0.312	"	6.25	ND	104	25-150				
Perfluoro-n-butanoic acid (PFBA)	6.25	0.312	"	6.25	ND	100	25-150				
Perfluorononanoic acid (PFNA)	6.54	0.312	"	6.25	0.416	97.9	25-150				
Perfluorooctanesulfonic acid (PFOS)	8.25	0.312	"	5.78	3.38	84.2	25-150				
Perfluorooctanoic acid (PFOA)	6.77	0.312	"	6.25	0.328	103	25-150				
Perfluoropentanoic acid (PFPeA)	6.75	0.312	"	6.25	0.499	100	25-150				
Perfluorotetradecanoic acid (PFTA)	6.09	0.312	"	6.25	ND	97.4	25-150				
Perfluorotridecanoic acid (PFTrDA)	5.56	0.312	"	6.25	ND	89.0	25-150				
Perfluoroundecanoic acid (PFUnA)	6.82	0.312	"	6.25	0.713	97.7	25-150				
Surrogate: M3PFBS	4.31		"	5.80		74.3	25-150				
Surrogate: M5PFHxA	4.60		"	6.25		73.6	25-150				
Surrogate: M4PFHpA	6.01		"	6.25		96.3	25-150				
Surrogate: M3PFHxS	5.05		"	5.91		85.5	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	4.84		"	6.25		77.5	25-150				
Surrogate: M6PFDA	4.69		"	6.25		75.0	25-150				
Surrogate: M7PFUdA	4.35		"	6.25		69.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	4.40		"	6.25		70.4	25-150				
Surrogate: M2PFTeDA	3.32		"	6.25		53.2	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.81		"	6.25		77.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	4.52		"	5.98		75.6	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.45		"	6.25		71.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.95		"	6.25		63.3	10-150				
Surrogate: d3-N-MeFOSAA	4.45		"	6.25		71.2	25-150				
Surrogate: d5-N-EtFOSAA	5.66		"	6.25		90.6	25-150				
Surrogate: M2-6:2 FTS	5.37		"	5.93		90.7	25-200				
Surrogate: M2-8:2 FTS	5.59		"	5.98		93.4	25-200				
Surrogate: M9PFNA	4.80		"	6.25		76.9	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD21552 - SPE PFAS Extraction-Soil-EPA 537m											
Matrix Spike Dup (BD21552-MSD1)	*Source sample: 22D1118-04 (E10 SOIL)						Prepared: 04/26/2022 Analyzed: 05/03/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.67	0.267	ug/kg dry	5.12	ND	91.2	25-200		9.20	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	3.72	0.267	"	5.07	ND	73.5	25-200		28.1	35	
N-EtFOSAA	5.15	0.267	"	5.33	ND	96.5	25-150		20.4	35	
N-MeFOSAA	5.74	0.267	"	5.33	ND	108	25-150		15.2	35	
Perfluoro-1-decanesulfonic acid (PFDS)	4.79	0.267	"	5.15	ND	93.1	25-150		20.2	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.78	0.267	"	5.09	ND	113	25-150		10.6	35	
Perfluoro-1-octanesulfonamide (FOSA)	5.25	0.267	"	5.33	ND	98.4	25-150		3.16	35	
Perfluorobutanesulfonic acid (PFBS)	4.23	0.267	"	4.72	ND	89.6	25-150		0.723	35	
Perfluorodecanoic acid (PFDA)	5.29	0.267	"	5.33	ND	99.2	25-150		8.42	35	
Perfluorododecanoic acid (PFDoA)	4.76	0.267	"	5.33	ND	89.3	25-150		1.21	35	
Perfluoroheptanoic acid (PFHpA)	4.22	0.267	"	5.33	ND	79.2	25-150		0.857	35	
Perfluorohexanesulfonic acid (PFHxS)	4.20	0.267	"	4.85	ND	86.5	25-150		14.7	35	
Perfluorohexanoic acid (PFHxA)	5.04	0.267	"	5.33	ND	94.4	25-150		3.39	35	
Perfluoro-n-butanoic acid (PFBA)	5.31	0.267	"	5.33	0.834	83.8	25-150		0.237	35	
Perfluorononanoic acid (PFNA)	5.24	0.267	"	5.33	ND	98.2	25-150		1.47	35	
Perfluorooctanesulfonic acid (PFOS)	4.03	0.267	"	4.93	1.06	60.2	25-150		27.8	35	
Perfluorooctanoic acid (PFOA)	5.36	0.267	"	5.33	ND	101	25-150		13.3	35	
Perfluoropentanoic acid (PFPeA)	5.31	0.267	"	5.33	ND	99.6	25-150		2.74	35	
Perfluorotetradecanoic acid (PFTA)	5.22	0.267	"	5.33	ND	97.8	25-150		1.38	35	
Perfluorotridecanoic acid (PFTrDA)	4.09	0.267	"	5.33	0.338	70.4	25-150		17.4	35	
Perfluoroundecanoic acid (PFUnA)	5.21	0.267	"	5.33	0.309	91.8	25-150		8.11	35	
Surrogate: M3PFBS	3.96		"	4.95		79.9	25-150				
Surrogate: M5PFHxA	3.97		"	5.33		74.4	25-150				
Surrogate: M4PFHpA	5.20		"	5.33		97.4	25-150				
Surrogate: M3PFHxS	4.38		"	5.05		86.8	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	4.25		"	5.33		79.7	25-150				
Surrogate: M6PFDA	3.81		"	5.33		71.4	25-150				
Surrogate: M7PFUdA	3.68		"	5.33		69.1	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.64		"	5.33		68.3	25-150				
Surrogate: M2PFTeDA	2.95		"	5.33		55.3	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.21		"	5.33		79.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.66		"	5.10		71.7	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.87		"	5.33		72.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.37		"	5.33		63.1	10-150				
Surrogate: d3-N-MeFOSAA	3.86		"	5.33		72.3	25-150				
Surrogate: d5-N-EtFOSAA	4.88		"	5.33		91.6	25-150				
Surrogate: M2-6:2 FTS	5.39		"	5.06		106	25-200				
Surrogate: M2-8:2 FTS	6.27		"	5.11		123	25-200				
Surrogate: M9PFNA	4.07		"	5.33		76.3	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD21552 - SPE PFAS Extraction-Soil-EPA 537m											
Matrix Spike Dup (BD21552-MSD2)	*Source sample: 22D1118-06 (E10 SED)						Prepared: 04/26/2022 Analyzed: 05/03/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.58	0.298	ug/kg dry	5.71	ND	97.6	25-200		16.3	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.78	0.298	"	5.65	0.302	79.2	25-200		10.4	35	
N-EtFOSAA	5.77	0.298	"	5.95	ND	96.9	25-150		12.5	35	
N-MeFOSAA	6.68	0.298	"	5.95	ND	112	25-150		7.37	35	
Perfluoro-1-decanesulfonic acid (PFDS)	4.68	0.298	"	5.74	ND	81.5	25-150		13.7	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	6.42	0.298	"	5.68	ND	113	25-150		1.17	35	
Perfluoro-1-octanesulfonamide (FOSA)	6.44	0.298	"	5.95	ND	108	25-150		4.01	35	
Perfluorobutanesulfonic acid (PFBS)	4.97	0.298	"	5.27	ND	94.4	25-150		7.87	35	
Perfluorodecanoic acid (PFDA)	5.83	0.298	"	5.95	ND	97.9	25-150		2.89	35	
Perfluorododecanoic acid (PFDoA)	5.21	0.298	"	5.95	ND	87.6	25-150		0.909	35	
Perfluoroheptanoic acid (PFHpA)	5.00	0.298	"	5.95	ND	84.0	25-150		1.46	35	
Perfluorohexanesulfonic acid (PFHxS)	5.76	0.298	"	5.42	0.343	100	25-150		0.214	35	
Perfluorohexanoic acid (PFHxA)	5.88	0.298	"	5.95	ND	98.9	25-150		9.63	35	
Perfluoro-n-butanoic acid (PFBA)	5.84	0.298	"	5.95	ND	98.1	25-150		6.84	35	
Perfluorononanoic acid (PFNA)	6.46	0.298	"	5.95	0.416	102	25-150		1.14	35	
Perfluorooctanesulfonic acid (PFOS)	8.50	0.298	"	5.50	3.38	92.9	25-150		2.99	35	
Perfluorooctanoic acid (PFOA)	6.55	0.298	"	5.95	0.328	105	25-150		3.28	35	
Perfluoropentanoic acid (PFPeA)	6.44	0.298	"	5.95	0.499	99.8	25-150		4.70	35	
Perfluorotetradecanoic acid (PFTA)	5.95	0.298	"	5.95	ND	100	25-150		2.20	35	
Perfluorotridecanoic acid (PFTrDA)	6.11	0.298	"	5.95	ND	103	25-150		9.43	35	
Perfluoroundecanoic acid (PFUnA)	6.19	0.298	"	5.95	0.713	92.0	25-150		9.66	35	
Surrogate: M3PFBS	4.07		"	5.53		73.6	25-150				
Surrogate: M5PFHxA	4.30		"	5.95		72.2	25-150				
Surrogate: M4PFHpA	5.50		"	5.95		92.4	25-150				
Surrogate: M3PFHxS	4.60		"	5.63		81.8	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	4.53		"	5.95		76.0	25-150				
Surrogate: M6PFDA	4.24		"	5.95		71.2	25-150				
Surrogate: M7PFUdA	4.07		"	5.95		68.4	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	4.02		"	5.95		67.5	25-150				
Surrogate: M2PFTeDA	3.23		"	5.95		54.3	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.56		"	5.95		76.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	4.08		"	5.69		71.6	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.19		"	5.95		70.4	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.49		"	5.95		58.6	10-150				
Surrogate: d3-N-MeFOSAA	3.53		"	5.95		59.3	25-150				
Surrogate: d5-N-EtFOSAA	5.11		"	5.95		85.9	25-150				
Surrogate: M2-6:2 FTS	5.31		"	5.65		94.1	25-200				
Surrogate: M2-8:2 FTS	6.47		"	5.70		113	25-200				
Surrogate: M9PFNA	4.20		"	5.95		70.6	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21784 - SPE Ext-PFAS-EPA 537.1M

Blank (BD21784-BLK1)

Prepared: 04/29/2022 Analyzed: 05/02/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	ng/L								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	5.00	"								
N-EtFOSAA	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"								
Perfluorobutanesulfonic acid (PFBS)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.00	"								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	2.00	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	2.00	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTrDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Surrogate: M3PFBS	61.8		"	74.3		83.1	25-150				
Surrogate: M5PFHxA	66.4		"	80.0		83.0	25-150				
Surrogate: M4PFHpA	73.3		"	80.0		91.6	25-150				
Surrogate: M3PFHxS	69.0		"	75.7		91.2	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	60.6		"	80.0		75.7	25-150				
Surrogate: M6PFDA	70.3		"	80.0		87.8	25-150				
Surrogate: M7PFUdA	64.6		"	80.0		80.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	55.4		"	80.0		69.3	25-150				
Surrogate: M2PFTeDA	48.7		"	80.0		60.8	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	65.2		"	80.0		81.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	64.1		"	76.6		83.8	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	62.2		"	80.0		77.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	29.9		"	80.0		37.4	10-150				
Surrogate: d3-N-MeFOSAA	50.3		"	80.0		62.9	25-150				
Surrogate: d5-N-EtFOSAA	71.4		"	80.0		89.2	25-150				
Surrogate: M2-6:2 FTS	72.7		"	75.9		95.8	25-200				
Surrogate: M2-8:2 FTS	132		"	76.6		172	25-200				
Surrogate: M9PFNA	67.3		"	80.0		84.2	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21784 - SPE Ext-PFAS-EPA 537.1M

LCS (BD21784-BS1)

Prepared: 04/29/2022 Analyzed: 05/02/2022

1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	78.7	2.00	ng/L	76.8		102	50-175				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	73.4	5.00	"	76.0		96.6	50-175				
N-EtFOSAA	84.6	2.00	"	80.0		106	50-130				
N-MeFOSAA	86.5	2.00	"	80.0		108	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	77.1	2.00	"	77.2		99.9	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	81.6	2.00	"	76.4		107	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	85.7	2.00	"	80.0		107	50-130				
Perfluorobutanesulfonic acid (PFBS)	102	2.00	"	70.8		145	50-130	High Bias			
Perfluorodecanoic acid (PFDA)	86.0	2.00	"	80.0		108	50-130				
Perfluorododecanoic acid (PFDoA)	75.9	2.00	"	80.0		94.9	50-130				
Perfluoroheptanoic acid (PFHpA)	72.1	2.00	"	80.0		90.1	50-130				
Perfluorohexanesulfonic acid (PFHxS)	88.5	2.00	"	72.8		122	50-130				
Perfluorohexanoic acid (PFHxA)	79.1	2.00	"	80.0		98.9	50-130				
Perfluoro-n-butanoic acid (PFBA)	81.5	2.00	"	80.0		102	50-130				
Perfluorononanoic acid (PFNA)	78.6	2.00	"	80.0		98.2	50-130				
Perfluorooctanesulfonic acid (PFOS)	56.8	2.00	"	74.0		76.7	50-130				
Perfluorooctanoic acid (PFOA)	84.7	2.00	"	80.0		106	50-130				
Perfluoropentanoic acid (PFPeA)	90.9	2.00	"	80.0		114	50-130				
Perfluorotetradecanoic acid (PFTA)	79.9	2.00	"	80.0		99.9	50-130				
Perfluorotridecanoic acid (PFTrDA)	67.1	2.00	"	80.0		83.9	50-130				
Perfluoroundecanoic acid (PFUnA)	81.9	2.00	"	80.0		102	50-130				
Surrogate: M3PFBS	42.4		"	74.3		57.0	25-150				
Surrogate: M5PFHxA	64.0		"	80.0		80.0	25-150				
Surrogate: M4PFHpA	76.3		"	80.0		95.4	25-150				
Surrogate: M3PFHxS	67.0		"	75.7		88.5	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	69.0		"	80.0		86.3	25-150				
Surrogate: M6PFDA	68.8		"	80.0		85.9	25-150				
Surrogate: M7PFUdA	71.9		"	80.0		89.9	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	65.1		"	80.0		81.4	25-150				
Surrogate: M2PFTeDA	60.9		"	80.0		76.1	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	63.4		"	80.0		79.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	70.4		"	76.6		92.0	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	36.7		"	80.0		45.9	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	11.1		"	80.0		13.9	10-150				
Surrogate: d3-N-MeFOSAA	61.9		"	80.0		77.4	25-150				
Surrogate: d5-N-EtFOSAA	65.3		"	80.0		81.7	25-150				
Surrogate: M2-6:2 FTS	78.7		"	75.9		104	25-200				
Surrogate: M2-8:2 FTS	128		"	76.6		167	25-200				
Surrogate: M9PFNA	72.2		"	80.0		90.2	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BD21784 - SPE Ext-PFAS-EPA 537.1M

