

Technical Report

for

Emerging Contaminants

prepared for:

Hampton Bays Water District
18B Ponquoque Ave
Hampton Bays NY, 11946
Attention: Keith Tuthill Jr.

Report Date: 07/18/2024
Client Project ID: WEII 1-2/GAC INFLUENT/ EFFLUENT
York Project (SDG) No.: 24G0039

Stratford, CT Laboratory IDs:
NY:10854, NJ: CT005, PA: 68-0440, CT: PH-0723



Richmond Hill, NY Laboratory IDs:
NY:12058, NJ: NY037, CT: PH-0721, NH: 2097,
EPA: NY01600

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ClientServices@yorklab.com

Report Date: 07/18/2024
Client Project ID: WELL 1-2/GAC INFLUENT/ EFFLUENT
York Project (SDG) No.: 24G0039

Hampton Bays Water District
18B Ponquoque Ave
Hampton Bays NY, 11946
Attention: Keith Tuthill Jr.

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 July 01, 2024 and listed below. The project was identified as your project: **WELL 1-2/GAC INFLUENT/ EFFLUENT**.

The analyses were conducted utilizing appropriate EPA 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.

Please contact Client Services at 203.325.1371 with any questions regarding this report or e-mail clientservices@yorklab.com.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24G0039-01	GAC INLFUENT	Drinking Water	07/01/2024	07/01/2024
24G0039-02	GAC INLFUENT FB	Drinking Water	07/01/2024	07/01/2024
24G0039-03	GAC EFFLUENT	Drinking Water	07/01/2024	07/01/2024
24G0039-04	GAC EFFLUENT FB	Drinking Water	07/01/2024	07/01/2024
24G0039-05	WELL 1-2	Drinking Water	07/01/2024	07/01/2024

General Notes for York Project (SDG) No.: 24G0039

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, NJ Cert No. CT005, PA Cert No. 68-04440, CT Cert No. PH-0723; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058, NJ Cert No. NY037, CT Cert No. PH-0721, NH Cert No. 2097, EPA Cert No. NY01600.

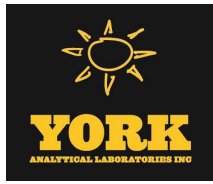
Approved By:



Cassie L. Mosher
Laboratory Manager

Date: 07/18/2024





Sample Information

Client Sample ID: GAC INLFUENT

York Sample ID: 24G0039-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
24G0039	WEII 1-2/GAC INFLUENT/ EFFLUENT	Drinking Water	July 1, 2024 8:00 am	07/01/2024

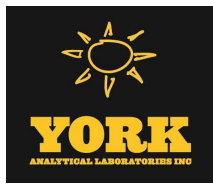
PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
919005-14-4	ADONA	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
756426-58-1	9CL-PF3ONS	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
763051-92-9	11CL-PF3OUdS	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
13252-13-6	HFPO-DA (Gen-X)	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.32		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
335-76-2	Perfluorodecanoic acid (PFDA)	ND		10		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
375-85-9	Perfluoroheptanoic acid (PFHpA)	4.41		10		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	17.8		10		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
307-24-4	Perfluorohexanoic acid (PFHxA)	7.57		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
375-95-1	Perfluorononanoic acid (PFNA)	6.24		10		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	49.9		4		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
335-67-1	Perfluorooctanoic acid (PFOA)	6.79		4		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.09		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	1.10		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
375-22-4	Perfluoro-n-butanoic acid (PFBA)	3.12		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		-		ng/L	1.79	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	2.17		-		ng/L	1.79	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		-		ng/L	1.79	EPA 533	07/08/2024 18:48	ESJ
								Certifications: NELAC-NY12058	07/10/2024 13:51	



Sample Information

Client Sample ID: GAC INLFUENT

York Sample ID: 24G0039-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0039

WEII 1-2/GAC INFLUENT/ EFFLUENT

Drinking Water

July 1, 2024 8:00 am

07/01/2024

PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
2706-90-3	Perfluoropentanoic acid (PFPeA)	7.80		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
							Certifications:	NELAC-NY12058	07/10/2024 13:51	
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
							Certifications:	NELAC-NY12058	07/10/2024 13:51	
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
							Certifications:	NELAC-NY12058	07/10/2024 13:51	
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
							Certifications:	NELAC-NY12058	07/10/2024 13:51	
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		-		ng/L	0.893	EPA 533	07/08/2024 18:48	ESJ
							Certifications:	NELAC-NY12058	07/10/2024 13:51	

Surrogate Recoveries

Result

Acceptance Range

Surrogate: MPFDoA	87.7 %	50-200
Surrogate: MPFBA	98.5 %	50-200
Surrogate: M9PFNA	95.0 %	50-200
Surrogate: M8PFOS	96.8 %	50-200
Surrogate: M8PFOA	93.9 %	50-200
Surrogate: M7PFUdA	89.1 %	50-200
Surrogate: M6PFDA	95.5 %	50-200
Surrogate: M5PFPeA	98.5 %	50-200
Surrogate: M5PFHxA	88.4 %	50-200
Surrogate: M4PFHpA	94.2 %	50-200
Surrogate: M3PFHxS	88.9 %	50-200
Surrogate: M3PFBS	87.9 %	50-200
Surrogate: M3HFPO-DA	82.3 %	50-200
Surrogate: M2-8:2 FTS	204 %	PFSu-H 50-200
Surrogate: M2-6:2 FTS	121 %	50-200
Surrogate: M2-4:2 FTS	95.5 %	50-200

PFAS, EPA 537.1 UCMR5 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 537.1 SPE DVB

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		-		ng/L	1.84	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:10	
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		-		ng/L	1.84	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:10	
2355-31-9	N-MeFOSAA	ND		-		ng/L	1.84	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:10	
2991-50-6	N-EtFOSAA	ND		-		ng/L	1.84	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:10	



Sample Information

Client Sample ID: GAC INLFUENT

York Sample ID: 24G0039-01

<u>York Project (SDG) No.</u> 24G0039	<u>Client Project ID</u> WEII 1-2/GAC INFLUENT/ EFFLUENT	<u>Matrix</u> Drinking Water	<u>Collection Date/Time</u> July 1, 2024 8:00 am	<u>Date Received</u> 07/01/2024
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PFAS, EPA 537.1 UCMR5 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 537.1 SPE DVB

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL	Acceptance Range					
	Surrogate Recoveries	Result			Acceptance Range					
	Surrogate: d5-N-EtFOSAA	68.0 %	PFSL		70-130					
	Surrogate: MPFDA	92.2 %			70-130					
	Surrogate: MPFHxA	82.8 %			70-130					
	Surrogate: M3HFPO-DA	79.1 %			70-130					

Sample Information

Client Sample ID: GAC INLFUENT FB

York Sample ID: 24G0039-02

<u>York Project (SDG) No.</u> 24G0039	<u>Client Project ID</u> WEII 1-2/GAC INFLUENT/ EFFLUENT	<u>Matrix</u> Drinking Water	<u>Collection Date/Time</u> July 1, 2024 8:00 am	<u>Date Received</u> 07/01/2024
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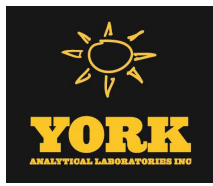
PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL	Acceptance Range					
919005-14-4	ADONA	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
756426-58-1	9CL-PF3ONS	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
763051-92-9	11CL-PF3OUdS	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
13252-13-6	HFPO-DA (Gen-X)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
335-76-2	Perfluorodecanoic acid (PFDA)	ND		10		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		10		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		10		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
375-95-1	Perfluorononanoic acid (PFNA)	ND		10		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		4		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	



Sample Information

Client Sample ID: GAC INLFUENT FB

York Sample ID: 24G0039-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0039

