



ANALYSIS REPORT

Prepared by:

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2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

C. T. Male Associates
50 Century Hill Drive
Latham NY 12110

Report Date: April 14, 2020 13:04

Project: Hoosick Falls WTP

Account #: 37191
Group Number: 2094814
SDG: HOO44
PO Number: 14.4756
State of Sample Origin: NY

Electronic Copy To	C. T. Male Associates	Attn: Kirk Moline
Electronic Copy To	C. T. Male Associates	Attn: Dan Reilly
Electronic Copy To	C. T. Male Associates	Attn: Jeff Marx
Electronic Copy To	Barr Engineering Company	Attn: Lauren Brady
Electronic Copy To	Environmental Standards	Attn: St. Gobain
Electronic Copy To	Barr Engineering Company	Attn: Data Mgt
Electronic Copy To	Barr Engineering Company	Attn: Terri Olson
Electronic Copy To	C. T. Male Associates	Attn: Nancy Garry

Respectfully Submitted,



(717)-556-7376

To view our laboratory's current scopes of accreditation please go to <https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/>. Historical copies may be requested through your project manager.



SAMPLE INFORMATION

<u>Client Sample Description</u>	<u>Sample Collection Date/Time</u>	<u>ELLE#</u>
SG1-LTB01-200402 Blank Water	04/02/2020	1292554
SG1-FTB01-200402 Blank Water	04/02/2020 10:30	1292555
GAC-Influent Grab Drinking Water	04/02/2020 10:35	1292556
GAC-Midpoint Grab Drinking Water	04/02/2020 10:37	1292557
GAC-Effluent Grab Drinking Water	04/02/2020 10:40	1292558

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Project Name: Hoosick Falls WTP
ELLE Group #: 2094814

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

No additional comments are necessary.

Sample Description: SG1-LTB01-200402 Blank Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: WW 1292554
ELLE Group #: 2094814
Matrix: Blank Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 04/03/2020 10:10
Collection Date/Time: 04/02/2020
SDG#: HOO44-01TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1			ng/l	ng/l	
14070	NEtFOSAA ¹ NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.	2991-50-6	1.8 U	1.8	1
14070	NMeFOSAA ¹ NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.	2355-31-9	1.8 U	1.8	1
14070	Perfluorobutanesulfonic acid ¹	375-73-5	1.8 U	1.8	1
14070	Perfluorodecanoic acid ¹	335-76-2	1.8 U	1.8	1
14070	Perfluorododecanoic acid ¹	307-55-1	1.8 U	1.8	1
14070	Perfluoroheptanoic acid ¹	375-85-9	1.8 U	1.8	1
14070	Perfluorohexanesulfonic acid ¹	355-46-4	1.8 U	1.8	1
14070	Perfluorohexanoic acid ¹	307-24-4	1.8 U	1.8	1
14070	Perfluorononanoic acid ¹	375-95-1	1.8 U	1.8	1
14070	Perfluorooctanesulfonic acid ¹	1763-23-1	1.8 U	1.8	1
14070	Perfluorooctanoic acid ¹	335-67-1	1.8 U	1.8	1
14070	Perfluorotetradecanoic acid ¹	376-06-7	1.8 U	1.8	1
14070	Perfluorotridecanoic acid ¹	72629-94-8	1.8 U	1.8	1
14070	Perfluoroundecanoic acid ¹	2058-94-8	1.8 U	1.8	1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1 Modified			ng/l	ng/l	
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	4.7 U	4.7	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	2.8 U	2.8	1
14473	Perfluorobutanoic acid ¹	375-22-4	6.6 U	6.6	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	1.9 U	1.9	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	1.9 U	1.9	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	1.9 U	1.9	1
14473	Perfluoropentanoic acid ¹	2706-90-3	1.9 U	1.9	1

Sample Comments

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14070	14 PFAS Drinking Water List	EPA 537 Version 1.1	1	20097001	04/07/2020 16:56	Marissa C Drexinger	1
14473	7 PFAS Compounds	EPA 537 Version 1.1 Modified	1	20097012	04/07/2020 15:58	Jason W Knight	1
14381	DW PFAS Prep	EPA 537 Version 1.1	1	20097001	04/06/2020 06:47	Katherine Mora	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20097012	04/06/2020 15:30	Eric Hockley	1

Sample Description: SG1-FTB01-200402 Blank Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: WW 1292555
ELLE Group #: 2094814
Matrix: Blank Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 04/03/2020 10:10
Collection Date/Time: 04/02/2020 10:30
SDG#: HOO44-02FB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1			ng/l	ng/l	
14070	NEtFOSAA ¹ NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.	2991-50-6	1.9 U	1.9	1
14070	NMeFOSAA ¹ NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.	2355-31-9	1.9 U	1.9	1
14070	Perfluorobutanesulfonic acid ¹	375-73-5	1.9 U	1.9	1
14070	Perfluorodecanoic acid ¹	335-76-2	1.9 U	1.9	1
14070	Perfluorododecanoic acid ¹	307-55-1	1.9 U	1.9	1
14070	Perfluoroheptanoic acid ¹	375-85-9	1.9 U	1.9	1
14070	Perfluorohexanesulfonic acid ¹	355-46-4	1.9 U	1.9	1
14070	Perfluorohexanoic acid ¹	307-24-4	1.9 U	1.9	1
14070	Perfluorononanoic acid ¹	375-95-1	1.9 U	1.9	1
14070	Perfluorooctanesulfonic acid ¹	1763-23-1	1.9 U	1.9	1
14070	Perfluorooctanoic acid ¹	335-67-1	1.9 U	1.9	1
14070	Perfluorotetradecanoic acid ¹	376-06-7	1.9 U	1.9	1
14070	Perfluorotridecanoic acid ¹	72629-94-8	1.9 U	1.9	1
14070	Perfluoroundecanoic acid ¹	2058-94-8	1.9 U	1.9	1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1 Modified			ng/l	ng/l	
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	4.7 U	4.7	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	2.8 U	2.8	1
14473	Perfluorobutanoic acid ¹	375-22-4	6.5 U	6.5	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	1.9 U	1.9	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	1.9 U	1.9	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	1.9 U	1.9	1
14473	Perfluoropentanoic acid ¹	2706-90-3	1.9 U	1.9	1