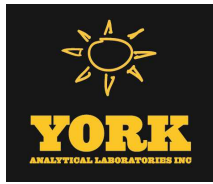
Matrix Spike (BD21784-MS1)	*Source sample: 22D0961-01 (Matrix Spike)							Prepared: 04/29/2022 Analyzed: 05/02/2022		
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	78.9	1.92	ng/L	73.8	ND	107	25-200			
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	68.8	4.81	"	73.1	ND	94.1	25-200			
N-EtFOSAA	80.9	1.92	"	76.9	ND	105	25-150			
N-MeFOSAA	83.0	1.92	"	76.9	ND	108	25-150			
Perfluoro-1-decanesulfonic acid (PFDS)	72.2	1.92	"	74.2	ND	97.3	25-150			
Perfluoro-1-heptanesulfonic acid (PFHpS)	82.1	1.92	"	73.5	ND	112	25-150			
Perfluoro-1-octanesulfonamide (FOSA)	87.0	1.92	"	76.9	ND	113	25-150			
Perfluorobutanesulfonic acid (PFBS)	69.5	1.92	"	68.1	3.11	97.5	25-150			
Perfluorodecanoic acid (PFDA)	76.1	1.92	"	76.9	ND	98.9	25-150			
Perfluorododecanoic acid (PFDoA)	75.2	1.92	"	76.9	ND	97.7	25-150			
Perfluoroheptanoic acid (PFHpA)	72.3	1.92	"	76.9	3.40	89.5	25-150			
Perfluorohexanesulfonic acid (PFHxS)	91.7	1.92	"	70.0	6.23	122	25-150			
Perfluorohexanoic acid (PFHxA)	83.4	1.92	"	76.9	5.98	101	25-150			
Perfluoro-n-butanoic acid (PFBA)	87.1	1.92	"	76.9	9.95	100	25-150			
Perfluorononanoic acid (PFNA)	74.4	1.92	"	76.9	ND	96.7	25-150			
Perfluorooctanesulfonic acid (PFOS)	83.6	1.92	"	71.2	6.18	109	25-150			
Perfluorooctanoic acid (PFOA)	90.3	1.92	"	76.9	11.5	102	25-150			
Perfluoropentanoic acid (PFPeA)	88.6	1.92	"	76.9	6.76	106	25-150			
Perfluorotetradecanoic acid (PFTA)	74.6	1.92	"	76.9	ND	97.0	25-150			
Perfluorotridecanoic acid (PFTrDA)	72.2	1.92	"	76.9	ND	93.9	25-150			
Perfluoroundecanoic acid (PFUnA)	76.2	1.92	"	76.9	ND	99.0	25-150			
Surrogate: M3PFBS	71.4		"	71.5		99.9	25-150			
Surrogate: M5PFHxA	70.7		"	76.9		91.9	25-150			
Surrogate: M4PFHpA	78.7		"	76.9		102	25-150			
Surrogate: M3PFHxS	78.0		"	72.8		107	25-150			
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	72.1		"	76.9		93.8	25-150			
Surrogate: M6PFDA	73.6		"	76.9		95.7	25-150			
Surrogate: M7PFUdA	74.4		"	76.9		96.8	25-150			
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	70.2		"	76.9		91.3	25-150			
Surrogate: M2PFTeDA	70.0		"	76.9		91.0	10-150			
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	26.5		"	76.9		34.4	25-150			
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	75.0		"	73.6		102	25-150			
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	62.8		"	76.9		81.6	25-150			
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	43.1		"	76.9		56.0	10-150			
Surrogate: d3-N-MeFOSAA	70.5		"	76.9		91.6	25-150			
Surrogate: d5-N-EtFOSAA	75.3		"	76.9		97.9	25-150			
Surrogate: M2-6:2 FTS	121		"	73.0		166	25-200			
Surrogate: M2-8:2 FTS	109		"	73.7		148	25-200			
Surrogate: M9PFNA	73.7		"	76.9		95.9	25-150			



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD21784 - SPE Ext-PFAS-EPA 537.1M											
Matrix Spike Dup (BD21784-MSD1)	*Source sample: 22D0961-01 (Matrix Spike Dup)						Prepared: 04/29/2022 Analyzed: 05/02/2022				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	71.4	2.00	ng/L	76.8	ND	93.0	25-200		9.91	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	75.6	5.00	"	76.0	ND	99.4	25-200		9.44	35	
N-EtFOSAA	76.4	2.00	"	80.0	ND	95.5	25-150		5.67	35	
N-MeFOSAA	81.1	2.00	"	80.0	ND	101	25-150		2.23	35	
Perfluoro-1-decanesulfonic acid (PFDS)	70.1	2.00	"	77.2	ND	90.8	25-150		2.99	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	78.7	2.00	"	76.4	ND	103	25-150		4.26	35	
Perfluoro-1-octanesulfonamide (FOSA)	55.0	2.00	"	80.0	ND	68.8	25-150		45.1	35	Non-dir.
Perfluorobutanesulfonic acid (PFBS)	70.5	2.00	"	70.8	3.11	95.2	25-150		1.45	35	
Perfluorodecanoic acid (PFDA)	82.0	2.00	"	80.0	ND	103	25-150		7.54	35	
Perfluorododecanoic acid (PFDoA)	75.7	2.00	"	80.0	ND	94.6	25-150		0.638	35	
Perfluoroheptanoic acid (PFHpA)	74.2	2.00	"	80.0	3.40	88.5	25-150		2.69	35	
Perfluorohexanesulfonic acid (PFHxS)	96.1	2.00	"	72.8	6.23	123	25-150		4.71	35	
Perfluorohexanoic acid (PFHxA)	83.7	2.00	"	80.0	5.98	97.1	25-150		0.357	35	
Perfluoro-n-butanoic acid (PFBA)	88.5	2.00	"	80.0	9.95	98.2	25-150		1.59	35	
Perfluorononanoic acid (PFNA)	76.3	2.00	"	80.0	ND	95.4	25-150		2.55	35	
Perfluorooctanesulfonic acid (PFOS)	76.8	2.00	"	74.0	6.18	95.4	25-150		8.44	35	
Perfluorooctanoic acid (PFOA)	96.8	2.00	"	80.0	11.5	107	25-150		6.92	35	
Perfluoropentanoic acid (PFPeA)	89.8	2.00	"	80.0	6.76	104	25-150		1.35	35	
Perfluorotetradecanoic acid (PFTA)	75.8	2.00	"	80.0	ND	94.8	25-150		1.62	35	
Perfluorotridecanoic acid (PFTrDA)	76.9	2.00	"	80.0	ND	96.1	25-150		6.25	35	
Perfluoroundecanoic acid (PFUnA)	80.9	2.00	"	80.0	ND	101	25-150		6.03	35	
Surrogate: M3PFBS	72.5		"	74.3		97.5	25-150				
Surrogate: M5PFHxA	73.7		"	80.0		92.1	25-150				
Surrogate: M4PFHpA	83.4		"	80.0		104	25-150				
Surrogate: M3PFHxS	82.8		"	75.7		109	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	74.8		"	80.0		93.5	25-150				
Surrogate: M6PFDA	74.7		"	80.0		93.4	25-150				
Surrogate: M7PFUdA	76.2		"	80.0		95.2	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	71.9		"	80.0		89.9	25-150				
Surrogate: M2PFTeDA	70.4		"	80.0		88.0	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	28.2		"	80.0		35.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	80.8		"	76.6		106	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	65.6		"	80.0		82.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.68		"	80.0		2.10	10-150				
Surrogate: d3-N-MeFOSAA	76.3		"	80.0		95.4	25-150				
Surrogate: d5-N-EtFOSAA	81.7		"	80.0		102	25-150				
Surrogate: M2-6:2 FTS	119		"	75.9		157	25-200				
Surrogate: M2-8:2 FTS	134		"	76.6		175	25-200				
Surrogate: M9PFNA	77.9		"	80.0		97.3	25-150				



Miscellaneous Physical Parameters - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

Batch BD21621 - % Solids Prep

Duplicate (BD21621-DUP1)	*Source sample: 22D1118-12 (ES SED)					Prepared: 04/26/2022 Analyzed: 04/27/2022					
% Solids	44.7	0.100	%		44.5				0.227	20	





Sample and Data Qualifiers Relating to This Work Order

- PFSu-L The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
- PFSu-H The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
- PF-LCS-H The LCS recovery was slightly above acceptable limits for the qualified compound. However, sample results are not biased high because results are corrected for isotope recovery.

Definitions and Other Explanations

- * Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
- ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
- RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
- LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
- LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
- MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
- Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
- NR Not reported
- RPD Relative Percent Difference
- Wet The data has been reported on an as-received (wet weight) basis
- Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

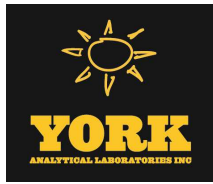
If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.
22D1118

Page 1 of 2

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 clientservices@yorklab.com www.yorklab.com 800-306-YORK 800-306-9675

YOUR Information		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company: WSP	Company: SAME	Company: SAME	Company: SAME	31402220.002	RUSH - Next Day	RUSH - Two Day			
Address: 500 SUMMIT LAKE DR	Address: SAME	Address: SAME	Address: SAME		RUSH - Three Day	RUSH - Four Day			
Phone: VAL HALL 4 NY	Phone: SAME	Phone: SAME	Phone: SAME		Standard (5-7 Day)	<input checked="" type="checkbox"/>			
Phone: 914 561 2951	Phone: SAME	Phone: SAME	Phone: SAME		YOUR Project Name				
Contact: JOHN.BENVEGNA@WSP.COM	Contact: SAME	Contact: SAME	Contact: SAME		WESTCHESTER CO. AIRPORT (WCA)				
E-mail: JOHN.BENVEGNA@WSP.COM	E-mail: SAME	E-mail: SAME	E-mail: SAME		YOUR PO#: 31402220.002				

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

MICHAEL K. DEFELICE
Muel K R A

Samples Collected by: (print AND sign your name)

Sample Identification	Matrix Codes	Samples From	Report / EDD Type (circle selections)	YORK Reg. Comp.
TRIB 1 GW	S - soil / solid	New York	Summary Report	Compared to the following Regulation(s): (please fill in)
NKS 2 GW	GW - groundwater	New Jersey	QA Report	2 UNP. P.A.S.
TRIB 2 GW	DW - drinking water	Connecticut	NY ASP A Package	
E10 SOIL (MS/MSD)	WW - wastewater	Pennsylvania	NY ASP B Package	1 UNP. P.A.S.
FIELD DUP 1	O - Oil Other	Other:		
E10 SED (MS/MSD)				
FIELD DUP 2				
E10 SW				2 UNP. P.A.S.
E10 OS GW				
4R GW				

Analysis Requested: TOTAL PFAS

Preservation: (check all that apply)
 HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
 ZnAc ___ Ascorbic Acid ___ Other: ___

Comments:

1. Samples Relinquished by / Company: [Signature] Date/Time: 4/22/22 12:55

2. Samples Relinquished by / Company: [Signature] Date/Time: 4/22/22 1508

3. Samples Relinquished by / Company: [Signature] Date/Time: 4/22/22 1508

4. Samples Relinquished by / Company: [Signature] Date/Time: 4/22/22 1508

Temperature: 5.2 Degrees C



York Analytical Laboratories, Inc.
 120 Research Drive
 Stratford, CT 06615
 clientservices@yorklab.com
 www.yorklab.com



YOUR INFORMATION

Company: WSP
 Address: 500 SUMMIT LAKE DR.
VALHALLA NY
 Phone: 914 561 2951
 Contact: JOHN.BENIGNA@WSP.COM
 E-mail:

Report To:

Company: SAME
 Address:
 Phone:
 Contact:
 E-mail:

Invoice To:

Company: SAME
 Address:
 Phone:
 Contact:
 E-mail:

YOUR PROJECT NUMBER

31402220.002
WESTCHESTER CO.
AIRPORT
(WCA)

YOUR PO#: 31402220.002

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Michael K De Felice
 Samples Collected by: (print your name above and sign below)
Michael K De Felice

Sample Identification

ES GW
ES SED
ES SOIL
E10 DS SED
E10 DS SOIL
FIELD BLANK GW
FIELD BLANK SOIL

Matrix Codes

S - soil / solid
 GW - groundwater
 DW - drinking water
 WW - wastewater
 O - Oil ; Other

Samples From

New York
 New Jersey
 Connecticut
 Pennsylvania
 Other

Report / EDD Type (circle selections)

Summary Report
 QA Report
 NY ASP A Package
 NY ASP B Package
 CT RCP
 CT RCP DQ/DUE
 NJDEP Reduced Deliverables
 NJDKQP
 Standard Excel EDD
 EQUIS (Standard)
 NYSDEC EQUIS
 NJDEP SRP HazSite
 Other:

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Sample Matrix

GW
S
↓
DI
↓

Date/Time Sampled

4/21/22 1250
1235
1240
1320
1330
1400
1430

Analysis Requested

TOTAL PFAS

Container Description

2 PLAS. VMP
1 PLAS. UNA

Comments:

Preservation: (check all that apply)	HCl	MeOH	HNO3	H2SO4	NaOH	ZnAc	Field Filtered Lab to Filter	Special Instruction
<p>Date/Time: <u>4/22/22 12:55</u> Samples Received by / Company: <u>Cheryl York</u> Date/Time: <u>4/22/22 1508</u> Samples Received by / Company: <u>Cheryl York</u> Date/Time: <u>4/22/22 1508</u> Samples Received in LAB by: <u>Cheryl York</u> Date/Time: <u>4/22/22 1508</u> Temp. Received at Lab: <u>5.2</u> Degrees C</p>								

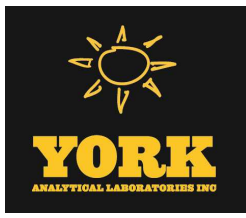
Field Chain-of-Custody Record

YORK Project No.