WEII 1-2/GAC INFLUENT/ EFFLUENT

Drinking Water

July 1, 2024 8:00 am

07/01/2024

PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

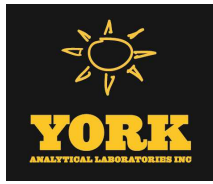
CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
335-67-1	Perfluorooctanoic acid (PFOA)	ND		4		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		-		ng/L	1.86	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		-		ng/L	1.86	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		-		ng/L	1.86	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		-		ng/L	0.930	EPA 533	07/16/2024 14:52	JTG
								Certifications: NELAC-NY12058	07/18/2024 04:11	

Surrogate Recoveries

Result

Acceptance Range

Surrogate: MPFDoA	66.1 %	50-200
Surrogate: MPFBA	86.2 %	50-200
Surrogate: M9PFNA	83.5 %	50-200
Surrogate: M8PFOS	90.7 %	50-200
Surrogate: M8PFOA	89.8 %	50-200
Surrogate: M7PFUdA	68.8 %	50-200
Surrogate: M6PFDA	80.0 %	50-200
Surrogate: M5PFPeA	90.6 %	50-200
Surrogate: M5PFHxA	77.9 %	50-200
Surrogate: M4PFHpA	85.9 %	50-200
Surrogate: M3PFHxS	80.4 %	50-200
Surrogate: M3PFBS	83.4 %	50-200
Surrogate: M3HFPO-DA	70.0 %	50-200
Surrogate: M2-8:2 FTS	153 %	50-200



Sample Information

Client Sample ID: GAC INFLUENT FB

York Sample ID: 24G0039-02

<u>York Project (SDG) No.</u> 24G0039	<u>Client Project ID</u> WEII 1-2/GAC INFLUENT/ EFFLUENT	<u>Matrix</u> Drinking Water	<u>Collection Date/Time</u> July 1, 2024 8:00 am	<u>Date Received</u> 07/01/2024
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PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
	Surrogate: M2-6:2 FTS	86.6 %		50-200						
	Surrogate: M2-4:2 FTS	79.2 %		50-200						

PFAS, EPA 537.1 UCMR5 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 537.1 SPE DVB

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		-		ng/L	1.79	EPA 537.1	07/05/2024 12:09	KFH
							Certifications: NELAC-NY12058		07/09/2024 13:35	
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		-		ng/L	1.79	EPA 537.1	07/05/2024 12:09	KFH
							Certifications: NELAC-NY12058		07/09/2024 13:35	
2355-31-9	N-MeFOSAA	ND		-		ng/L	1.79	EPA 537.1	07/05/2024 12:09	KFH
							Certifications: NELAC-NY12058		07/09/2024 13:35	
2991-50-6	N-EtFOSAA	ND		-		ng/L	1.79	EPA 537.1	07/05/2024 12:09	KFH
							Certifications: NELAC-NY12058		07/09/2024 13:35	

Surrogate Recoveries

Result

Acceptance Range

Surrogate: d5-N-EtFOSAA	70.2 %	70-130
Surrogate: MPFDA	97.5 %	70-130
Surrogate: MPFHxA	86.9 %	70-130
Surrogate: M3HFPO-DA	103 %	70-130

Sample Information

Client Sample ID: GAC EFFLUENT

York Sample ID: 24G0039-03

<u>York Project (SDG) No.</u> 24G0039	<u>Client Project ID</u> WEII 1-2/GAC INFLUENT/ EFFLUENT	<u>Matrix</u> Drinking Water	<u>Collection Date/Time</u> July 1, 2024 8:15 am	<u>Date Received</u> 07/01/2024
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1,4-Dioxane by GC/MS/SIM EPA 522

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 522

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
123-91-1	1,4-Dioxane	ND		1		ug/L	0.200	EPA 522	07/08/2024 08:26	SS
							Certifications: NELAC-NY10854		07/09/2024 14:33	

Surrogate Recoveries

Result

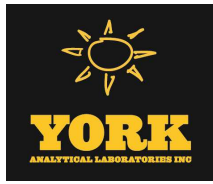
Acceptance Range

Surrogate: 1,4-Dioxane-d8	88.0 %	70-130
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PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: GAC EFFLUENT

York Sample ID: 24G0039-03

<u>York Project (SDG) No.</u> 24G0039	<u>Client Project ID</u> WEII 1-2/GAC INFLUENT/ EFFLUENT	<u>Matrix</u> Drinking Water	<u>Collection Date/Time</u> July 1, 2024 8:15 am	<u>Date Received</u> 07/01/2024
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Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level MCL	Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
919005-14-4	ADONA	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
756426-58-1	9CL-PF3ONS	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
763051-92-9	11CL-PF3OUdS	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		10	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		10	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		10	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	ND		10	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		4	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	ND		4	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		-	ng/L	1.85	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		-	ng/L	1.85	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		-	ng/L	1.85	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		-	ng/L	0.923	EPA 533 Certifications: NELAC-NY12058	07/08/2024 18:48 07/10/2024 14:17	ESJ



Sample Information

Client Sample ID: GAC EFFLUENT

York Sample ID: 24G0039-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0039

WEII 1-2/GAC INFLUENT/ EFFLUENT

Drinking Water

July 1, 2024 8:15 am

07/01/2024

PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		-		ng/L	0.923	EPA 533	07/08/2024 18:48	ESJ
							Certifications:	NELAC-NY12058	07/10/2024 14:17	
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		-		ng/L	0.923	EPA 533	07/08/2024 18:48	ESJ
							Certifications:	NELAC-NY12058	07/10/2024 14:17	
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		-		ng/L	0.923	EPA 533	07/08/2024 18:48	ESJ
							Certifications:	NELAC-NY12058	07/10/2024 14:17	
	Surrogate Recoveries	Result		Acceptance Range						
	Surrogate: MPFDoA	79.0 %		50-200						
	Surrogate: MPFBA	82.3 %		50-200						
	Surrogate: M9PFNA	88.4 %		50-200						
	Surrogate: M8PFOS	84.1 %		50-200						
	Surrogate: M8PFOA	85.1 %		50-200						
	Surrogate: M7PFUdA	82.7 %		50-200						
	Surrogate: M6PFDA	89.7 %		50-200						
	Surrogate: M5PFPeA	82.3 %		50-200						
	Surrogate: M5PFHxA	78.8 %		50-200						
	Surrogate: M4PFHpA	79.9 %		50-200						
	Surrogate: M3PFHxS	68.1 %		50-200						
	Surrogate: M3PFBS	58.0 %		50-200						
	Surrogate: M3HFPO-DA	80.5 %		50-200						
	Surrogate: M2-8:2 FTS	152 %		50-200						
	Surrogate: M2-6:2 FTS	73.6 %		50-200						
	Surrogate: M2-4:2 FTS	44.5 %	PFSu-L	50-200						

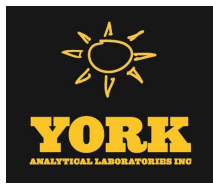
PFAS, EPA 537.1 UCMR5 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 537.1 SPE DVB

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		-		ng/L	1.87	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:47	
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		-		ng/L	1.87	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:47	
2355-31-9	N-MeFOSAA	ND		-		ng/L	1.87	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:47	
2991-50-6	N-EtFOSAA	ND		-		ng/L	1.87	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:47	
	Surrogate Recoveries	Result		Acceptance Range						
	Surrogate: d5-N-EtFOSAA	66.1 %	PFSL	70-130						
	Surrogate: MPFDA	101 %		70-130						
	Surrogate: MPFHxA	91.7 %		70-130						



Sample Information

Client Sample ID: GAC EFFLUENT

York Sample ID: 24G0039-03

Table with 5 columns: York Project (SDG) No., Client Project ID, Matrix, Collection Date/Time, Date Received. Values: 24G0039, WEII 1-2/GAC INFLUENT/ EFFLUENT, Drinking Water, July 1, 2024 8:15 am, 07/01/2024

PFAS, EPA 537.1 UCMR5 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 537.1 SPE DVB

Table with 10 columns: CAS No., Parameter, Result, Flag, MCL, Units, Reported to LOQ, Reference Method, Date/Time Prep/Anal., Analyst. Row 1: Surrogate: M3HFPO-DA, 96.6%, 70-130

Sample Information

Client Sample ID: GAC EFFLUENT FB

York Sample ID: 24G0039-04

Table with 5 columns: York Project (SDG) No., Client Project ID, Matrix, Collection Date/Time, Date Received. Values: 24G0039, WEII 1-2/GAC INFLUENT/ EFFLUENT, Drinking Water, July 1, 2024 8:15 am, 07/01/2024

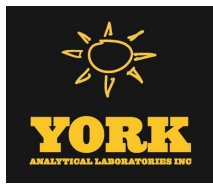
PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

Table with 10 columns: CAS No., Parameter, Result, Flag, MCL, Units, Reported to LOQ, Reference Method, Date/Time Prep/Anal., Analyst. Multiple rows listing various PFAS compounds and their results.