22D1118

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

Page 2 of 2



Technical Report

prepared for:

First Environment, Inc.
10 Park Place Building 1A
Butler NJ, 07405
Attention: David Luer

Report Date: 05/31/2022
Client Project ID: WESTC028 Westchester Airport
York Project (SDG) No.: 22E1000

Revision No. 1.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 05/31/2022
Client Project ID: WESTC028 Westchester Airport
York Project (SDG) No.: 22E1000

First Environment, Inc.
10 Park Place Building 1A
Butler NJ, 07405
Attention: David Luer

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 20, 2022 and listed below. The project was identified as your project: **WESTC028 Westchester Airport**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
22E1000-01	E-10	Water	05/20/2022	05/20/2022
22E1000-02	OF-7	Water	05/20/2022	05/20/2022
22E1000-03	OF-7 Pool	Water	05/20/2022	05/20/2022
22E1000-04	OF-7 Swamp	Water	05/20/2022	05/20/2022
22E1000-05	OF-7 Grate	Water	05/20/2022	05/20/2022
22E1000-06	FB 5-20-22	Water	05/20/2022	05/20/2022

General Notes for York Project (SDG) No.: 22E1000

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 05/31/2022

Cassie L. Mosher
Laboratory Manager





Sample Information

Client Sample ID: E-10

York Sample ID: 22E1000-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22E1000	WESTC028 Westchester Airport	Water	May 20, 2022 10:30 am	05/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	24.2		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	79.8		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	45.2		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	290		ng/L	18.5	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:23	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	109		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	368		ng/L	18.5	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:23	WL
375-95-1	* Perfluorononanoic acid (PFNA)	40.3		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	2.43		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	5.69		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	118		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	13.0		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	38.4		ng/L	4.63	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	3.19		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	38.6		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:20	WL



Sample Information

Client Sample ID: E-10

York Sample ID: 22E1000-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22E1000

WESTC028 Westchester Airport

Water

May 20, 2022 10:30 am

05/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result		Acceptance Range						
	Surrogate: M3PFBS	95.2 %		25-150						
	Surrogate: M5PFHxA	70.7 %		25-150						
	Surrogate: M4PFHpA	90.9 %		25-150						
	Surrogate: M3PFHxS	83.3 %		25-150						
	Surrogate: M3PFHxS	87.9 %		25-150						
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	88.7 %		25-150						
	Surrogate: M6PFDA	82.6 %		25-150						
	Surrogate: M7PFUdA	99.2 %		25-150						
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	84.1 %		25-150						
	Surrogate: M2PFTeDA	70.2 %		10-150						
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	101 %		25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	108 %		25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	98.3 %		25-150						
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.5 %		25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	53.9 %		10-150						
	Surrogate: d3-N-MeFOSAA	97.3 %		25-150						
	Surrogate: d5-N-EtFOSAA	102 %		25-150						
	Surrogate: M2-6:2 FTS	192 %		25-200						
	Surrogate: M2-8:2 FTS	179 %		25-200						
	Surrogate: M9PFNA	82.1 %		25-150						

Sample Information

Client Sample ID: OF-7

York Sample ID: 22E1000-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22E1000

WESTC028 Westchester Airport

Water

May 20, 2022 11:00 am

05/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	83.5		ng/L	8.93	5	EPA 537m	05/25/2022 10:54	05/26/2022 19:37	WL

Certifications:





Sample Information

Client Sample ID: OF-7

York Sample ID: 22E1000-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22E1000

WESTC028 Westchester Airport

Water

May 20, 2022 11:00 am

05/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
307-24-4	* Perfluorohexanoic acid (PFHxA)	403		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	353		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	2150		ng/L	44.6	25	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:50	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	952		ng/L	44.6	25	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:50	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	5040		ng/L	44.6	25	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:50	WL
375-95-1	* Perfluorononanoic acid (PFNA)	241		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	13.5		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	34.1		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	616		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	51.6		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	199		ng/L	22.3	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	15.8		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	168		ng/L	8.93	5	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 19:37	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS

123 %

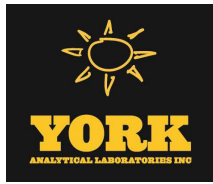
25-150

Surrogate: M5PFHxA

83.4 %

25-150





Sample Information

Client Sample ID: OF-7

York Sample ID: 22E1000-02

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:00 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	79.9 %			25-150					
	Surrogate: M3PFHxS	77.9 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	77.1 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	59.1 %			25-150					
	Surrogate: M6PFDA	61.8 %			25-150					
	Surrogate: M6PFDA	84.3 %			25-150					
	Surrogate: M7PFUdA	86.9 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	78.4 %			25-150					
	Surrogate: M2PFTeDA	79.5 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	103 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	46.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	131 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	94.7 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	45.5 %			10-150					
	Surrogate: d3-N-MeFOSAA	90.3 %			25-150					
	Surrogate: d5-N-EtFOSAA	89.8 %			25-150					
	Surrogate: M2-6:2 FTS	238 %	PFSu-H		25-200					
	Surrogate: M2-8:2 FTS	209 %	PFSu-H		25-200					
	Surrogate: M9PFNA	71.2 %			25-150					

Sample Information

Client Sample ID: OF-7 Pool

York Sample ID: 22E1000-03

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:04 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	85.0		ng/L	18.9	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:28	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	441		ng/L	18.9	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:28	WL



Sample Information

Client Sample ID: OF-7 Pool

York Sample ID: 22E1000-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22E1000

WESTC028 Westchester Airport

Water

May 20, 2022 11:04 am

05/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-85-9	* Perfluoroheptanoic acid (PFHpA)	352		ng/L	18.9	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:28	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	1540		ng/L	47.3	25	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:41	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	998		ng/L	18.9	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:28	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	3550		ng/L	47.3	25	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:41	WL
375-95-1	* Perfluorononanoic acid (PFNA)	213		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	14.8		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	27.1		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
72629-94-8	* Perfluorotridecanoic acid (PFTriDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	533		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	153		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	245		ng/L	47.3	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:28	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	42.4		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 22:59	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	167		ng/L	18.9	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:28	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS

98.7 %

25-150

Surrogate: M3PFBS

141 %

25-150

Surrogate: M3PFBS

112 %

25-150

Surrogate: M5PFHxA

82.6 %

25-150



Sample Information

Client Sample ID: OF-7 Pool

York Sample ID: 22E1000-03

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:04 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M5PFHxA	76.3 %							25-150	
	Surrogate: M5PFHxA	69.5 %							25-150	
	Surrogate: M4PFHpA	76.5 %							25-150	
	Surrogate: M4PFHpA	81.1 %							25-150	
	Surrogate: M4PFHpA	63.8 %							25-150	
	Surrogate: M3PFHxS	84.4 %							25-150	
	Surrogate: M3PFHxS	82.1 %							25-150	
	Surrogate: M3PFHxS	84.2 %							25-150	
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	52.7 %							25-150	
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	77.8 %							25-150	
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	82.8 %							25-150	
	Surrogate: M6PFDA	67.4 %							25-150	
	Surrogate: M6PFDA	70.8 %							25-150	
	Surrogate: M6PFDA	111 %							25-150	
	Surrogate: M7PFUdA	88.5 %							25-150	
	Surrogate: M7PFUdA	69.2 %							25-150	
	Surrogate: M7PFUdA	152 %	PFSu-H						25-150	
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	61.0 %							25-150	
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	56.1 %							25-150	
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	129 %							25-150	
	Surrogate: M2PFTeDA	66.5 %							10-150	
	Surrogate: M2PFTeDA	57.2 %							10-150	
	Surrogate: M2PFTeDA	110 %							10-150	
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	86.3 %							25-150	
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	94.4 %							25-150	
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	119 %							25-150	
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	71.4 %							25-150	
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	74.1 %							25-150	
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	82.1 %							25-150	
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	74.4 %							25-150	



Sample Information

Client Sample ID: OF-7 Pool

York Sample ID: 22E1000-03

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:04 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.8 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	84.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	17.3 %			10-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.79 %	PFSu-L		10-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	34.1 %			10-150					
	Surrogate: d3-N-MeFOSAA	41.4 %			25-150					
	Surrogate: d3-N-MeFOSAA	137 %			25-150					
	Surrogate: d3-N-MeFOSAA	71.0 %			25-150					
	Surrogate: d5-N-EtFOSAA	82.8 %			25-150					
	Surrogate: d5-N-EtFOSAA	161 %	PFSu-H		25-150					
	Surrogate: d5-N-EtFOSAA	90.2 %			25-150					
	Surrogate: M2-6:2 FTS	256 %	PFSu-H		25-200					
	Surrogate: M2-6:2 FTS	257 %	PFSu-H		25-200					
	Surrogate: M2-6:2 FTS	354 %	PFSu-H		25-200					
	Surrogate: M2-8:2 FTS	28.3 %			25-200					
	Surrogate: M2-8:2 FTS	133 %			25-200					
	Surrogate: M2-8:2 FTS	328 %	PFSu-H		25-200					
	Surrogate: M9PFNA	70.5 %			25-150					
	Surrogate: M9PFNA	58.9 %			25-150					
	Surrogate: M9PFNA	68.2 %			25-150					

Sample Information

Client Sample ID: OF-7 Swamp

York Sample ID: 22E1000-04

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:11 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	33.7		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	142		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL



Sample Information

Client Sample ID: OF-7 Swamp

York Sample ID: 22E1000-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22E1000

WESTC028 Westchester Airport

Water

May 20, 2022 11:11 am

05/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-85-9	* Perfluoroheptanoic acid (PFHpA)	53.4		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	469		ng/L	18.9	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:54	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	92.0		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	1040		ng/L	18.9	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 20:54	WL
375-95-1	* Perfluorononanoic acid (PFNA)	33.9		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	6.11		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	2.45		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
72629-94-8	* Perfluorotridecanoic acid (PFTriDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	191		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	21.4		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	52.1		ng/L	4.73	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	65.9		ng/L	1.89	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:12	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS

113 %

25-150

Surrogate: M3PFBS

103 %

25-150

Surrogate: M5PFHxA

73.1 %

25-150

Surrogate: M5PFHxA

57.6 %

25-150



Sample Information

Client Sample ID: OF-7 Swamp

York Sample ID: 22E1000-04

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:11 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M4PFHpA	72.7 %							25-150	
	Surrogate: M4PFHpA	86.4 %							25-150	
	Surrogate: M3PFHxS	68.7 %							25-150	
	Surrogate: M3PFHxS	115 %							25-150	
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	65.1 %							25-150	
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	94.5 %							25-150	
	Surrogate: M6PFDA	117 %							25-150	
	Surrogate: M6PFDA	65.7 %							25-150	
	Surrogate: M7PFUdA	144 %							25-150	
	Surrogate: M7PFUdA	74.7 %							25-150	
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	63.1 %							25-150	
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	123 %							25-150	
	Surrogate: M2PFTeDA	98.0 %							10-150	
	Surrogate: M2PFTeDA	59.2 %							10-150	
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	51.5 %							25-150	
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	72.6 %							25-150	
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	125 %							25-150	
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	78.1 %							25-150	
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	76.8 %							25-150	
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	61.7 %							25-150	
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	14.4 %							10-150	
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	32.8 %							10-150	
	Surrogate: d3-N-MeFOSAA	68.1 %							25-150	
	Surrogate: d3-N-MeFOSAA	140 %							25-150	
	Surrogate: d5-N-EtFOSAA	74.0 %							25-150	
	Surrogate: d5-N-EtFOSAA	159 %	PFSu-H						25-150	
	Surrogate: M2-6:2 FTS	172 %							25-200	
	Surrogate: M2-6:2 FTS	283 %	PFSu-H						25-200	
	Surrogate: M2-8:2 FTS	317 %	PFSu-H						25-200	
	Surrogate: M2-8:2 FTS	28.7 %							25-200	
	Surrogate: M9PFNA	66.4 %							25-150	



Sample Information

Client Sample ID: OF-7 Swamp

York Sample ID: 22E1000-04

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:11 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M9PFNA	96.3 %			25-150					

Sample Information

Client Sample ID: OF-7 Grate

York Sample ID: 22E1000-05

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:16 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	75.5		ng/L	18.5	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 21:20	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	431		ng/L	18.5	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 21:20	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	279		ng/L	18.5	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 21:20	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	1660		ng/L	18.5	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 21:20	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	729		ng/L	18.5	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 21:20	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	4630		ng/L	46.3	25	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 21:46	WL
375-95-1	* Perfluorononanoic acid (PFNA)	226		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	19.5		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	64.0		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	4.27		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	643		ng/L	18.5	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 21:20	WL



Sample Information

Client Sample ID: OF-7 Grate

York Sample ID: 22E1000-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22E1000