Sample Information

Client Sample ID: GAC EFFLUENT FB

York Sample ID: 24G0039-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0039

WEII 1-2/GAC INFLUENT/ EFFLUENT

Drinking Water

July 1, 2024 8:15 am

07/01/2024

PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		-		ng/L	0.916	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		-		ng/L	0.916	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		-		ng/L	1.83	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		-		ng/L	1.83	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		-		ng/L	1.83	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		-		ng/L	0.916	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		-		ng/L	0.916	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		-		ng/L	0.916	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		-		ng/L	0.916	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		-		ng/L	0.916	EPA 533	07/16/2024 14:52	JTG
							Certifications:	NELAC-NY12058	07/18/2024 04:24	

Surrogate Recoveries

Result

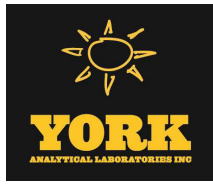
Acceptance Range

Surrogate: MPFDoA	68.4 %	50-200
Surrogate: MPFBA	87.7 %	50-200
Surrogate: M9PFNA	83.9 %	50-200
Surrogate: M8PFOS	87.3 %	50-200
Surrogate: M8PFOA	92.8 %	50-200
Surrogate: M7PFUdA	75.7 %	50-200
Surrogate: M6PFDA	82.5 %	50-200
Surrogate: M5PFPeA	91.1 %	50-200
Surrogate: M5PFHxA	79.7 %	50-200
Surrogate: M4PFHpA	89.5 %	50-200
Surrogate: M3PFHxS	86.4 %	50-200
Surrogate: M3PFBS	88.1 %	50-200
Surrogate: M3HFPO-DA	67.8 %	50-200
Surrogate: M2-8:2 FTS	157 %	50-200
Surrogate: M2-6:2 FTS	89.4 %	50-200
Surrogate: M2-4:2 FTS	78.1 %	50-200

PFAS, EPA 537.1 UCMR5 List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: GAC EFFLUENT FB

York Sample ID: 24G0039-04

<u>York Project (SDG) No.</u> 24G0039	<u>Client Project ID</u> WELL 1-2/GAC INFLUENT/ EFFLUENT	<u>Matrix</u> Drinking Water	<u>Collection Date/Time</u> July 1, 2024 8:15 am	<u>Date Received</u> 07/01/2024
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Sample Prepared by Method: EPA 537.1 SPE DVB

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		-		ng/L	1.82	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:59	
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		-		ng/L	1.82	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:59	
2355-31-9	N-MeFOSAA	ND		-		ng/L	1.82	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:59	
2991-50-6	N-EtFOSAA	ND		-		ng/L	1.82	EPA 537.1	07/05/2024 12:09	KFH
							Certifications:	NELAC-NY12058	07/09/2024 13:59	

Surrogate Recoveries	Result	Flag	Acceptance Range
Surrogate: <i>d5-N-EtFOSAA</i>	62.5 %	PFSL	70-130
Surrogate: <i>MPFDA</i>	90.9 %		70-130
Surrogate: <i>MPFHxA</i>	78.6 %		70-130
Surrogate: <i>M3HFPO-DA</i>	84.5 %		70-130

Sample Information

Client Sample ID: WELL 1-2

York Sample ID: 24G0039-05

<u>York Project (SDG) No.</u> 24G0039	<u>Client Project ID</u> WELL 1-2/GAC INFLUENT/ EFFLUENT	<u>Matrix</u> Drinking Water	<u>Collection Date/Time</u> July 1, 2024 8:30 am	<u>Date Received</u> 07/01/2024
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1,4-Dioxane by GC/MS/SIM EPA 522

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 522

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level		Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
				MCL						
123-91-1	1,4-Dioxane	ND		1		ug/L	0.200	EPA 522	07/08/2024 08:26	SS
							Certifications:	NELAC-NY10854	07/09/2024 14:41	

Surrogate Recoveries	Result	Acceptance Range
Surrogate: <i>1,4-Dioxane-d8</i>	88.0 %	70-130



Analytical Batch Summary

Batch ID: BG40371 **Preparation Method:** EPA 537.1 SPE DVB **Prepared By:** MPR

YORK Sample ID	Client Sample ID	Preparation Date
24G0039-01	GAC INLFUENT	07/05/24
24G0039-02	GAC INLFUENT FB	07/05/24
24G0039-03	GAC EFFLUENT	07/05/24
24G0039-04	GAC EFFLUENT FB	07/05/24
BG40371-BLK1	Blank	07/05/24
BG40371-BS1	LCS	07/05/24
BG40371-DUP1	Duplicate	07/05/24
BG40371-MS1	Matrix Spike	07/05/24

Batch ID: BG40439 **Preparation Method:** EPA 522 **Prepared By:** moa

YORK Sample ID	Client Sample ID	Preparation Date
24G0039-03	GAC EFFLUENT	07/08/24
24G0039-05	WELL 1-2	07/08/24
BG40439-BLK1	Blank	07/08/24
BG40439-BS1	LCS	07/08/24
BG40439-BS2	LCS	07/08/24
BG40439-DUP1	Duplicate	07/08/24
BG40439-MS1	Matrix Spike	07/08/24

Batch ID: BG40507 **Preparation Method:** EPA 533 **Prepared By:** MPR

YORK Sample ID	Client Sample ID	Preparation Date
24G0039-01	GAC INLFUENT	07/08/24
24G0039-03	GAC EFFLUENT	07/08/24
BG40507-BLK1	Blank	07/08/24
BG40507-BLK2	Blank	07/08/24
BG40507-BS1	LCS	07/08/24
BG40507-DUP1	Duplicate	07/08/24
BG40507-MS1	Matrix Spike	07/08/24

Batch ID: BG41063 **Preparation Method:** EPA 533 **Prepared By:** DRF

YORK Sample ID	Client Sample ID	Preparation Date
24G0039-02	GAC INLFUENT FB	07/16/24
24G0039-04	GAC EFFLUENT FB	07/16/24
BG41063-BLK1	Blank	07/16/24
BG41063-BS1	LCS	07/16/24
BG41063-DUP1	Duplicate	07/16/24
BG41063-MS1	Matrix Spike	07/16/24