WESTC028 Westchester Airport

Water

May 20, 2022 11:16 am

05/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	128		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	227		ng/L	46.3	10	EPA 537m Certifications:	05/25/2022 10:54	05/26/2022 21:20	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	45.6		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	155		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:25	WL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	81.1 %	25-150
Surrogate: M3PFBS	105 %	25-150
Surrogate: M3PFBS	140 %	25-150
Surrogate: M5PFHxA	73.7 %	25-150
Surrogate: M5PFHxA	72.1 %	25-150
Surrogate: M5PFHxA	67.1 %	25-150
Surrogate: M4PFHpA	70.3 %	25-150
Surrogate: M4PFHpA	77.3 %	25-150
Surrogate: M4PFHpA	86.0 %	25-150
Surrogate: M3PFHxS	78.8 %	25-150
Surrogate: M3PFHxS	90.8 %	25-150
Surrogate: M3PFHxS	85.4 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	72.4 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	63.6 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	81.7 %	25-150
Surrogate: M6PFDA	58.3 %	25-150
Surrogate: M6PFDA	66.4 %	25-150
Surrogate: M6PFDA	107 %	25-150
Surrogate: M7PFUdA	61.8 %	25-150
Surrogate: M7PFUdA	69.1 %	25-150
Surrogate: M7PFUdA	143 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	59.3 %	25-150



Sample Information

Client Sample ID: OF-7 Grate

York Sample ID: 22E1000-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22E1000

WESTC028 Westchester Airport

Water

May 20, 2022 11:16 am

05/20/2022

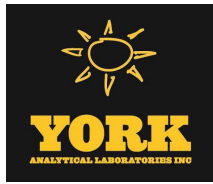
PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	125 %								
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	52.9 %								
	Surrogate: M2PFTeDA	56.5 %								
	Surrogate: M2PFTeDA	105 %								
	Surrogate: M2PFTeDA	44.9 %								
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	77.2 %								
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	48.3 %								
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	112 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	70.5 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	55.6 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	83.7 %								
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	74.2 %								
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	77.7 %								
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	80.4 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	15.3 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	19.9 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	50.5 %								
	Surrogate: d3-N-MeFOSAA	79.8 %								
	Surrogate: d3-N-MeFOSAA	143 %								
	Surrogate: d3-N-MeFOSAA	93.2 %								
	Surrogate: d5-N-EtFOSAA	58.7 %								
	Surrogate: d5-N-EtFOSAA	151 %	PFSu-H							
	Surrogate: d5-N-EtFOSAA	51.8 %								
	Surrogate: M2-6:2 FTS	91.7 %								
	Surrogate: M2-6:2 FTS	322 %	PFSu-H							
	Surrogate: M2-6:2 FTS	206 %	PFSu-H							
	Surrogate: M2-8:2 FTS	79.2 %								
	Surrogate: M2-8:2 FTS	374 %	PFSu-H							
	Surrogate: M2-8:2 FTS	112 %								
	Surrogate: M9PFNA	77.2 %								



Sample Information

Client Sample ID: OF-7 Grate

York Sample ID: 22E1000-05

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:16 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M9PFNA	56.2 %			25-150					
	Surrogate: M9PFNA	59.7 %			25-150					

Sample Information

Client Sample ID: FB 5-20-22

York Sample ID: 22E1000-06

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:16 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	2.44		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL



Sample Information

Client Sample ID: FB 5-20-22

York Sample ID: 22E1000-06

<u>York Project (SDG) No.</u> 22E1000	<u>Client Project ID</u> WESTC028 Westchester Airport	<u>Matrix</u> Water	<u>Collection Date/Time</u> May 20, 2022 11:16 am	<u>Date Received</u> 05/20/2022
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PFAS, NYSDEC Target List

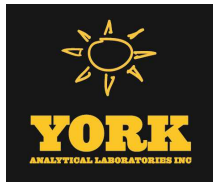
Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.63	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	1.85	1	EPA 537m Certifications:	05/25/2022 10:54	05/25/2022 23:38	WL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	119 %	25-150
Surrogate: M5PFHxA	103 %	25-150
Surrogate: M4PFHpA	127 %	25-150
Surrogate: M3PFHxS	120 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	78.9 %	25-150
Surrogate: M6PFDA	99.7 %	25-150
Surrogate: M7PFUdA	116 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	97.4 %	25-150
Surrogate: M2PFTeDA	82.4 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	116 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	124 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	103 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	49.4 %	10-150
Surrogate: d3-N-MeFOSAA	81.4 %	25-150
Surrogate: d5-N-EtFOSAA	115 %	25-150
Surrogate: M2-6:2 FTS	211 %	25-200
Surrogate: M2-8:2 FTS	173 %	25-200
Surrogate: M9PFNA	118 %	25-150



Analytical Batch Summary

Batch ID: BE21419

Preparation Method: SPE Ext-PFAS-EPA 537.1M

Prepared By: WEL

YORK Sample ID	Client Sample ID	Preparation Date
22E1000-01	E-10	05/25/22
22E1000-01RE1	E-10	05/25/22
22E1000-02	OF-7	05/25/22
22E1000-02RE1	OF-7	05/25/22
22E1000-03	OF-7 Pool	05/25/22
22E1000-03RE1	OF-7 Pool	05/25/22
22E1000-03RE2	OF-7 Pool	05/25/22
22E1000-04	OF-7 Swamp	05/25/22
22E1000-04RE1	OF-7 Swamp	05/25/22
22E1000-04RE2	OF-7 Swamp	05/25/22
22E1000-05	OF-7 Grate	05/25/22
22E1000-05RE1	OF-7 Grate	05/25/22
22E1000-05RE2	OF-7 Grate	05/25/22
22E1000-06	FB 5-20-22	05/25/22
BE21419-BLK1	Blank	05/25/22
BE21419-BS1	LCS	05/25/22
BE21419-BSD1	LCS Dup	05/25/22



PFAS Target compounds by LC/MS-MS - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting	Units	Spike Level	Source*	%REC	%REC	Flag	RPD	RPD Limit	Flag
		Limit			Result	Limits	RPD				

Batch BE21419 - SPE Ext-PFAS-EPA 537.1M

Blank (BE21419-BLK1)

Prepared & Analyzed: 05/25/2022

Perfluorobutanesulfonic acid (PFBS)	ND	2.00	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.00	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	2.00	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTriDA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
N-EtFOSAA	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	2.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	2.00	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	5.00	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	2.00	"								
Surrogate: M3PFBS	66.1		"	74.3		89.0	25-150				
Surrogate: M5PFHxA	69.7		"	80.0		87.1	25-150				
Surrogate: M4PFHpA	82.1		"	80.0		103	25-150				
Surrogate: M3PFHxS	69.6		"	75.7		91.9	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	74.3		"	80.0		92.9	25-150				
Surrogate: M6PFDA	68.8		"	80.0		85.9	25-150				
Surrogate: M7PFUdA	80.5		"	80.0		101	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	66.8		"	80.0		83.5	25-150				
Surrogate: M2PFTeDA	60.8		"	80.0		76.0	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	78.8		"	80.0		98.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	64.6		"	76.6		84.4	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	71.3		"	80.0		89.1	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	60.5		"	80.0		75.6	10-150				
Surrogate: d3-N-MeFOSAA	75.3		"	80.0		94.1	25-150				
Surrogate: d5-N-EtFOSAA	69.2		"	80.0		86.5	25-150				
Surrogate: M2-6:2 FTS	54.9		"	75.9		72.3	25-200				
Surrogate: M2-8:2 FTS	68.7		"	76.6		89.6	25-200				
Surrogate: M9PFNA	76.0		"	80.0		95.0	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

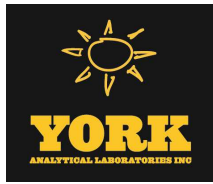
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE21419 - SPE Ext-PFAS-EPA 537.1M											
LCS (BE21419-BS1)											
Prepared & Analyzed: 05/25/2022											
Perfluorobutanesulfonic acid (PFBS)	84.1	2.00	ng/L	70.8		119	50-130				
Perfluorohexanoic acid (PFHxA)	89.0	2.00	"	80.0		111	50-130				
Perfluoroheptanoic acid (PFHpA)	76.5	2.00	"	80.0		95.7	50-130				
Perfluorohexanesulfonic acid (PFHxS)	104	2.00	"	72.8		143	50-130	High Bias			
Perfluorooctanoic acid (PFOA)	89.1	2.00	"	80.0		111	50-130				
Perfluorooctanesulfonic acid (PFOS)	89.3	2.00	"	74.0		121	50-130				
Perfluorononanoic acid (PFNA)	96.6	2.00	"	80.0		121	50-130				
Perfluorodecanoic acid (PFDA)	97.1	2.00	"	80.0		121	50-130				
Perfluoroundecanoic acid (PFUnA)	88.7	2.00	"	80.0		111	50-130				
Perfluorododecanoic acid (PFDoA)	93.1	2.00	"	80.0		116	50-130				
Perfluorotridecanoic acid (PFTriDA)	103	2.00	"	80.0		129	50-130				
Perfluorotetradecanoic acid (PFTA)	104	2.00	"	80.0		130	50-130				
N-MeFOSAA	83.5	2.00	"	80.0		104	50-130				
N-EtFOSAA	92.0	2.00	"	80.0		115	50-130				
Perfluoropentanoic acid (PFPeA)	89.1	2.00	"	80.0		111	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	99.4	2.00	"	80.0		124	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	96.1	2.00	"	76.4		126	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	91.5	2.00	"	77.2		119	50-130				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	74.4	5.00	"	76.0		97.9	50-175				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	76.1	2.00	"	76.8		99.1	50-175				
Perfluoro-n-butanoic acid (PFBA)	90.7	2.00	"	80.0		113	50-130				
Surrogate: M3PFBS	62.6		"	74.3		84.3	25-150				
Surrogate: M5PFHxA	67.9		"	80.0		84.9	25-150				
Surrogate: M4PFHpA	79.5		"	80.0		99.4	25-150				
Surrogate: M3PFHxS	63.6		"	75.7		84.1	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	70.6		"	80.0		88.3	25-150				
Surrogate: M6PFDA	61.1		"	80.0		76.3	25-150				
Surrogate: M7PFUdA	69.0		"	80.0		86.3	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	65.2		"	80.0		81.5	25-150				
Surrogate: M2PFTeDA	54.8		"	80.0		68.5	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	79.5		"	80.0		99.4	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	63.8		"	76.6		83.3	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	70.1		"	80.0		87.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	42.2		"	80.0		52.7	10-150				
Surrogate: d3-N-MeFOSAA	68.1		"	80.0		85.1	25-150				
Surrogate: d5-N-EtFOSAA	59.4		"	80.0		74.2	25-150				
Surrogate: M2-6:2 FTS	61.7		"	75.9		81.2	25-200				
Surrogate: M2-8:2 FTS	79.7		"	76.6		104	25-200				
Surrogate: M9PFNA	63.5		"	80.0		79.3	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE21419 - SPE Ext-PFAS-EPA 537.1M											
LCS Dup (BE21419-BSD1)											
Prepared & Analyzed: 05/25/2022											
Perfluorobutanesulfonic acid (PFBS)	85.2	2.00	ng/L	70.8		120	50-130		1.29	30	
Perfluorohexanoic acid (PFHxA)	90.7	2.00	"	80.0		113	50-130		1.79	30	
Perfluoroheptanoic acid (PFHpA)	80.0	2.00	"	80.0		100	50-130		4.41	30	
Perfluorohexanesulfonic acid (PFHxS)	104	2.00	"	72.8		142	50-130	High Bias	0.588	30	
Perfluorooctanoic acid (PFOA)	83.4	2.00	"	80.0		104	50-130		6.58	30	
Perfluorooctanesulfonic acid (PFOS)	83.5	2.00	"	74.0		113	50-130		6.63	30	
Perfluorononanoic acid (PFNA)	87.5	2.00	"	80.0		109	50-130		9.96	30	
Perfluorodecanoic acid (PFDA)	97.3	2.00	"	80.0		122	50-130		0.196	30	
Perfluoroundecanoic acid (PFUnA)	82.6	2.00	"	80.0		103	50-130		7.12	30	
Perfluorododecanoic acid (PFDoA)	93.0	2.00	"	80.0		116	50-130		0.166	30	
Perfluorotridecanoic acid (PFTriDA)	99.5	2.00	"	80.0		124	50-130		3.77	30	
Perfluorotetradecanoic acid (PFTA)	105	2.00	"	80.0		132	50-130	High Bias	1.56	30	
N-MeFOSAA	88.8	2.00	"	80.0		111	50-130		6.12	30	
N-EtFOSAA	79.3	2.00	"	80.0		99.1	50-130		14.9	30	
Perfluoropentanoic acid (PFPeA)	87.2	2.00	"	80.0		109	50-130		2.13	30	
Perfluoro-1-octanesulfonamide (FOSA)	96.7	2.00	"	80.0		121	50-130		2.70	30	
Perfluoro-1-heptanesulfonic acid (PFHpS)	79.2	2.00	"	76.4		104	50-130		19.2	30	
Perfluoro-1-decanesulfonic acid (PFDS)	75.5	2.00	"	77.2		97.8	50-130		19.1	30	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	86.9	5.00	"	76.0		114	50-175		15.6	30	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	80.1	2.00	"	76.8		104	50-175		5.11	30	
Perfluoro-n-butanoic acid (PFBA)	90.1	2.00	"	80.0		113	50-130		0.713	30	
Surrogate: M3PFBS	59.0		"	74.3		79.4	25-150				
Surrogate: M5PFHxA	65.9		"	80.0		82.4	25-150				
Surrogate: M4PFHpA	75.5		"	80.0		94.3	25-150				
Surrogate: M3PFHxS	61.2		"	75.7		80.9	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	69.7		"	80.0		87.1	25-150				
Surrogate: M6PFDA	56.8		"	80.0		71.0	25-150				
Surrogate: M7PFUdA	70.7		"	80.0		88.4	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	62.7		"	80.0		78.4	25-150				
Surrogate: M2PFTeDA	47.2		"	80.0		59.1	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	77.0		"	80.0		96.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	67.6		"	76.6		88.3	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	69.1		"	80.0		86.3	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	44.4		"	80.0		55.5	10-150				
Surrogate: d3-N-MeFOSAA	62.0		"	80.0		77.5	25-150				
Surrogate: d5-N-EtFOSAA	61.9		"	80.0		77.4	25-150				
Surrogate: M2-6:2 FTS	53.2		"	75.9		70.1	25-200				
Surrogate: M2-8:2 FTS	66.0		"	76.6		86.1	25-200				
Surrogate: M9PFNA	67.5		"	80.0		84.4	25-150				





Sample and Data Qualifiers Relating to This Work Order

PFSu-L	The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
PF-LCS-H	The LCS recovery was slightly above acceptable limits for the qualified compound. However, sample results are not biased high because results are corrected for isotope recovery.
PF-CCV-H	The CCV recovery was slightly above acceptable limits for the qualified compound. However, sample results are not biased high because results are corrected for isotope recovery.