Semivolatile Organic Compounds by GC/MS/SIM - Quality Control Data
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG40439 - EPA 522											
Blank (BG40439-BLK1)											Prepared & Analyzed: 07/08/2024
1,4-Dioxane	ND	0.200	ug/L								
Surrogate: 1,4-Dioxane-d8	1.90		"	2.50		76.0	70-130				
LCS (BG40439-BS1)											Prepared & Analyzed: 07/08/2024
1,4-Dioxane	4.24	0.200	ug/L	5.00		84.8	70-130				
Surrogate: 1,4-Dioxane-d8	2.30		"	2.50		92.0	70-130				
LCS (BG40439-BS2)											Prepared & Analyzed: 07/08/2024
1,4-Dioxane	1.19	0.200	ug/L	1.00		119	70-130				
Surrogate: 1,4-Dioxane-d8	2.10		"	2.50		84.0	70-130				
Duplicate (BG40439-DUP1)											*Source sample: 24F1877-03 (Duplicate) Prepared & Analyzed: 07/08/2024
1,4-Dioxane	ND	0.200	ug/L		ND						30
Surrogate: 1,4-Dioxane-d8	1.90		"	2.50		76.0	70-130				
Matrix Spike (BG40439-MS1)											*Source sample: 24F1877-01 (Matrix Spike) Prepared & Analyzed: 07/08/2024
1,4-Dioxane	4.74	0.200	ug/L	5.00	ND	94.8	70-130				
Surrogate: 1,4-Dioxane-d8	1.90		"	2.50		76.0	70-130				



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

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

Batch BG40371 - EPA 537.1 SPE DVB

Blank (BG40371-BLK1)

Prepared: 07/05/2024 Analyzed: 07/09/2024

Perfluorotridecanoic acid (PFTTrDA)	ND	4.00	ng/L										
Perfluorotetradecanoic acid (PFTA)	ND	4.00	"										
N-MeFOSAA	ND	4.00	"										
N-EtFOSAA	ND	4.00	"										
<i>Surrogate: d5-N-EtFOSAA</i>	195		"	320		60.8		70-130					
<i>Surrogate: MPFDA</i>	77.8		"	80.0		97.3		70-130					
<i>Surrogate: MPFHxA</i>	66.3		"	80.0		82.9		70-130					
<i>Surrogate: M3HFPO-DA</i>	71.1		"	80.0		88.8		70-130					

LCS (BG40371-BS1)

Prepared: 07/05/2024 Analyzed: 07/09/2024

Perfluorotridecanoic acid (PFTTrDA)	78.9	4.00	ng/L	80.0		98.6		70-130					
Perfluorotetradecanoic acid (PFTA)	75.3	4.00	"	80.0		94.2		70-130					
N-MeFOSAA	94.3	4.00	"	80.0		118		70-130					
N-EtFOSAA	70.1	4.00	"	80.0		87.6		70-130					
<i>Surrogate: d5-N-EtFOSAA</i>	225		"	320		70.2		70-130					
<i>Surrogate: MPFDA</i>	86.7		"	80.0		108		70-130					
<i>Surrogate: MPFHxA</i>	71.8		"	80.0		89.7		70-130					
<i>Surrogate: M3HFPO-DA</i>	83.9		"	80.0		105		70-130					

Duplicate (BG40371-DUP1)

*Source sample: 24F1645-02 (Duplicate)

Prepared: 07/05/2024 Analyzed: 07/09/2024

Perfluorotridecanoic acid (PFTTrDA)	ND	1.87	ng/L		ND							25	
Perfluorotetradecanoic acid (PFTA)	ND	1.87	"		ND							25	
N-MeFOSAA	ND	1.87	"		ND							25	
N-EtFOSAA	ND	1.87	"		ND							25	
<i>Surrogate: d5-N-EtFOSAA</i>	125		"	149		83.7		70-130					
<i>Surrogate: MPFDA</i>	49.0		"	37.3		131		70-130					
<i>Surrogate: MPFHxA</i>	39.7		"	37.3		106		70-130					
<i>Surrogate: M3HFPO-DA</i>	43.7		"	37.3		117		70-130					



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

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

Batch BG40371 - EPA 537.1 SPE DVB

Matrix Spike (BG40371-MS1)	*Source sample: 24F1144-05 (Matrix Spike)						Prepared: 07/05/2024 Analyzed: 07/09/2024			
Perfluorotridecanoic acid (PFTrDA)	25.5	1.87	ng/L	37.3	ND	68.4	70-130	Low Bias		
Perfluorotetradecanoic acid (PFTA)	23.8	1.87	"	37.3	ND	63.8	70-130	Low Bias		
N-MeFOSAA	28.8	1.87	"	37.3	ND	77.2	70-130			
N-EtFOSAA	22.9	1.87	"	37.3	ND	61.4	70-130	Low Bias		
<i>Surrogate: d5-N-EtFOSAA</i>	<i>91.5</i>		<i>"</i>	<i>149</i>		<i>61.3</i>	<i>70-130</i>			
<i>Surrogate: MPFDA</i>	<i>35.7</i>		<i>"</i>	<i>37.3</i>		<i>95.7</i>	<i>70-130</i>			
<i>Surrogate: MPFHxA</i>	<i>28.8</i>		<i>"</i>	<i>37.3</i>		<i>77.2</i>	<i>70-130</i>			
<i>Surrogate: M3HFPO-DA</i>	<i>32.9</i>		<i>"</i>	<i>37.3</i>		<i>88.2</i>	<i>70-130</i>			

Batch BG40507 - EPA 533

Blank (BG40507-BLK1)	Prepared: 07/08/2024 Analyzed: 07/10/2024									
ADONA	ND	1.00	ng/L							
9CL-PF3ONS	ND	1.00	"							
11CL-PF3OUdS	ND	1.00	"							
HFPO-DA (Gen-X)	ND	1.00	"							
Perfluorobutanesulfonic acid (PFBS)	ND	1.00	"							
Perfluorodecanoic acid (PFDA)	ND	1.00	"							
Perfluorododecanoic acid (PFDoA)	ND	1.00	"							
Perfluoroheptanoic acid (PFHpA)	ND	1.00	"							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.00	"							
Perfluorohexanoic acid (PFHxA)	ND	1.00	"							
Perfluorononanoic acid (PFNA)	ND	1.00	"							
Perfluorooctanesulfonic acid (PFOS)	ND	1.00	"							
Perfluorooctanoic acid (PFOA)	ND	1.00	"							
Perfluoroundecanoic acid (PFUnA)	ND	1.00	"							
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND	1.00	"							
Perfluoro-1-pentanesulfonate (PFPeS)	ND	1.00	"							
Perfluoro-n-butanoic acid (PFBA)	ND	1.00	"							
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.01	"							
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	2.01	"							
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.01	"							
Perfluoropentanoic acid (PFPeA)	ND	1.00	"							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.00	"							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.00	"							
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	1.00	"							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	1.00	"							
<i>Surrogate: MPFDoA</i>	<i>17.3</i>		<i>"</i>	<i>20.1</i>		<i>86.1</i>	<i>50-200</i>			
<i>Surrogate: MPFBA</i>	<i>18.7</i>		<i>"</i>	<i>20.1</i>		<i>92.9</i>	<i>50-200</i>			
<i>Surrogate: M9PFNA</i>	<i>20.0</i>		<i>"</i>	<i>20.1</i>		<i>99.5</i>	<i>50-200</i>			
<i>Surrogate: M8PFOS</i>	<i>18.0</i>		<i>"</i>	<i>19.2</i>		<i>93.6</i>	<i>50-200</i>			
<i>Surrogate: M8PFOA</i>	<i>17.8</i>		<i>"</i>	<i>20.1</i>		<i>88.8</i>	<i>50-200</i>			
<i>Surrogate: M7PFUdA</i>	<i>19.3</i>		<i>"</i>	<i>20.1</i>		<i>96.2</i>	<i>50-200</i>			
<i>Surrogate: M6PFDA</i>	<i>20.6</i>		<i>"</i>	<i>20.1</i>		<i>103</i>	<i>50-200</i>			
<i>Surrogate: M5PFPeA</i>	<i>18.3</i>		<i>"</i>	<i>20.1</i>		<i>91.2</i>	<i>50-200</i>			
<i>Surrogate: M5PFHxA</i>	<i>17.1</i>		<i>"</i>	<i>20.1</i>		<i>85.3</i>	<i>50-200</i>			
<i>Surrogate: M4PFHpA</i>	<i>18.0</i>		<i>"</i>	<i>20.1</i>		<i>89.9</i>	<i>50-200</i>			



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

York Analytical Laboratories, Inc. - Stratford

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

Batch BG40507 - EPA 533

Blank (BG40507-BLK1)

Prepared: 07/08/2024 Analyzed: 07/10/2024

Surrogate: M3PFHxS	14.7		ng/L	19.0		77.3	50-200			
Surrogate: M3PFBS	11.8		"	18.7		63.3	50-200			
Surrogate: M3HFPO-DA	15.2		"	20.1		75.7	50-200			
Surrogate: M2-8:2 FTS	107		"	77.1		139	50-200			
Surrogate: M2-6:2 FTS	55.5		"	76.3		72.8	50-200			
Surrogate: M2-4:2 FTS	36.6		"	75.5		48.5	50-200			

Blank (BG40507-BLK2)

Prepared: 07/08/2024 Analyzed: 07/10/2024

ADONA	ND	0.887	ng/L							
9CL-PF3ONS	ND	0.887	"							
11CL-PF3OUdS	ND	0.887	"							
HFPO-DA (Gen-X)	ND	0.887	"							
Perfluorobutanesulfonic acid (PFBS)	ND	0.887	"							
Perfluorodecanoic acid (PFDA)	ND	0.887	"							
Perfluorododecanoic acid (PFDoA)	ND	0.887	"							
Perfluoroheptanoic acid (PFHpA)	ND	0.887	"							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.887	"							
Perfluorohexanoic acid (PFHxA)	ND	0.887	"							
Perfluorononanoic acid (PFNA)	ND	0.887	"							
Perfluorooctanesulfonic acid (PFOS)	ND	0.887	"							
Perfluorooctanoic acid (PFOA)	ND	0.887	"							
Perfluoroundecanoic acid (PFUnA)	ND	0.887	"							
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND	0.887	"							
Perfluoro-1-pentanesulfonate (PFPeS)	ND	0.887	"							
Perfluoro-n-butanoic acid (PFBA)	ND	0.887	"							
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	1.77	"							
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	1.77	"							
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	1.77	"							
Perfluoropentanoic acid (PFPeA)	ND	0.887	"							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.887	"							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.887	"							
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	0.887	"							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	0.887	"							
Surrogate: MPFDoA	10.7		"	17.7		60.5	50-200			
Surrogate: MPFBA	16.2		"	17.7		91.4	50-200			
Surrogate: M9PFNA	15.7		"	17.7		88.6	50-200			
Surrogate: M8PFOS	15.2		"	17.0		89.4	50-200			
Surrogate: M8PFOA	15.7		"	17.7		88.7	50-200			
Surrogate: M7PFUdA	13.1		"	17.7		73.9	50-200			
Surrogate: M6PFDA	16.0		"	17.7		90.2	50-200			
Surrogate: M5PFPeA	16.2		"	17.7		91.4	50-200			
Surrogate: M5PFHxA	15.2		"	17.7		85.7	50-200			
Surrogate: M4PFHpA	15.6		"	17.7		88.1	50-200			
Surrogate: M3PFHxS	12.6		"	16.8		75.1	50-200			
Surrogate: M3PFBS	10.8		"	16.5		65.6	50-200			
Surrogate: M3HFPO-DA	13.9		"	17.7		78.3	50-200			
Surrogate: M2-8:2 FTS	88.5		"	68.1		130	50-200			



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

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting	Units	Spike	Source*	%REC	%REC	Limits	Flag	RPD	Flag
		Limit			Result					RPD	
Batch BG40507 - EPA 533											
Blank (BG40507-BLK2)											
											Prepared: 07/08/2024 Analyzed: 07/10/2024
Surrogate: M2-6:2 FTS	44.7		ng/L	67.4		66.3		50-200			
Surrogate: M2-4:2 FTS	31.7		"	66.7		47.6		50-200			
LCS (BG40507-BS1)											
											Prepared: 07/08/2024 Analyzed: 07/10/2024
ADONA	21.5	0.996	ng/L	18.8		114		70-130			
9CL-PF3ONS	22.1	0.996	"	18.6		119		70-130			
11CL-PF3OUdS	17.0	0.996	"	18.8		90.2		70-130			
HFPO-DA (Gen-X)	21.4	0.996	"	19.9		107		70-130			
Perfluorobutanesulfonic acid (PFBS)	20.1	0.996	"	17.7		114		70-130			
Perfluorodecanoic acid (PFDA)	23.0	0.996	"	19.9		115		70-130			
Perfluorododecanoic acid (PFDoA)	22.2	0.996	"	19.9		111		70-130			
Perfluoroheptanoic acid (PFHpA)	22.0	0.996	"	19.9		111		70-130			
Perfluorohexanesulfonic acid (PFHxS)	20.7	0.996	"	18.2		114		70-130			
Perfluorohexanoic acid (PFHxA)	22.3	0.996	"	19.9		112		70-130			
Perfluorononanoic acid (PFNA)	23.9	0.996	"	19.9		120		70-130			
Perfluorooctanesulfonic acid (PFOS)	23.3	0.996	"	18.5		126		70-130			
Perfluorooctanoic acid (PFOA)	22.6	0.996	"	19.9		113		70-130			
Perfluoroundecanoic acid (PFUnA)	21.6	0.996	"	19.9		108		70-130			
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	21.3	0.996	"	18.7		114		70-130			
Perfluoro-1-pentanesulfonate (PFPeS)	19.7	0.996	"	18.7		105		70-130			
Perfluoro-n-butanoic acid (PFBA)	22.4	0.996	"	19.9		113		70-130			
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	22.7	1.99	"	19.1		119		70-130			
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	23.2	1.99	"	19.0		122		70-130			
Perfluoro-1-heptanesulfonic acid (PFHpS)	21.6	1.99	"	19.0		114		70-130			
Perfluoropentanoic acid (PFPeA)	22.4	0.996	"	19.9		112		70-130			
Perfluoro-5-oxahexanoic acid (PFMBA)	22.8	0.996	"	19.9		114		70-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	21.7	0.996	"	19.9		109		70-130			
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	22.6	0.996	"	19.9		114		70-130			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	21.7	0.996	"	17.8		122		70-130			
Surrogate: MPFDoA	17.1		"	19.9		85.8		50-200			
Surrogate: MPFBA	18.7		"	19.9		93.8		50-200			
Surrogate: M9PFNA	19.3		"	19.9		96.7		50-200			
Surrogate: M8PFOS	17.9		"	19.1		93.9		50-200			
Surrogate: M8PFOA	18.9		"	19.9		94.6		50-200			
Surrogate: M7PFUdA	18.0		"	19.9		90.5		50-200			
Surrogate: M6PFDA	19.5		"	19.9		98.1		50-200			
Surrogate: M5PFPeA	18.9		"	19.9		94.8		50-200			
Surrogate: M5PFHxA	16.9		"	19.9		85.0		50-200			
Surrogate: M4PFHpA	17.4		"	19.9		87.6		50-200			
Surrogate: M3PFHxS	15.6		"	18.9		82.8		50-200			
Surrogate: M3PFBS	12.2		"	18.6		65.7		50-200			
Surrogate: M3HFPO-DA	15.9		"	19.9		79.7		50-200			
Surrogate: M2-8:2 FTS	137		"	76.5		179		50-200			
Surrogate: M2-6:2 FTS	76.2		"	75.7		101		50-200			
Surrogate: M2-4:2 FTS	37.5		"	74.9		50.1		50-200			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BG40507 - EPA 533

Duplicate (BG40507-DUP1)

*Source sample: 24G0213-02 (Duplicate)