Definitions and Other Explanations

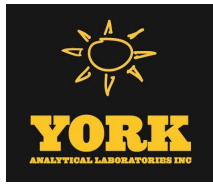
*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.



Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Revision Description: This report has been revised to include results for PFHpA on Sample -03.



Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.
22E1000

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 www.yorklab.com 800-306-YORK 800-306-9675 Page 1 of 1

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company: First Environment	Company: SAME	Company: SAME	Company: SAME	Company: SAME	Company: SAME	Company: SAME	Company: SAME	RUSH - Next Day	
Address: 18 Park Place Bldg 1A Suite 500	Address: SAME	Address: SAME	Address: SAME	Address: SAME	Address: SAME	Address: SAME	Address: SAME	RUSH - Two Day	
Phone: Butler NJ 07405	Phone: SAME	Phone: SAME	Phone: SAME	Phone: SAME	Phone: SAME	Phone: SAME	Phone: SAME	RUSH - Three Day	
Phone: 973-334-0003	Phone: SAME	Phone: SAME	Phone: SAME	Phone: SAME	Phone: SAME	Phone: SAME	Phone: SAME	RUSH - Four Day	
Contact: Daveluer	Contact: SAME	Contact: SAME	Contact: SAME	Contact: SAME	Contact: SAME	Contact: SAME	Contact: SAME	Standard (5-7 Day)	<input checked="" type="checkbox"/>
E-mail: DLuere@FirstEnvironment.com	E-mail: SAME	E-mail: SAME	E-mail: SAME	E-mail: SAME	E-mail: SAME	E-mail: SAME	E-mail: SAME	YOUR Project Name	
								Westchester Airport	
								YOUR PO#:	

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Matrix Codes	Samples From	Report / EDD Type (circle selections)	YORK Reg. Comp.
S - soil / solid	New York	Summary Report	Compared to the following Regulation(s): (please fill in)
<input checked="" type="checkbox"/> GW - groundwater	New Jersey	QA Report	
DW - drinking water	Connecticut	<input checked="" type="checkbox"/> NY ASP A Packages	Standard Excel EDD
WW - wastewater	Pennsylvania	<input checked="" type="checkbox"/> NY ASP B Package	CT RCP DQA/DUE EQUIS (Standard)
O - Oil Other:	Other:		NJDEP Reduced Deliverables
			NJDEP SRP HazSite
			NJDQOP Other:

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
E-10	GW	5/20/22 1030	PFAS	2X 150 mL PLASTIC
OF-7		1100		
OF-7 Pool		1104		
OF-7 Swamp		1111		
OF-7 Grate		1116		
FB 5/20/22	Blank	1106		

Comments:

Preservation: (check all that apply)

HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___

Ascorbic Acid ___ Other: ___

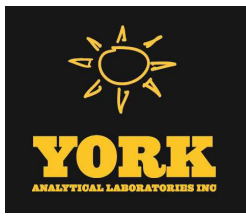
1. Samples Relinquished by / Company: *5/20/22 1430*

2. Samples Relinquished by / Company: *5/20/22 1430*

3. Samples Relinquished by / Company: *5/23/22 10:40*

4. Samples Relinquished by / Company: *5/23/22 10:40*

Company: First Environment	Company: SAME	Company: SAME	Company: SAME
Address: 18 Park Place Bldg 1A Suite 500	Address: SAME	Address: SAME	Address: SAME
Phone: Butler NJ 07405	Phone: SAME	Phone: SAME	Phone: SAME
Phone: 973-334-0003	Phone: SAME	Phone: SAME	Phone: SAME
Contact: Daveluer	Contact: SAME	Contact: SAME	Contact: SAME
E-mail: DLuere@FirstEnvironment.com	E-mail: SAME	E-mail: SAME	E-mail: SAME



Technical Report

prepared for:

First Environment, Inc.
10 Park Place Building 1A
Butler NJ, 07405
Attention: David Luer

Report Date: 07/07/2022
Client Project ID: WESTC028
York Project (SDG) No.: 22F1006

Revision No. 1.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 07/07/2022
Client Project ID: WESTC028
York Project (SDG) No.: 22F1006

First Environment, Inc.
10 Park Place Building 1A
Butler NJ, 07405
Attention: David Luer

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on June 20, 2022 and listed below. The project was identified as your project: **WESTC028**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
22F1006-01	OF-7	Water	06/20/2022	06/20/2022
22F1006-02	OF-7 Pool	Water	06/20/2022	06/20/2022
22F1006-03	OF-7 Swamp	Water	06/20/2022	06/20/2022
22F1006-04	OF-7 Grate	Water	06/20/2022	06/20/2022
22F1006-05	E-10	Water	06/20/2022	06/20/2022
22F1006-06	FB 62022	Water	06/20/2022	06/20/2022

General Notes for York Project (SDG) No.: 22F1006

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 07/07/2022

Cassie L. Mosher
Laboratory Manager





Sample Information

Client Sample ID: OF-7

York Sample ID: 22F1006-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22F1006	WESTC028	Water	June 20, 2022 10:41 am	06/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	82.6		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
307-24-4	* Perfluorohexanoic acid (PFHxA)	369		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	224		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	3080		ng/L	33.8	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:53	WEL
335-67-1	* Perfluorooctanoic acid (PFOA)	1360		ng/L	33.8	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:53	WEL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	4020		ng/L	125	5	EPA 537m Certifications:	06/29/2022 13:10	07/01/2022 14:46	WEL
375-95-1	* Perfluorononanoic acid (PFNA)	302		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
335-76-2	* Perfluorodecanoic acid (PFDA)	16.2		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	56.2		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
2355-31-9	* N-MeFOSAA	ND		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
2991-50-6	* N-EtFOSAA	ND		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	539		ng/L	33.8	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:53	WEL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	191		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	141		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	340		ng/L	84.5	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:53	WEL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	43.6		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	127		ng/L	6.76	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 13:40	WEL



Sample Information

Client Sample ID: OF-7

York Sample ID: 22F1006-01

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:41 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result	Acceptance Range							
	Surrogate: M3PFBS	128 %								
	Surrogate: M5PFHxA	115 %								
	Surrogate: M4PFHpA	131 %								
	Surrogate: M3PFHxS	52.4 %								
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	92.7 %								
	Surrogate: M6PFDA	132 %								
	Surrogate: M7PFUdA	134 %								
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	133 %								
	Surrogate: M2PFTeDA	111 %								
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	152 %	PFSu-H							
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	130 %								
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	92.4 %								
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	0.396 %	PFSu-L							
	Surrogate: d3-N-MeFOSAA	154 %	PFSu-H							
	Surrogate: d5-N-EtFOSAA	181 %	PFSu-H							
	Surrogate: M2-6:2 FTS	107 %								
	Surrogate: M2-8:2 FTS	364 %	PFSu-H							
	Surrogate: M9PFNA	117 %								

Sample Information

Client Sample ID: OF-7 Pool

York Sample ID: 22F1006-02

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:46 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	90.3		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
307-24-4	* Perfluorohexanoic acid (PFHxA)	391		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL



Sample Information

Client Sample ID: OF-7 Pool

York Sample ID: 22F1006-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22F1006

WESTC028

Water

June 20, 2022 10:46 am

06/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-85-9	* Perfluoroheptanoic acid (PFHpA)	203		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	1240		ng/L	32.9	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:19	WEL
335-67-1	* Perfluorooctanoic acid (PFOA)	708		ng/L	32.9	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:19	WEL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	5230		ng/L	125	5	EPA 537m Certifications:	06/29/2022 13:10	07/01/2022 14:59	WEL
375-95-1	* Perfluorononanoic acid (PFNA)	446		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
335-76-2	* Perfluorodecanoic acid (PFDA)	25.3		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	101		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
72629-94-8	* Perfluorotridecanoic acid (PFTriDA)	ND		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
2355-31-9	* N-MeFOSAA	ND		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
2991-50-6	* N-EtFOSAA	ND		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	479		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	36.5		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	183		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	276		ng/L	82.2	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:19	WEL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	72.3		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	131		ng/L	6.58	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:06	WEL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS

106 %

25-150

Surrogate: M5PFHxA

97.5 %

25-150

Surrogate: M4PFHpA

113 %

25-150

Surrogate: M3PFHxS

129 %

25-150



Sample Information

Client Sample ID: OF-7 Pool

York Sample ID: 22F1006-02

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:46 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	158 %	PFSu-H		25-150					
	Surrogate: M6PFDA	94.1 %			25-150					
	Surrogate: M7PFUdA	79.3 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	95.9 %			25-150					
	Surrogate: M2PFTeDA	84.0 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	121 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	97.8 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	109 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.16 %	PFSu-L		10-150					
	Surrogate: d3-N-MeFOSAA	103 %			25-150					
	Surrogate: d5-N-EtFOSAA	100 %			25-150					
	Surrogate: M2-6:2 FTS	337 %	PFSu-H		25-200					
	Surrogate: M2-8:2 FTS	226 %	PFSu-H		25-200					
	Surrogate: M9PFNA	64.0 %			25-150					

Sample Information

Client Sample ID: OF-7 Swamp

York Sample ID: 22F1006-03

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:55 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	38.0		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
307-24-4	* Perfluorohexanoic acid (PFHxA)	186		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	69.8		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	476		ng/L	14.7	10	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:44	WEL
335-67-1	* Perfluorooctanoic acid (PFOA)	102		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL



Sample Information

Client Sample ID: OF-7 Swamp

York Sample ID: 22F1006-03

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:55 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	727		ng/L	14.7	10	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:44	WEL
375-95-1	* Perfluorononanoic acid (PFNA)	35.1		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
335-76-2	* Perfluorodecanoic acid (PFDA)	4.07		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	3.33		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
2355-31-9	* N-MeFOSAA	ND		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
2991-50-6	* N-EtFOSAA	ND		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	261		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	27.1		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	67.5		ng/L	36.8	10	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:44	WEL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	80.3		ng/L	2.94	2	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:31	WEL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	92.9 %	25-150
Surrogate: M5PFHxA	61.0 %	25-150
Surrogate: M4PFHpA	90.0 %	25-150
Surrogate: M3PFHxS	95.4 %	25-150
Surrogate: M6PFDA	117 %	25-150
Surrogate: M7PFUdA	120 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	116 %	25-150
Surrogate: M2PFTeDA	92.3 %	10-150



Sample Information

Client Sample ID: OF-7 Swamp

York Sample ID: 22F1006-03

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:55 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	71.6 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	111 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	102 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	59.7 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	9.06 %	PFSu-L		10-150					
	Surrogate: d3-N-MeFOSAA	107 %			25-150					
	Surrogate: d5-N-EtFOSAA	153 %	PFSu-H		25-150					
	Surrogate: M2-6:2 FTS	146 %			25-200					
	Surrogate: M2-8:2 FTS	216 %	PFSu-H		25-200					
	Surrogate: M9PFNA	107 %			25-150					

Sample Information

Client Sample ID: OF-7 Grate

York Sample ID: 22F1006-04

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 11:00 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	89.3		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
307-24-4	* Perfluorohexanoic acid (PFHxA)	355		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	184		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	1560		ng/L	43.1	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 15:10	WEL
335-67-1	* Perfluorooctanoic acid (PFOA)	839		ng/L	43.1	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 15:10	WEL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	3010		ng/L	125	5	EPA 537m Certifications:	06/29/2022 13:10	07/01/2022 15:12	WEL
375-95-1	* Perfluorononanoic acid (PFNA)	327		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
335-76-2	* Perfluorodecanoic acid (PFDA)	30.4		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL



Sample Information

Client Sample ID: OF-7 Grate

York Sample ID: 22F1006-04

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 11:00 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	109		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
2355-31-9	* N-MeFOSAA	ND		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
2991-50-6	* N-EtFOSAA	ND		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	474		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	16.0		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	150		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	378		ng/L	108	25	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 15:10	WEL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	66.0		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	121		ng/L	8.62	5	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 14:57	WEL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	98.9 %	25-150
Surrogate: M5PFHxA	102 %	25-150
Surrogate: M4PFHpA	110 %	25-150
Surrogate: M3PFHxS	85.3 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	115 %	25-150
Surrogate: M6PFDA	105 %	25-150
Surrogate: M7PFUDA	104 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	104 %	25-150
Surrogate: M2PFTeDA	78.6 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	122 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	132 %	25-150



Sample Information

Client Sample ID: OF-7 Grate

York Sample ID: 22F1006-04

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 11:00 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	108 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.49 %	PFSu-L		10-150					
	Surrogate: d3-N-MeFOSAA	102 %			25-150					
	Surrogate: d5-N-EtFOSAA	110 %			25-150					
	Surrogate: M2-6:2 FTS	182 %			25-200					
	Surrogate: M2-8:2 FTS	203 %	PFSu-H		25-200					
	Surrogate: M9PFNA	89.0 %			25-150					

Sample Information

Client Sample ID: E-10

York Sample ID: 22F1006-05

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:14 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	31.1		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
307-24-4	* Perfluorohexanoic acid (PFHxA)	127		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	66.9		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	471		ng/L	14.7	10	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 15:23	WEL
335-67-1	* Perfluorooctanoic acid (PFOA)	168		ng/L	14.7	10	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 15:23	WEL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	907		ng/L	14.7	10	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 15:23	WEL
375-95-1	* Perfluorononanoic acid (PFNA)	64.7		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
335-76-2	* Perfluorodecanoic acid (PFDA)	2.57		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	5.97		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
72629-94-8	* Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL



Sample Information

Client Sample ID: E-10

York Sample ID: 22F1006-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

22F1006

WESTC028

Water

June 20, 2022 10:14 am

06/20/2022

PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	177		ng/L	14.7	10	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 15:23	WEL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	28.2		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	80.6		ng/L	36.8	10	EPA 537m Certifications:	06/23/2022 14:35	06/28/2022 15:23	WEL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	52.0		ng/L	1.47	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:42	WEL

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	97.3 %	25-150
Surrogate: M5PFHxA	75.0 %	25-150
Surrogate: M4PFHpA	99.0 %	25-150
Surrogate: M3PFHxS	81.5 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	118 %	25-150
Surrogate: M6PFDA	118 %	25-150
Surrogate: M7PFUdA	120 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	113 %	25-150
Surrogate: M2PFTeDA	89.2 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	99.7 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	87.3 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	97.5 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.92 %	PFSu-L 10-150
Surrogate: d3-N-MeFOSAA	118 %	25-150
Surrogate: d5-N-EtFOSAA	121 %	25-150
Surrogate: M2-6:2 FTS	87.1 %	25-200



Sample Information

Client Sample ID: E-10

York Sample ID: 22F1006-05

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:14 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M2-8:2 FTS	231 %		PFSu-H	25-200					
	Surrogate: M9PFNA	85.8 %			25-150					

Sample Information

Client Sample ID: FB 62022

York Sample ID: 22F1006-06

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:50 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL



Sample Information

Client Sample ID: FB 62022

York Sample ID: 22F1006-06

<u>York Project (SDG) No.</u> 22F1006	<u>Client Project ID</u> WESTC028	<u>Matrix</u> Water	<u>Collection Date/Time</u> June 20, 2022 10:50 am	<u>Date Received</u> 06/20/2022
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PFAS, NYSDEC Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.73	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	1.89	1	EPA 537m Certifications:	06/23/2022 14:35	06/27/2022 23:55	WEL

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	85.4 %	25-150
Surrogate: M5PFHxA	89.2 %	25-150
Surrogate: M4PFHpA	97.2 %	25-150
Surrogate: M3PFHxS	90.0 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	99.2 %	25-150
Surrogate: M6PFDA	99.1 %	25-150
Surrogate: M7PFUdA	89.4 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	88.3 %	25-150
Surrogate: M2PFTeDA	66.5 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	79.7 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	92.5 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	83.7 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	22.8 %	10-150
Surrogate: d3-N-MeFOSAA	71.7 %	25-150
Surrogate: d5-N-EtFOSAA	93.6 %	25-150
Surrogate: M2-6:2 FTS	86.2 %	25-200
Surrogate: M2-8:2 FTS	120 %	25-200
Surrogate: M9PFNA	90.5 %	25-150



Analytical Batch Summary

Batch ID: BF21517 **Preparation Method:** SPE Ext-PFAS-EPA 537.1M **Prepared By:** WEL

YORK Sample ID	Client Sample ID	Preparation Date
22F1006-01	OF-7	06/23/22
22F1006-01RE1	OF-7	06/23/22
22F1006-02	OF-7 Pool	06/23/22
22F1006-02RE1	OF-7 Pool	06/23/22
22F1006-03	OF-7 Swamp	06/23/22
22F1006-03RE1	OF-7 Swamp	06/23/22
22F1006-04	OF-7 Grate	06/23/22
22F1006-04RE1	OF-7 Grate	06/23/22
22F1006-05	E-10	06/23/22
22F1006-05RE1	E-10	06/23/22
22F1006-06	FB 62022	06/23/22
BF21517-BLK1	Blank	06/23/22
BF21517-BS1	LCS	06/23/22
BF21517-MS1	Matrix Spike	06/23/22
BF21517-MS2	Matrix Spike	06/23/22
BF21517-MSD1	Matrix Spike Dup	06/23/22
BF21517-MSD2	Matrix Spike Dup	06/23/22

Batch ID: BF21786 **Preparation Method:** SPE Ext-PFAS-EPA 537.1M **Prepared By:** KT

YORK Sample ID	Client Sample ID	Preparation Date
22F1006-01RE2	OF-7	06/29/22
22F1006-02RE2	OF-7 Pool	06/29/22
22F1006-04RE2	OF-7 Grate	06/29/22
BF21786-BLK1	Blank	06/29/22
BF21786-BS1	LCS	06/29/22
BF21786-MS1	Matrix Spike	06/29/22
BF21786-MSD1	Matrix Spike Dup	06/29/22



PFAS Target compounds by LC/MS-MS - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting	Units	Spike Level	Source*	%REC	%REC Limits	Flag	RPD	RPD	
		Limit			Result					Limit	Flag

Batch BF21517 - SPE Ext-PFAS-EPA 537.1M

Blank (BF21517-BLK1) Prepared: 06/23/2022 Analyzed: 06/27/2022

Perfluorobutanesulfonic acid (PFBS)	ND	2.00	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.00	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	2.00	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTriDA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
N-EtFOSAA	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	2.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	2.00	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	5.00	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	2.00	"								
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Surrogate: M3PFBS	64.0		"	74.3		86.1	25-150				
Surrogate: M5PFHxA	67.8		"	80.0		84.8	25-150				
Surrogate: M4PFHpA	81.4		"	80.0		102	25-150				
Surrogate: M3PFHxS	71.0		"	75.7		93.9	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	77.0		"	80.0		96.3	25-150				
Surrogate: M6PFDA	71.3		"	80.0		89.2	25-150				
Surrogate: M7PFUdA	78.3		"	80.0		97.8	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	76.1		"	80.0		95.1	25-150				
Surrogate: M2PFTeDA	59.9		"	80.0		74.9	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	62.3		"	80.0		77.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	82.6		"	76.6		108	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	66.5		"	80.0		83.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	34.4		"	80.0		43.1	10-150				
Surrogate: d3-N-MeFOSAA	89.5		"	80.0		112	25-150				
Surrogate: d5-N-EtFOSAA	86.6		"	80.0		108	25-150				
Surrogate: M2-6:2 FTS	112		"	75.9		147	25-200				
Surrogate: M2-8:2 FTS	193		"	76.6		252	25-200				
Surrogate: M9PFNA	77.1		"	80.0		96.4	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BF21517 - SPE Ext-PFAS-EPA 537.1M

LCS (BF21517-BS1)

Prepared: 06/23/2022 Analyzed: 06/27/2022

Perfluorobutanesulfonic acid (PFBS)	70.9	2.00	ng/L	70.8		100	50-130				
Perfluorohexanoic acid (PFHxA)	77.5	2.00	"	80.0		96.8	50-130				
Perfluoroheptanoic acid (PFHpA)	68.0	2.00	"	80.0		85.0	50-130				
Perfluorohexanesulfonic acid (PFHxS)	68.3	2.00	"	72.8		93.8	50-130				
Perfluorooctanoic acid (PFOA)	73.2	2.00	"	80.0		91.4	50-130				
Perfluorooctanesulfonic acid (PFOS)	69.2	2.00	"	74.0		93.5	50-130				
Perfluorononanoic acid (PFNA)	74.3	2.00	"	80.0		92.8	50-130				
Perfluorodecanoic acid (PFDA)	92.1	2.00	"	80.0		115	50-130				
Perfluoroundecanoic acid (PFUnA)	76.2	2.00	"	80.0		95.3	50-130				
Perfluorododecanoic acid (PFDoA)	73.3	2.00	"	80.0		91.6	50-130				
Perfluorotridecanoic acid (PFTriDA)	69.9	2.00	"	80.0		87.3	50-130				
Perfluorotetradecanoic acid (PFTA)	81.4	2.00	"	80.0		102	50-130				
N-MeFOSAA	77.3	2.00	"	80.0		96.6	50-130				
N-EtFOSAA	81.1	2.00	"	80.0		101	50-130				
Perfluoropentanoic acid (PFPeA)	80.9	2.00	"	80.0		101	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	79.0	2.00	"	80.0		98.8	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	69.0	2.00	"	76.4		90.4	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	65.8	2.00	"	77.2		85.2	50-130				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	84.3	5.00	"	76.0		111	50-175				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	78.3	2.00	"	76.8		102	50-175				
Perfluoro-n-butanoic acid (PFBA)	77.5	2.00	"	80.0		96.9	50-130				
Surrogate: M3PFBS	61.7		"	74.3		83.0	25-150				
Surrogate: M5PFHxA	70.7		"	80.0		88.4	25-150				
Surrogate: M4PFHpA	83.3		"	80.0		104	25-150				
Surrogate: M3PFHxS	72.0		"	75.7		95.2	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	77.5		"	80.0		96.8	25-150				
Surrogate: M6PFDA	69.7		"	80.0		87.1	25-150				
Surrogate: M7PFUdA	72.2		"	80.0		90.3	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	78.4		"	80.0		98.0	25-150				
Surrogate: M2PFTeDA	65.8		"	80.0		82.3	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	65.2		"	80.0		81.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	83.0		"	76.6		108	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	67.2		"	80.0		84.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	40.6		"	80.0		50.7	10-150				
Surrogate: d3-N-MeFOSAA	95.2		"	80.0		119	25-150				
Surrogate: d5-N-EtFOSAA	92.4		"	80.0		116	25-150				
Surrogate: M2-6:2 FTS	76.6		"	75.9		101	25-200				
Surrogate: M2-8:2 FTS	131		"	76.6		172	25-200				
Surrogate: M9PFNA	75.3		"	80.0		94.1	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BF21517 - SPE Ext-PFAS-EPA 537.1M

Matrix Spike (BF21517-MS1)	*Source sample: 22F1047-05 (Matrix Spike)						Prepared: 06/23/2022 Analyzed: 06/28/2022	
Perfluorobutanesulfonic acid (PFBS)	79.8	1.85	ng/L	65.6	7.62	110	25-150	
Perfluorohexanoic acid (PFHxA)	97.9	1.85	"	74.1	20.4	105	25-150	
Perfluoroheptanoic acid (PFHpA)	75.5	1.85	"	74.1	8.79	90.1	25-150	
Perfluorohexanesulfonic acid (PFHxS)	68.2	1.85	"	67.4	5.53	92.9	25-150	
Perfluorooctanoic acid (PFOA)	103	1.85	"	74.1	27.8	101	25-150	
Perfluorooctanesulfonic acid (PFOS)	89.6	1.85	"	68.5	37.8	75.6	25-150	
Perfluorononanoic acid (PFNA)	79.0	1.85	"	74.1	3.29	102	25-150	
Perfluorodecanoic acid (PFDA)	83.0	1.85	"	74.1	ND	112	25-150	
Perfluoroundecanoic acid (PFUnA)	74.6	1.85	"	74.1	ND	101	25-150	
Perfluorododecanoic acid (PFDoA)	79.6	1.85	"	74.1	ND	107	25-150	
Perfluorotridecanoic acid (PFTriDA)	68.0	1.85	"	74.1	ND	91.8	25-150	
Perfluorotetradecanoic acid (PFTA)	83.1	1.85	"	74.1	ND	112	25-150	
N-MeFOSAA	84.0	1.85	"	74.1	ND	113	25-150	
N-EtFOSAA	79.7	1.85	"	74.1	ND	108	25-150	
Perfluoropentanoic acid (PFPeA)	98.8	1.85	"	74.1	18.3	109	25-150	
Perfluoro-1-octanesulfonamide (FOSA)	82.0	1.85	"	74.1	ND	111	25-150	
Perfluoro-1-heptanesulfonic acid (PFHpS)	72.0	1.85	"	70.7	ND	102	25-150	
Perfluoro-1-decanesulfonic acid (PFDS)	51.6	1.85	"	71.5	ND	72.2	25-150	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	63.2	4.63	"	70.4	ND	89.8	25-200	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	76.2	1.85	"	71.1	ND	107	25-200	
Perfluoro-n-butanoic acid (PFBA)	90.6	1.85	"	74.1	14.3	103	25-150	
Surrogate: M3PFBS	52.7		"	68.8		76.5	25-150	
Surrogate: M5PFHxA	49.4		"	74.1		66.7	25-150	
Surrogate: M4PFHpA	63.5		"	74.1		85.7	25-150	
Surrogate: M3PFHxS	73.5		"	70.1		105	25-150	
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	61.7		"	74.1		83.3	25-150	
Surrogate: M6PFDA	59.9		"	74.1		80.8	25-150	
Surrogate: M7PFUdA	61.3		"	74.1		82.8	25-150	
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	57.9		"	74.1		78.2	25-150	
Surrogate: M2PFTeDA	54.1		"	74.1		73.0	10-150	
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	58.2		"	74.1		78.6	25-150	
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	81.2		"	70.9		115	25-150	
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	50.8		"	74.1		68.6	25-150	
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	11.9		"	74.1		16.0	10-150	
Surrogate: d3-N-MeFOSAA	57.2		"	74.1		77.2	25-150	
Surrogate: d5-N-EtFOSAA	59.5		"	74.1		80.4	25-150	
Surrogate: M2-6:2 FTS	154		"	70.3		219	25-200	
Surrogate: M2-8:2 FTS	90.1		"	71.0		127	25-200	
Surrogate: M9PFNA	63.0		"	74.1		85.0	25-150	