Prepared: 07/08/2024 Analyzed: 07/10/2024

ADONA	ND	0.912	ng/L		ND					30	
9CL-PF3ONS	ND	0.912	"		ND					30	
11CL-PF3OUdS	ND	0.912	"		ND					30	
HFPO-DA (Gen-X)	ND	0.912	"		ND					30	
Perfluorobutanesulfonic acid (PFBS)	ND	0.912	"		ND					30	
Perfluorodecanoic acid (PFDA)	ND	0.912	"		ND					30	
Perfluorododecanoic acid (PFDoA)	ND	0.912	"		ND					30	
Perfluoroheptanoic acid (PFHpA)	ND	0.912	"		ND					30	
Perfluorohexanesulfonic acid (PFHxS)	ND	0.912	"		ND					30	
Perfluorohexanoic acid (PFHxA)	ND	0.912	"		ND					30	
Perfluorononanoic acid (PFNA)	ND	0.912	"		ND					30	
Perfluorooctanesulfonic acid (PFOS)	ND	0.912	"		ND					30	
Perfluorooctanoic acid (PFOA)	ND	0.912	"		ND					30	
Perfluoroundecanoic acid (PFUnA)	ND	0.912	"		ND					30	
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND	0.912	"		ND					30	
Perfluoro-1-pentanesulfonate (PFPeS)	ND	0.912	"		ND					30	
Perfluoro-n-butanoic acid (PFBA)	ND	0.912	"		ND					30	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	1.82	"		ND					30	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	1.82	"		ND					30	
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	1.82	"		ND					30	
Perfluoropentanoic acid (PFPeA)	ND	0.912	"		ND					30	
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.912	"		ND					30	
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.912	"		ND					30	
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	0.912	"		ND					30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	0.912	"		ND					30	
Surrogate: MPFDoA	15.7		"	18.2		85.9	50-200				
Surrogate: MPFBA	17.1		"	18.2		93.8	50-200				
Surrogate: M9PFNA	17.1		"	18.2		93.5	50-200				
Surrogate: M8PFOS	16.2		"	17.5		92.7	50-200				
Surrogate: M8PFOA	16.6		"	18.2		91.2	50-200				
Surrogate: M7PFUdA	15.7		"	18.2		86.1	50-200				
Surrogate: M6PFDA	17.2		"	18.2		94.2	50-200				
Surrogate: M5PFPeA	17.9		"	18.2		98.0	50-200				
Surrogate: M5PFHxA	16.2		"	18.2		88.7	50-200				
Surrogate: M4PFHpA	15.6		"	18.2		85.4	50-200				
Surrogate: M3PFHxS	12.2		"	17.3		70.6	50-200				
Surrogate: M3PFBS	11.3		"	17.0		66.6	50-200				
Surrogate: M3HFPO-DA	17.2		"	18.2		94.1	50-200				
Surrogate: M2-8:2 FTS	107		"	70.1		153	50-200				
Surrogate: M2-6:2 FTS	52.7		"	69.3		76.0	50-200				
Surrogate: M2-4:2 FTS	36.4		"	68.6		53.0	50-200				



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

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

Batch BG40507 - EPA 533

Matrix Spike (BG40507-MS1)	*Source sample: 24G0214-02 (Matrix Spike)						Prepared: 07/08/2024 Analyzed: 07/10/2024		
ADONA	40.9	0.912	ng/L	34.5	ND	118	70-130		
9CL-PF3ONS	38.9	0.912	"	34.1	ND	114	70-130		
11CL-PF3OUdS	31.6	0.912	"	34.5	ND	91.6	70-130		
HFPO-DA (Gen-X)	44.1	0.912	"	36.5	ND	121	70-130		
Perfluorobutanesulfonic acid (PFBS)	35.8	0.912	"	32.4	ND	111	70-130		
Perfluorodecanoic acid (PFDA)	41.2	0.912	"	36.5	ND	113	70-130		
Perfluorododecanoic acid (PFDoA)	40.5	0.912	"	36.5	ND	111	70-130		
Perfluoroheptanoic acid (PFHpA)	42.0	0.912	"	36.5	ND	115	70-130		
Perfluorohexanesulfonic acid (PFHxS)	41.2	0.912	"	33.3	ND	124	70-130		
Perfluorohexanoic acid (PFHxA)	42.0	0.912	"	36.5	ND	115	70-130		
Perfluorononanoic acid (PFNA)	42.4	0.912	"	36.5	ND	116	70-130		
Perfluorooctanesulfonic acid (PFOS)	39.5	0.912	"	33.9	ND	117	70-130		
Perfluorooctanoic acid (PFOA)	41.9	0.912	"	36.5	ND	115	70-130		
Perfluoroundecanoic acid (PFUnA)	38.1	0.912	"	36.5	ND	105	70-130		
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	34.7	0.912	"	34.2	ND	101	70-130		
Perfluoro-1-pentanesulfonate (PFPeS)	39.0	0.912	"	34.3	ND	114	70-130		
Perfluoro-n-butanoic acid (PFBA)	41.2	0.912	"	36.5	ND	113	70-130		
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	40.9	1.82	"	35.0	ND	117	70-130		
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	41.0	1.82	"	34.7	ND	118	70-130		
Perfluoro-1-heptanesulfonic acid (PFHpS)	34.8	1.82	"	34.8	ND	99.9	70-130		
Perfluoropentanoic acid (PFPeA)	41.1	0.912	"	36.5	ND	113	70-130		
Perfluoro-5-oxahexanoic acid (PFMBA)	42.9	0.912	"	36.5	ND	118	70-130		
Perfluoro-4-oxapentanoic acid (PFMPA)	41.1	0.912	"	36.5	ND	113	70-130		
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	48.2	0.912	"	36.5	ND	132	70-130	High Bias	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	38.2	0.912	"	32.6	ND	117	70-130		
<i>Surrogate: MPFDoA</i>	<i>16.7</i>		<i>"</i>	<i>18.2</i>		<i>91.3</i>	<i>50-200</i>		
<i>Surrogate: MPFBA</i>	<i>16.4</i>		<i>"</i>	<i>18.2</i>		<i>90.0</i>	<i>50-200</i>		
<i>Surrogate: M9PFNA</i>	<i>17.9</i>		<i>"</i>	<i>18.2</i>		<i>98.1</i>	<i>50-200</i>		
<i>Surrogate: M8PFOS</i>	<i>16.2</i>		<i>"</i>	<i>17.5</i>		<i>92.4</i>	<i>50-200</i>		
<i>Surrogate: M8PFOA</i>	<i>16.4</i>		<i>"</i>	<i>18.2</i>		<i>89.8</i>	<i>50-200</i>		
<i>Surrogate: M7PFUdA</i>	<i>17.7</i>		<i>"</i>	<i>18.2</i>		<i>96.9</i>	<i>50-200</i>		
<i>Surrogate: M6PFDA</i>	<i>18.8</i>		<i>"</i>	<i>18.2</i>		<i>103</i>	<i>50-200</i>		
<i>Surrogate: M5PFPeA</i>	<i>16.9</i>		<i>"</i>	<i>18.2</i>		<i>92.8</i>	<i>50-200</i>		
<i>Surrogate: M5PFHxA</i>	<i>16.0</i>		<i>"</i>	<i>18.2</i>		<i>87.8</i>	<i>50-200</i>		
<i>Surrogate: M4PFHpA</i>	<i>15.6</i>		<i>"</i>	<i>18.2</i>		<i>85.4</i>	<i>50-200</i>		
<i>Surrogate: M3PFHxS</i>	<i>11.6</i>		<i>"</i>	<i>17.3</i>		<i>67.1</i>	<i>50-200</i>		
<i>Surrogate: M3PFBS</i>	<i>11.4</i>		<i>"</i>	<i>17.0</i>		<i>67.0</i>	<i>50-200</i>		
<i>Surrogate: M3HFPO-DA</i>	<i>16.3</i>		<i>"</i>	<i>18.2</i>		<i>89.2</i>	<i>50-200</i>		
<i>Surrogate: M2-8:2 FTS</i>	<i>114</i>		<i>"</i>	<i>70.1</i>		<i>162</i>	<i>50-200</i>		
<i>Surrogate: M2-6:2 FTS</i>	<i>48.9</i>		<i>"</i>	<i>69.3</i>		<i>70.6</i>	<i>50-200</i>		
<i>Surrogate: M2-4:2 FTS</i>	<i>36.0</i>		<i>"</i>	<i>68.6</i>		<i>52.5</i>	<i>50-200</i>		



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

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

Batch BG41063 - EPA 533

Blank (BG41063-BLK1)

Prepared: 07/16/2024 Analyzed: 07/18/2024

ADONA	ND	1.00	ng/L								
9CL-PF3ONS	ND	1.00	"								
11CL-PF3OUdS	ND	1.00	"								
HFPO-DA (Gen-X)	ND	1.00	"								
Perfluorobutanesulfonic acid (PFBS)	ND	1.00	"								
Perfluorodecanoic acid (PFDA)	ND	1.00	"								
Perfluorododecanoic acid (PFDoA)	ND	1.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	1.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	1.00	"								
Perfluorohexanoic acid (PFHxA)	ND	1.00	"								
Perfluorononanoic acid (PFNA)	ND	1.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	1.00	"								
Perfluorooctanoic acid (PFOA)	ND	1.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	1.00	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND	1.00	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	1.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	1.00	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	1.00	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.00	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.00	"								
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	1.00	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	1.00	"								
<i>Surrogate: MPFDoA</i>	13.4		"	20.0		67.2	50-200				
<i>Surrogate: MPFBA</i>	18.1		"	20.0		90.6	50-200				
<i>Surrogate: M9PFNA</i>	16.6		"	20.0		83.1	50-200				
<i>Surrogate: M8PFOS</i>	17.3		"	19.2		90.5	50-200				
<i>Surrogate: M8PFOA</i>	17.7		"	20.0		88.6	50-200				
<i>Surrogate: M7PFUdA</i>	14.5		"	20.0		72.4	50-200				
<i>Surrogate: M6PFDA</i>	15.9		"	20.0		79.6	50-200				
<i>Surrogate: M5PFPeA</i>	18.7		"	20.0		93.3	50-200				
<i>Surrogate: M5PFHxA</i>	15.3		"	20.0		76.3	50-200				
<i>Surrogate: M4PFHpA</i>	17.4		"	20.0		86.9	50-200				
<i>Surrogate: M3PFHxS</i>	15.6		"	19.0		82.1	50-200				
<i>Surrogate: M3PFBS</i>	16.6		"	18.6		88.9	50-200				
<i>Surrogate: M3HFPO-DA</i>	13.8		"	20.0		69.2	50-200				
<i>Surrogate: M2-8:2 FTS</i>	109		"	76.8		142	50-200				
<i>Surrogate: M2-6:2 FTS</i>	72.7		"	76.0		95.7	50-200				
<i>Surrogate: M2-4:2 FTS</i>	63.7		"	75.2		84.7	50-200				



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

York Analytical Laboratories, Inc. - Stratford

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

Batch BG41063 - EPA 533

LCS (BG41063-BS1)

Prepared: 07/16/2024 Analyzed: 07/18/2024

ADONA	35.2	1.00	ng/L	37.8		93.0	70-130			
9CL-PF3ONS	36.3	1.00	"	37.4		97.2	70-130			
11CL-PF3OUdS	31.1	1.00	"	37.8		82.3	70-130			
HFPO-DA (Gen-X)	42.3	1.00	"	40.0		106	70-130			
Perfluorobutanesulfonic acid (PFBS)	40.5	1.00	"	35.5		114	70-130			
Perfluorodecanoic acid (PFDA)	47.2	1.00	"	40.0		118	70-130			
Perfluorododecanoic acid (PFDoA)	43.8	1.00	"	40.0		109	70-130			
Perfluoroheptanoic acid (PFHpA)	40.4	1.00	"	40.0		101	70-130			
Perfluorohexanesulfonic acid (PFHxS)	38.6	1.00	"	36.5		106	70-130			
Perfluorohexanoic acid (PFHxA)	42.1	1.00	"	40.0		105	70-130			
Perfluorononanoic acid (PFNA)	46.9	1.00	"	40.0		117	70-130			
Perfluorooctanesulfonic acid (PFOS)	41.3	1.00	"	37.1		111	70-130			
Perfluorooctanoic acid (PFOA)	40.8	1.00	"	40.0		102	70-130			
Perfluoroundecanoic acid (PFUnA)	41.0	1.00	"	40.0		102	70-130			
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	41.3	1.00	"	37.5		110	70-130			
Perfluoro-1-pentanesulfonate (PFPeS)	40.3	1.00	"	37.6		107	70-130			
Perfluoro-n-butanoic acid (PFBA)	42.3	1.00	"	40.0		106	70-130			
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	42.4	2.00	"	38.4		110	70-130			
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	42.3	2.00	"	38.1		111	70-130			
Perfluoro-1-heptanesulfonic acid (PFHpS)	39.4	2.00	"	38.2		103	70-130			
Perfluoropentanoic acid (PFPeA)	41.8	1.00	"	40.0		105	70-130			
Perfluoro-5-oxahexanoic acid (PFMBA)	43.5	1.00	"	40.0		109	70-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	40.7	1.00	"	40.0		102	70-130			
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	42.4	1.00	"	40.0		106	70-130			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	35.1	1.00	"	35.7		98.4	70-130			
Surrogate: MPFDoA	13.8		"	20.0		69.2	50-200			
Surrogate: MPFBA	18.2		"	20.0		91.1	50-200			
Surrogate: M9PFNA	17.1		"	20.0		85.4	50-200			
Surrogate: M8PFOS	17.8		"	19.2		92.7	50-200			
Surrogate: M8PFOA	18.5		"	20.0		92.5	50-200			
Surrogate: M7PFUdA	15.3		"	20.0		76.5	50-200			
Surrogate: M6PFDA	16.8		"	20.0		84.1	50-200			
Surrogate: M5PFPeA	19.3		"	20.0		96.3	50-200			
Surrogate: M5PFHxA	15.9		"	20.0		79.7	50-200			
Surrogate: M4PFHpA	18.0		"	20.0		89.8	50-200			
Surrogate: M3PFHxS	17.0		"	19.0		89.5	50-200			
Surrogate: M3PFBS	16.3		"	18.6		87.4	50-200			
Surrogate: M3HFPO-DA	13.4		"	20.0		66.9	50-200			
Surrogate: M2-8:2 FTS	110		"	76.8		144	50-200			
Surrogate: M2-6:2 FTS	73.5		"	76.0		96.8	50-200			
Surrogate: M2-4:2 FTS	61.7		"	75.2		82.0	50-200			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BG41063 - EPA 533