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag	
Batch BF21517 - SPE Ext-PFAS-EPA 537.1M												
Matrix Spike (BF21517-MS2)		*Source sample: 22F1047-09 (Matrix Spike)						Prepared: 06/23/2022 Analyzed: 06/29/2022				
Perfluorobutanesulfonic acid (PFBS)	73.3	9.47	ng/L	67.0	ND	109	25-150					
Perfluorohexanoic acid (PFHxA)	96.9	9.47	"	75.8	22.4	98.3	25-150					
Perfluoroheptanoic acid (PFHpA)	66.2	9.47	"	75.8	ND	87.4	25-150					
Perfluorohexanesulfonic acid (PFHxS)	72.7	9.47	"	68.9	ND	105	25-150					
Perfluorooctanoic acid (PFOA)	87.4	9.47	"	75.8	19.6	89.5	25-150					
Perfluorooctanesulfonic acid (PFOS)	103	9.47	"	70.1	26.5	109	25-150					
Perfluorononanoic acid (PFNA)	70.2	9.47	"	75.8	ND	92.6	25-150					
Perfluorodecanoic acid (PFDA)	70.8	9.47	"	75.8	ND	93.4	25-150					
Perfluoroundecanoic acid (PFUnA)	77.0	9.47	"	75.8	ND	102	25-150					
Perfluorododecanoic acid (PFDoA)	67.3	9.47	"	75.8	ND	88.8	25-150					
Perfluorotridecanoic acid (PFTriDA)	64.8	9.47	"	75.8	ND	85.5	25-150					
Perfluorotetradecanoic acid (PFTA)	87.0	9.47	"	75.8	ND	115	25-150					
N-MeFOSAA	82.9	9.47	"	75.8	ND	109	25-150					
N-EtFOSAA	81.0	9.47	"	75.8	ND	107	25-150					
Perfluoropentanoic acid (PFPeA)	106	9.47	"	75.8	33.7	95.1	25-150					
Perfluoro-1-octanesulfonamide (FOSA)	167	9.47	"	75.8	ND	220	25-150	High Bias				
Perfluoro-1-heptanesulfonic acid (PFHpS)	62.9	9.47	"	72.3	ND	87.0	25-150					
Perfluoro-1-decanesulfonic acid (PFDS)	52.7	9.47	"	73.1	ND	72.1	25-150					
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	85.4	23.7	"	72.0	ND	119	25-200					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	57.6	9.47	"	72.7	ND	79.1	25-200					
Perfluoro-n-butanoic acid (PFBA)	82.4	9.47	"	75.8	ND	109	25-150					
Surrogate: M3PFBS	62.6		"	70.4		88.9	25-150					
Surrogate: M5PFHxA	63.9		"	75.8		84.3	25-150					
Surrogate: M4PFHpA	79.2		"	75.8		104	25-150					
Surrogate: M3PFHxS	74.3		"	71.7		104	25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	66.4		"	75.8		87.7	25-150					
Surrogate: M6PFDA	70.1		"	75.8		92.5	25-150					
Surrogate: M7PFUdA	59.8		"	75.8		78.9	25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	64.7		"	75.8		85.3	25-150					
Surrogate: M2PFTeDA	52.3		"	75.8		69.0	10-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	71.5		"	75.8		94.3	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	81.4		"	72.5		112	25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	70.1		"	75.8		92.6	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	5.25		"	75.8		6.92	10-150					
Surrogate: d3-N-MeFOSAA	63.6		"	75.8		84.0	25-150					
Surrogate: d5-N-EtFOSAA	66.4		"	75.8		87.6	25-150					
Surrogate: M2-6:2 FTS	125		"	71.9		174	25-200					
Surrogate: M2-8:2 FTS	101		"	72.6		139	25-200					
Surrogate: M9PFNA	75.6		"	75.8		99.8	25-150					



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BF21517 - SPE Ext-PFAS-EPA 537.1M

Matrix Spike Dup (BF21517-MSD1)	*Source sample: 22F1047-05 (Matrix Spike Dup)						Prepared: 06/23/2022 Analyzed: 06/28/2022				
Perfluorobutanesulfonic acid (PFBS)	70.1	1.85	ng/L	65.6	7.62	95.3	25-150		12.9	35	
Perfluorohexanoic acid (PFHxA)	94.1	1.85	"	74.1	20.4	99.5	25-150		3.98	35	
Perfluoroheptanoic acid (PFHpA)	80.7	1.85	"	74.1	8.79	97.1	25-150		6.70	35	
Perfluorohexanesulfonic acid (PFHxS)	70.6	1.85	"	67.4	5.53	96.5	25-150		3.49	35	
Perfluorooctanoic acid (PFOA)	92.1	1.85	"	74.1	27.8	86.9	25-150		11.1	35	
Perfluorooctanesulfonic acid (PFOS)	107	1.85	"	68.5	37.8	100	25-150		17.4	35	
Perfluorononanoic acid (PFNA)	74.8	1.85	"	74.1	3.29	96.6	25-150		5.46	35	
Perfluorodecanoic acid (PFDA)	73.4	1.85	"	74.1	ND	99.0	25-150		12.4	35	
Perfluoroundecanoic acid (PFUnA)	71.4	1.85	"	74.1	ND	96.3	25-150		4.42	35	
Perfluorododecanoic acid (PFDoA)	67.7	1.85	"	74.1	ND	91.4	25-150		16.2	35	
Perfluorotridecanoic acid (PFTeDA)	58.4	1.85	"	74.1	ND	78.8	25-150		15.2	35	
Perfluorotetradecanoic acid (PFTA)	78.8	1.85	"	74.1	ND	106	25-150		5.28	35	
N-MeFOSAA	70.9	1.85	"	74.1	ND	95.7	25-150		16.9	35	
N-EtFOSAA	82.1	1.85	"	74.1	ND	111	25-150		3.00	35	
Perfluoropentanoic acid (PFPeA)	92.1	1.85	"	74.1	18.3	99.5	25-150		7.09	35	
Perfluoro-1-octanesulfonamide (FOSA)	45.5	1.85	"	74.1	ND	61.4	25-150		57.3	35	Non-dir.
Perfluoro-1-heptanesulfonic acid (PFHpS)	78.2	1.85	"	70.7	ND	111	25-150		8.17	35	
Perfluoro-1-decanesulfonic acid (PFDS)	54.9	1.85	"	71.5	ND	76.8	25-150		6.20	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	62.3	4.63	"	70.4	ND	88.5	25-200		1.45	35	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	54.4	1.85	"	71.1	ND	76.5	25-200		33.3	35	
Perfluoro-n-butanoic acid (PFBA)	80.0	1.85	"	74.1	14.3	88.7	25-150		12.5	35	
Surrogate: M3PFBS	58.8		"	68.8		85.4	25-150				
Surrogate: M5PFHxA	51.7		"	74.1		69.8	25-150				
Surrogate: M4PFHpA	60.1		"	74.1		81.2	25-150				
Surrogate: M3PFHxS	75.7		"	70.1		108	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFDA)	66.7		"	74.1		90.0	25-150				
Surrogate: M6PFDA	64.5		"	74.1		87.1	25-150				
Surrogate: M7PFUdA	59.8		"	74.1		80.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	61.7		"	74.1		83.3	25-150				
Surrogate: M2PFTeDA	52.7		"	74.1		71.1	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	62.7		"	74.1		84.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	74.2		"	70.9		105	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	56.3		"	74.1		76.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	0.630		"	74.1		0.850	10-150				
Surrogate: d3-N-MeFOSAA	62.2		"	74.1		84.0	25-150				
Surrogate: d5-N-EtFOSAA	57.3		"	74.1		77.4	25-150				
Surrogate: M2-6:2 FTS	163		"	70.3		232	25-200				
Surrogate: M2-8:2 FTS	108		"	71.0		153	25-200				
Surrogate: M9PFNA	66.0		"	74.1		89.0	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BF21517 - SPE Ext-PFAS-EPA 537.1M

Matrix Spike Dup (BF21517-MSD2)	*Source sample: 22F1047-09 (Matrix Spike Dup)						Prepared: 06/23/2022 Analyzed: 06/29/2022				
Perfluorobutanesulfonic acid (PFBS)	79.5	9.47	ng/L	67.0	ND	119	25-150		8.05	35	
Perfluorohexanoic acid (PFHxA)	101	9.47	"	75.8	22.4	104	25-150		4.01	35	
Perfluoroheptanoic acid (PFHpA)	72.8	9.47	"	75.8	ND	96.1	25-150		9.53	35	
Perfluorohexanesulfonic acid (PFHxS)	92.5	9.47	"	68.9	ND	134	25-150		24.0	35	
Perfluorooctanoic acid (PFOA)	97.7	9.47	"	75.8	19.6	103	25-150		11.1	35	
Perfluorooctanesulfonic acid (PFOS)	113	9.47	"	70.1	26.5	123	25-150		9.08	35	
Perfluorononanoic acid (PFNA)	85.6	9.47	"	75.8	ND	113	25-150		19.8	35	
Perfluorodecanoic acid (PFDA)	96.4	9.47	"	75.8	ND	127	25-150		30.6	35	
Perfluoroundecanoic acid (PFUnA)	72.9	9.47	"	75.8	ND	96.3	25-150		5.42	35	
Perfluorododecanoic acid (PFDoA)	80.8	9.47	"	75.8	ND	107	25-150		18.3	35	
Perfluorotridecanoic acid (PFTriDA)	78.2	9.47	"	75.8	ND	103	25-150		18.7	35	
Perfluorotetradecanoic acid (PFTA)	109	9.47	"	75.8	ND	144	25-150		22.5	35	
N-MeFOSAA	83.8	9.47	"	75.8	ND	111	25-150		1.07	35	
N-EtFOSAA	82.8	9.47	"	75.8	ND	109	25-150		2.19	35	
Perfluoropentanoic acid (PFPeA)	104	9.47	"	75.8	33.7	92.2	25-150		2.13	35	
Perfluoro-1-octanesulfonamide (FOSA)	80.2	9.47	"	75.8	ND	106	25-150		70.1	35	Non-dir.
Perfluoro-1-heptanesulfonic acid (PFHpS)	86.4	9.47	"	72.3	ND	119	25-150		31.4	35	
Perfluoro-1-decanesulfonic acid (PFDS)	69.4	9.47	"	73.1	ND	94.9	25-150		27.3	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	76.6	23.7	"	72.0	ND	106	25-200		10.9	35	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	63.6	9.47	"	72.7	ND	87.5	25-200		10.0	35	
Perfluoro-n-butanoic acid (PFBA)	81.5	9.47	"	75.8	ND	108	25-150		1.20	35	
Surrogate: M3PFBS	58.4		"	70.4		83.0	25-150				
Surrogate: M5PFHxA	65.4		"	75.8		86.3	25-150				
Surrogate: M4PFHpA	72.9		"	75.8		96.2	25-150				
Surrogate: M3PFHxS	65.6		"	71.7		91.6	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFDA)	64.0		"	75.8		84.5	25-150				
Surrogate: M6PFDA	59.1		"	75.8		78.0	25-150				
Surrogate: M7PFUdA	59.9		"	75.8		79.1	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	57.9		"	75.8		76.4	25-150				
Surrogate: M2PFTeDA	42.6		"	75.8		56.3	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	77.5		"	75.8		102	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	71.4		"	72.5		98.5	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	70.1		"	75.8		92.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	6.37		"	75.8		8.41	10-150				
Surrogate: d3-N-MeFOSAA	69.3		"	75.8		91.5	25-150				
Surrogate: d5-N-EtFOSAA	66.7		"	75.8		88.1	25-150				
Surrogate: M2-6:2 FTS	140		"	71.9		195	25-200				
Surrogate: M2-8:2 FTS	96.9		"	72.6		133	25-200				
Surrogate: M9PFNA	69.3		"	75.8		91.5	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BF21786 - SPE Ext-PFAS-EPA 537.1M

Blank (BF21786-BLK1)

Prepared: 06/29/2022 Analyzed: 06/30/2022

Perfluorobutanesulfonic acid (PFBS)	ND	2.00	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.00	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	2.00	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTriDA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
N-EtFOSAA	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	2.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	2.00	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	5.00	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	2.00	"								
Surrogate: M3PFBS	77.5		"	74.3		104	25-150				
Surrogate: M5PFHxA	69.9		"	80.0		87.4	25-150				
Surrogate: M4PFHpA	72.7		"	80.0		90.9	25-150				
Surrogate: M3PFHxS	62.1		"	75.7		82.1	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	83.1		"	80.0		104	25-150				
Surrogate: M6PFDA	62.5		"	80.0		78.1	25-150				
Surrogate: M7PFUdA	79.7		"	80.0		99.6	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	81.5		"	80.0		102	25-150				
Surrogate: M2PFTeDA	82.9		"	80.0		104	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	77.4		"	80.0		96.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	67.3		"	76.6		87.9	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	80.2		"	80.0		100	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	43.5		"	80.0		54.4	10-150				
Surrogate: d3-N-MeFOSAA	52.6		"	80.0		65.8	25-150				
Surrogate: d5-N-EtFOSAA	69.7		"	80.0		87.2	25-150				
Surrogate: M2-6:2 FTS	70.6		"	75.9		92.9	25-200				
Surrogate: M2-8:2 FTS	103		"	76.6		134	25-200				
Surrogate: M9PFNA	66.3		"	80.0		82.9	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BF21786 - SPE Ext-PFAS-EPA 537.1M

LCS (BF21786-BS1)