Duplicate (BG41063-DUP1)	*Source sample: 24G0774-02 (Duplicate)					Prepared: 07/16/2024 Analyzed: 07/18/2024					
ADONA	ND	0.931	ng/L		ND					30	
9CL-PF3ONS	ND	0.931	"		ND					30	
11CL-PF3OUdS	ND	0.931	"		ND					30	
HFPO-DA (Gen-X)	ND	0.931	"		ND					30	
Perfluorobutanesulfonic acid (PFBS)	ND	0.931	"		ND					30	
Perfluorodecanoic acid (PFDA)	ND	0.931	"		ND					30	
Perfluorododecanoic acid (PFDoA)	ND	0.931	"		ND					30	
Perfluoroheptanoic acid (PFHpA)	ND	0.931	"		ND					30	
Perfluorohexanesulfonic acid (PFHxS)	ND	0.931	"		ND					30	
Perfluorohexanoic acid (PFHxA)	ND	0.931	"		ND					30	
Perfluorononanoic acid (PFNA)	ND	0.931	"		ND					30	
Perfluorooctanesulfonic acid (PFOS)	ND	0.931	"		ND					30	
Perfluorooctanoic acid (PFOA)	ND	0.931	"		ND					30	
Perfluoroundecanoic acid (PFUnA)	ND	0.931	"		ND					30	
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND	0.931	"		ND					30	
Perfluoro-1-pentanesulfonate (PFPeS)	ND	0.931	"		ND					30	
Perfluoro-n-butanoic acid (PFBA)	ND	0.931	"		ND					30	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	1.86	"		ND					30	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	1.86	"		ND					30	
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	1.86	"		ND					30	
Perfluoropentanoic acid (PFPeA)	ND	0.931	"		ND					30	
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.931	"		ND					30	
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.931	"		ND					30	
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	0.931	"		ND					30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	0.931	"		ND					30	
<i>Surrogate: MPFDoA</i>	<i>13.0</i>		<i>"</i>	<i>18.6</i>		<i>69.9</i>	<i>50-200</i>				
<i>Surrogate: MPFBA</i>	<i>16.6</i>		<i>"</i>	<i>18.6</i>		<i>89.1</i>	<i>50-200</i>				
<i>Surrogate: M9PFNA</i>	<i>16.2</i>		<i>"</i>	<i>18.6</i>		<i>87.1</i>	<i>50-200</i>				
<i>Surrogate: M8PFOS</i>	<i>16.7</i>		<i>"</i>	<i>17.8</i>		<i>93.8</i>	<i>50-200</i>				
<i>Surrogate: M8PFOA</i>	<i>16.6</i>		<i>"</i>	<i>18.6</i>		<i>89.1</i>	<i>50-200</i>				
<i>Surrogate: M7PFUdA</i>	<i>14.3</i>		<i>"</i>	<i>18.6</i>		<i>76.6</i>	<i>50-200</i>				
<i>Surrogate: M6PFDA</i>	<i>14.5</i>		<i>"</i>	<i>18.6</i>		<i>77.9</i>	<i>50-200</i>				
<i>Surrogate: M5PFPeA</i>	<i>17.2</i>		<i>"</i>	<i>18.6</i>		<i>92.6</i>	<i>50-200</i>				
<i>Surrogate: M5PFHxA</i>	<i>14.9</i>		<i>"</i>	<i>18.6</i>		<i>80.2</i>	<i>50-200</i>				
<i>Surrogate: M4PFHpA</i>	<i>16.8</i>		<i>"</i>	<i>18.6</i>		<i>90.4</i>	<i>50-200</i>				
<i>Surrogate: M3PFHxS</i>	<i>13.8</i>		<i>"</i>	<i>17.6</i>		<i>78.0</i>	<i>50-200</i>				
<i>Surrogate: M3PFBS</i>	<i>14.6</i>		<i>"</i>	<i>17.3</i>		<i>84.3</i>	<i>50-200</i>				
<i>Surrogate: M3HFPO-DA</i>	<i>12.9</i>		<i>"</i>	<i>18.6</i>		<i>69.4</i>	<i>50-200</i>				
<i>Surrogate: M2-8:2 FTS</i>	<i>115</i>		<i>"</i>	<i>71.5</i>		<i>161</i>	<i>50-200</i>				
<i>Surrogate: M2-6:2 FTS</i>	<i>63.0</i>		<i>"</i>	<i>70.7</i>		<i>89.0</i>	<i>50-200</i>				
<i>Surrogate: M2-4:2 FTS</i>	<i>53.7</i>		<i>"</i>	<i>70.0</i>		<i>76.7</i>	<i>50-200</i>				



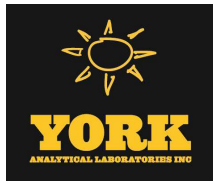
PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

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

Batch BG41063 - EPA 533

Matrix Spike (BG41063-MS1)	*Source sample: 24G0778-01 (Matrix Spike)						Prepared: 07/16/2024 Analyzed: 07/18/2024		
ADONA	31.5	0.883	ng/L	33.4	ND	94.3	70-130		
9CL-PF3ONS	34.9	0.883	"	33.0	ND	106	70-130		
11CL-PF3OUdS	28.1	0.883	"	33.3	ND	84.2	70-130		
HFPO-DA (Gen-X)	36.1	0.883	"	35.3	ND	102	70-130		
Perfluorobutanesulfonic acid (PFBS)	43.3	0.883	"	31.4	6.78	117	70-130		
Perfluorodecanoic acid (PFDA)	40.8	0.883	"	35.3	ND	115	70-130		
Perfluorododecanoic acid (PFDoA)	36.1	0.883	"	35.3	ND	102	70-130		
Perfluoroheptanoic acid (PFHpA)	40.7	0.883	"	35.3	3.45	105	70-130		
Perfluorohexanesulfonic acid (PFHxS)	40.4	0.883	"	32.2	2.39	118	70-130		
Perfluorohexanoic acid (PFHxA)	42.2	0.883	"	35.3	5.52	104	70-130		
Perfluorononanoic acid (PFNA)	42.4	0.883	"	35.3	0.915	117	70-130		
Perfluorooctanesulfonic acid (PFOS)	52.4	0.883	"	32.8	15.1	114	70-130		
Perfluorooctanoic acid (PFOA)	49.7	0.883	"	35.3	12.5	105	70-130		
Perfluoroundecanoic acid (PFUnA)	37.9	0.883	"	35.3	ND	107	70-130		
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	33.1	0.883	"	33.1	ND	99.9	70-130		
Perfluoro-1-pentanesulfonate (PFPeS)	38.3	0.883	"	33.2	ND	116	70-130		
Perfluoro-n-butanoic acid (PFBA)	41.0	0.883	"	35.3	3.62	106	70-130		
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	38.8	1.77	"	33.9	ND	114	70-130		
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	36.5	1.77	"	33.6	ND	109	70-130		
Perfluoro-1-heptanesulfonic acid (PFHpS)	35.9	1.77	"	33.7	ND	107	70-130		
Perfluoropentanoic acid (PFPeA)	43.5	0.883	"	35.3	5.93	106	70-130		
Perfluoro-5-oxahexanoic acid (PFMBA)	38.7	0.883	"	35.3	ND	110	70-130		
Perfluoro-4-oxapentanoic acid (PFMPA)	35.5	0.883	"	35.3	ND	100	70-130		
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	37.7	0.883	"	35.3	ND	107	70-130		
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	31.5	0.883	"	31.5	ND	100	70-130		
Surrogate: MPFDoA	13.0		"	17.7		73.3	50-200		
Surrogate: MPFBA	16.2		"	17.7		91.9	50-200		
Surrogate: M9PFNA	14.3		"	17.7		81.3	50-200		
Surrogate: M8PFOS	15.2		"	16.9		89.6	50-200		
Surrogate: M8PFOA	16.7		"	17.7		94.4	50-200		
Surrogate: M7PFUdA	13.0		"	17.7		73.7	50-200		
Surrogate: M6PFDA	14.3		"	17.7		80.7	50-200		
Surrogate: M5PFPeA	17.3		"	17.7		98.2	50-200		
Surrogate: M5PFHxA	14.6		"	17.7		82.8	50-200		
Surrogate: M4PFHpA	15.2		"	17.7		86.3	50-200		
Surrogate: M3PFHxS	14.8		"	16.7		88.1	50-200		
Surrogate: M3PFBS	15.0		"	16.5		91.4	50-200		
Surrogate: M3HFPO-DA	11.7		"	17.7		66.4	50-200		
Surrogate: M2-8:2 FTS	99.8		"	67.8		147	50-200		
Surrogate: M2-6:2 FTS	73.4		"	67.1		109	50-200		
Surrogate: M2-4:2 FTS	90.0		"	66.4		136	50-200		





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.
PFSL	The recovery for this PFAS surrogate was below control limits
PFLH	The recovery for this PFAS compound was below control limits
PFLH	The recovery for this PFAS compound was above control limits

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.
MCL	This is the Maximum Contaminant Level in ng/L (ppt) established by the NYSDOH for these compounds where an MCL is reported. Exceedences are flagged accordingly.