Prepared: 06/29/2022 Analyzed: 06/30/2022

Perfluorobutanesulfonic acid (PFBS)	73.5	2.00	ng/L	70.8		104	50-130				
Perfluorohexanoic acid (PFHxA)	79.9	2.00	"	80.0		99.8	50-130				
Perfluoroheptanoic acid (PFHpA)	72.0	2.00	"	80.0		90.0	50-130				
Perfluorohexanesulfonic acid (PFHxS)	70.8	2.00	"	72.8		97.2	50-130				
Perfluorooctanoic acid (PFOA)	73.2	2.00	"	80.0		91.5	50-130				
Perfluorooctanesulfonic acid (PFOS)	69.2	2.00	"	74.0		93.6	50-130				
Perfluorononanoic acid (PFNA)	78.7	2.00	"	80.0		98.4	50-130				
Perfluorodecanoic acid (PFDA)	80.8	2.00	"	80.0		101	50-130				
Perfluoroundecanoic acid (PFUnA)	77.6	2.00	"	80.0		97.0	50-130				
Perfluorododecanoic acid (PFDoA)	76.7	2.00	"	80.0		95.9	50-130				
Perfluorotridecanoic acid (PFTriDA)	74.5	2.00	"	80.0		93.1	50-130				
Perfluorotetradecanoic acid (PFTA)	83.9	2.00	"	80.0		105	50-130				
N-MeFOSAA	86.0	2.00	"	80.0		108	50-130				
N-EtFOSAA	87.6	2.00	"	80.0		109	50-130				
Perfluoropentanoic acid (PFPeA)	81.1	2.00	"	80.0		101	50-130				
Perfluoro-1-octanesulfonamide (FOSA)	81.1	2.00	"	80.0		101	50-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	70.3	2.00	"	76.4		92.1	50-130				
Perfluoro-1-decanesulfonic acid (PFDS)	62.0	2.00	"	77.2		80.3	50-130				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	72.5	5.00	"	76.0		95.4	50-175				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	64.5	2.00	"	76.8		84.0	50-175				
Perfluoro-n-butanoic acid (PFBA)	79.6	2.00	"	80.0		99.5	50-130				
Surrogate: M3PFBS	61.1		"	74.3		82.2	25-150				
Surrogate: M5PFHxA	76.9		"	80.0		96.1	25-150				
Surrogate: M4PFHpA	82.2		"	80.0		103	25-150				
Surrogate: M3PFHxS	68.7		"	75.7		90.7	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	82.6		"	80.0		103	25-150				
Surrogate: M6PFDA	79.6		"	80.0		99.5	25-150				
Surrogate: M7PFUdA	78.9		"	80.0		98.6	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	76.0		"	80.0		95.0	25-150				
Surrogate: M2PFTeDA	58.7		"	80.0		73.4	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	74.0		"	80.0		92.4	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	81.3		"	76.6		106	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	75.8		"	80.0		94.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	35.9		"	80.0		44.9	10-150				
Surrogate: d3-N-MeFOSAA	72.2		"	80.0		90.2	25-150				
Surrogate: d5-N-EtFOSAA	68.7		"	80.0		85.9	25-150				
Surrogate: M2-6:2 FTS	87.6		"	75.9		115	25-200				
Surrogate: M2-8:2 FTS	73.0		"	76.6		95.3	25-200				
Surrogate: M9PFNA	77.6		"	80.0		97.0	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BF21786 - SPE Ext-PFAS-EPA 537.1M

Matrix Spike (BF21786-MS1)	*Source sample: 22F1069-03 (Matrix Spike)						Prepared: 06/29/2022 Analyzed: 07/01/2022				
Perfluorobutanesulfonic acid (PFBS)	94.4	8.80	ng/L	62.3	ND	152	25-150	High Bias			
Perfluorohexanoic acid (PFHxA)	87.1	8.80	"	70.4	14.7	103	25-150				
Perfluoroheptanoic acid (PFHpA)	67.3	8.80	"	70.4	9.51	82.0	25-150				
Perfluorohexanesulfonic acid (PFHxS)	67.8	8.80	"	64.1	21.9	71.7	25-150				
Perfluorooctanoic acid (PFOA)	88.3	8.80	"	70.4	20.7	95.9	25-150				
Perfluorooctanesulfonic acid (PFOS)	54.8	8.80	"	65.1	ND	84.1	25-150				
Perfluorononanoic acid (PFNA)	57.7	8.80	"	70.4	ND	81.9	25-150				
Perfluorodecanoic acid (PFDA)	84.9	8.80	"	70.4	ND	121	25-150				
Perfluoroundecanoic acid (PFUnA)	80.8	8.80	"	70.4	ND	115	25-150				
Perfluorododecanoic acid (PFDoA)	68.7	8.80	"	70.4	ND	97.6	25-150				
Perfluorotridecanoic acid (PFTriDA)	58.0	8.80	"	70.4	ND	82.3	25-150				
Perfluorotetradecanoic acid (PFTA)	52.7	8.80	"	70.4	ND	74.9	25-150				
N-MeFOSAA	85.9	8.80	"	70.4	ND	122	25-150				
N-EtFOSAA	51.0	8.80	"	70.4	ND	72.5	25-150				
Perfluoropentanoic acid (PFPeA)	97.3	8.80	"	70.4	ND	138	25-150				
Perfluoro-1-octanesulfonamide (FOSA)	83.9	8.80	"	70.4	ND	119	25-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	66.2	8.80	"	67.3	ND	98.4	25-150				
Perfluoro-1-decanesulfonic acid (PFDS)	60.0	8.80	"	68.0	ND	88.3	25-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	82.7	22.0	"	66.9	ND	124	25-200				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	59.2	8.80	"	67.6	ND	87.5	25-200				
Perfluoro-n-butanoic acid (PFBA)	120	8.80	"	70.4	ND	170	25-150	High Bias			
Surrogate: M3PFBS	70.9		"	65.4		108	25-150				
Surrogate: M5PFHxA	26.4		"	70.4		37.4	25-150				
Surrogate: M4PFHpA	85.4		"	70.4		121	25-150				
Surrogate: M3PFHxS	99.4		"	66.6		149	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	81.2		"	70.4		115	25-150				
Surrogate: M6PFDA	76.7		"	70.4		109	25-150				
Surrogate: M7PFUdA	75.5		"	70.4		107	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	82.5		"	70.4		117	25-150				
Surrogate: M2PFTeDA	99.2		"	70.4		141	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	94.8		"	70.4		135	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	103		"	67.4		153	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	83.9		"	70.4		119	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	13.1		"	70.4		18.6	10-150				
Surrogate: d3-N-MeFOSAA	92.3		"	70.4		131	25-150				
Surrogate: d5-N-EtFOSAA	122		"	70.4		173	25-150				
Surrogate: M2-6:2 FTS	202		"	66.8		303	25-200				
Surrogate: M2-8:2 FTS	208		"	67.5		309	25-200				
Surrogate: M9PFNA	99.1		"	70.4		141	25-150				



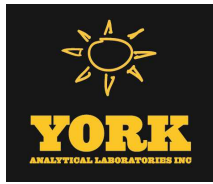
PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BF21786 - SPE Ext-PFAS-EPA 537.1M

Matrix Spike Dup (BF21786-MSD1)	*Source sample: 22F1069-03 (Matrix Spike Dup)						Prepared: 06/29/2022 Analyzed: 07/01/2022				
Perfluorobutanesulfonic acid (PFBS)	85.7	8.93	ng/L	63.2	ND	136	25-150		9.68	35	
Perfluorohexanoic acid (PFHxA)	91.5	8.93	"	71.4	14.7	107	25-150		4.91	35	
Perfluoroheptanoic acid (PFHpA)	82.2	8.93	"	71.4	9.51	102	25-150		20.0	35	
Perfluorohexanesulfonic acid (PFHxS)	93.1	8.93	"	65.0	21.9	110	25-150		31.5	35	
Perfluorooctanoic acid (PFOA)	86.9	8.93	"	71.4	20.7	92.6	25-150		1.56	35	
Perfluorooctanesulfonic acid (PFOS)	66.7	8.93	"	66.1	ND	101	25-150		19.7	35	
Perfluorononanoic acid (PFNA)	63.8	8.93	"	71.4	ND	89.4	25-150		10.1	35	
Perfluorodecanoic acid (PFDA)	79.7	8.93	"	71.4	ND	112	25-150		6.27	35	
Perfluoroundecanoic acid (PFUnA)	79.1	8.93	"	71.4	ND	111	25-150		2.07	35	
Perfluorododecanoic acid (PFDoA)	81.9	8.93	"	71.4	ND	115	25-150		17.5	35	
Perfluorotridecanoic acid (PFTriDA)	79.8	8.93	"	71.4	ND	112	25-150		31.7	35	
Perfluorotetradecanoic acid (PFTA)	62.5	8.93	"	71.4	ND	87.5	25-150		17.0	35	
N-MeFOSAA	85.4	8.93	"	71.4	ND	120	25-150		0.621	35	
N-EtFOSAA	70.3	8.93	"	71.4	ND	98.5	25-150		31.8	35	
Perfluoropentanoic acid (PFPeA)	104	8.93	"	71.4	ND	146	25-150		6.91	35	
Perfluoro-1-octanesulfonamide (FOSA)	58.9	8.93	"	71.4	ND	82.4	25-150		35.1	35	Non-dir.
Perfluoro-1-heptanesulfonic acid (PFHpS)	66.9	8.93	"	68.2	ND	98.1	25-150		1.08	35	
Perfluoro-1-decanesulfonic acid (PFDS)	60.3	8.93	"	68.9	ND	87.5	25-150		0.558	35	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	87.6	22.3	"	67.9	ND	129	25-200		5.71	35	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	60.8	8.93	"	68.6	ND	88.7	25-200		2.69	35	
Perfluoro-n-butanoic acid (PFBA)	106	8.93	"	71.4	ND	148	25-150		12.1	35	
Surrogate: M3PFBS	83.4		"	66.4		126	25-150				
Surrogate: M5PFHxA	21.0		"	71.4		29.4	25-150				
Surrogate: M4PFHpA	79.2		"	71.4		111	25-150				
Surrogate: M3PFHxS	90.4		"	67.6		134	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFDA)	95.0		"	71.4		133	25-150				
Surrogate: M6PFDA	89.1		"	71.4		125	25-150				
Surrogate: M7PFUdA	80.4		"	71.4		112	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	84.8		"	71.4		119	25-150				
Surrogate: M2PFTeDA	86.3		"	71.4		121	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	114		"	71.4		160	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	109		"	68.4		159	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	102		"	71.4		143	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	28.7		"	71.4		40.1	10-150				
Surrogate: d3-N-MeFOSAA	95.8		"	71.4		134	25-150				
Surrogate: d5-N-EtFOSAA	117		"	71.4		164	25-150				
Surrogate: M2-6:2 FTS	243		"	67.8		358	25-200				
Surrogate: M2-8:2 FTS	209		"	68.4		306	25-200				
Surrogate: M9PFNA	105		"	71.4		146	25-150				





Sample and Data Qualifiers Relating to This Work Order

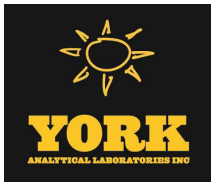
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
PFSu-L	The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
PF-CCV-H	The CCV recovery was slightly above acceptable limits for the qualified compound. However, sample results are not biased high because results are corrected for isotope recovery.
PFAS-MSH	The recovery for this matrix spike compound was above control limits possibly due to matrix effects or non-homogeneity of the sample versus the native sample

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.



2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Revision Description: This report has been revised to include PFOA results on Sample -04.



Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. **22F1006**
Page **1** of **1**

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clientservices@yorklab.com

Report To:
Company: **First Environmental Corp**
Address: **10 Park Place Bldg 1A 501 Rte 504**
Butler NJ 07405
Phone: **973-334-0003**
Contact: **Dave Luer**
E-mail: **DLuer@FirstEnvironmental.com**

Report To:
Company: **SAANE**
Address: **SAANE**
Phone: **SAANE**
Contact: **SAANE**
E-mail: **SAANE**

Report To:
Company: **SAANE**
Address: **SAANE**
Phone: **SAANE**
Contact: **SAANE**
E-mail: **SAANE**

Report To:
Company: **SAANE**
Address: **SAANE**
Phone: **SAANE**
Contact: **SAANE**
E-mail: **SAANE**

Turn-Around Time
RUSH - Next Day
RUSH - Two Day
RUSH - Three Day
RUSH - Four Day
Standard (5-7 Day)

YOUR Project Number
WESTCQ28

YOUR Project Name
WESTCQ28

YOUR PO#: **WESTCQ28**

Report / EDD Type (circle selections)
Compared to the following Regulation(s): (please fill in)
CT RCP Standard Excel EDD
CT RCP DQ/DUE EQUIS (Standard)
NJ DEP Reduced **NYSDEC EQUIS**
Deliverables NJ DEP SRP HazSite
NJDKQP Other:

Container Description
2X 250 plastic

Analysis Requested
PFA5

Sample Matrix
S - soil / solid
GW - groundwater
DW - drinking water
WW - wastewater
O - Oil / Other

Matrix Codes
GW
GW
GW
GW
GW
Blank

Sample Identification
OF-7
OF-7 Pool
OF-7 Swamp
OF-7 Grate
E-10
FB 6/20/22

Samples Collected by: (print AND sign your name)
DAVE LUER

Samples From
New York
New Jersey
Connecticut
Pennsylvania
Other:

Summary Report
 Summary Report
 QA Report
 NY ASP A Package
 NY ASP B Package

Date/Time Sampled
6/20/22 1041
1046
1055
1100
1014
1050

Yes or No
circle Yes or No

Comments:
Samples iced/chilled at time of lab pickup? circle Yes or No
1. Samples Received by / Company
2. Samples Relinquished by / Company
3. Samples Relinquished by / Company
4. Samples Received by / Company

Preservation: (check all that apply)
HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other: ___

Special Instruction
Field Filtered
Lab to Filter

Date/Time
6/20/22 12:40

Date/Time
6/20/22 1448

Date/Time
6/20/22 1241

Date/Time
6/20/22 1448