Sample Comments

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14070	14 PFAS Drinking Water List	EPA 537 Version 1.1	1	20100009	04/13/2020 16:28	Marissa C Drexinger	1
14473	7 PFAS Compounds	EPA 537 Version 1.1 Modified	1	20097012	04/07/2020 16:07	Jason W Knight	1
14381	DW PFAS Prep	EPA 537 Version 1.1	2	20100009	04/09/2020 15:30	Isaac Phillips-Cary	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20097012	04/06/2020 15:30	Eric Hockley	1

Sample Description: GAC-Influent Grab Drinking Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: PW 1292556
ELLE Group #: 2094814
Matrix: Drinking Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 04/03/2020 10:10
Collection Date/Time: 04/02/2020 10:35
SDG#: HOO44-03

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1					
14070	NEtFOSAA ¹ NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.	2991-50-6	1.7 U	1.7	1
14070	NMeFOSAA ¹ NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.	2355-31-9	1.7 U	1.7	1
14070	Perfluorobutanesulfonic acid¹	375-73-5	2.0	1.7	1
14070	Perfluorodecanoic acid ¹	335-76-2	1.7 U	1.7	1
14070	Perfluorododecanoic acid ¹	307-55-1	1.7 U	1.7	1
14070	Perfluoroheptanoic acid¹	375-85-9	17	1.7	1
14070	Perfluorohexanesulfonic acid ¹	355-46-4	1.7 U	1.7	1
14070	Perfluorohexanoic acid¹	307-24-4	16	1.7	1
14070	Perfluorononanoic acid ¹	375-95-1	1.7 U	1.7	1
14070	Perfluorooctanesulfonic acid	1763-23-1	4.1	1.7	1
14070	Perfluorooctanoic acid	335-67-1	400	17	10
14070	Perfluorotetradecanoic acid ¹	376-06-7	1.7 U	1.7	1
14070	Perfluorotridecanoic acid ¹	72629-94-8	1.7 U	1.7	1
14070	Perfluoroundecanoic acid ¹	2058-94-8	1.7 U	1.7	1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1 Modified					
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	4.6 U	4.6	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	2.7 U	2.7	1
14473	Perfluorobutanoic acid ¹	375-22-4	6.4 U	6.4	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	1.8 U	1.8	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	1.8 U	1.8	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	1.8 U	1.8	1
14473	Perfluoropentanoic acid¹	2706-90-3	3.0	1.8	1

Sample Comments

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14070	14 PFAS Drinking Water List	EPA 537 Version 1.1	1	20097001	04/07/2020 17:19	Marissa C Drexinger	1
14070	14 PFAS Drinking Water List	EPA 537 Version 1.1	1	20097001	04/09/2020 10:40	Marissa C Drexinger	10
14473	7 PFAS Compounds	EPA 537 Version 1.1 Modified	1	20097012	04/07/2020 16:16	Jason W Knight	1
14381	DW PFAS Prep	EPA 537 Version 1.1	1	20097001	04/06/2020 06:47	Katherine Mora	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20097012	04/06/2020 15:30	Eric Hockley	1

Sample Description: GAC-Midpoint Grab Drinking Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: PW 1292557
ELLE Group #: 2094814
Matrix: Drinking Water

Project Name: Hoosick Falls WTP

Submission Date/Time: 04/03/2020 10:10
Collection Date/Time: 04/02/2020 10:37
SDG#: HOO44-04

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1			ng/l	ng/l	
14070	NEtFOSAA ¹ NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.	2991-50-6	1.7 U	1.7	1
14070	NMeFOSAA ¹ NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.	2355-31-9	1.7 U	1.7	1
14070	Perfluorobutanesulfonic acid ¹	375-73-5	1.7 U	1.7	1
14070	Perfluorodecanoic acid ¹	335-76-2	1.7 U	1.7	1
14070	Perfluorododecanoic acid ¹	307-55-1	1.7 U	1.7	1
14070	Perfluoroheptanoic acid ¹	375-85-9	1.7 U	1.7	1
14070	Perfluorohexanesulfonic acid ¹	355-46-4	1.7 U	1.7	1
14070	Perfluorohexanoic acid ¹	307-24-4	1.7 U	1.7	1
14070	Perfluorononanoic acid ¹	375-95-1	1.7 U	1.7	1
14070	Perfluorooctanesulfonic acid	1763-23-1	1.7 U	1.7	1
14070	Perfluorooctanoic acid	335-67-1	1.7 U	1.7	1
14070	Perfluorotetradecanoic acid ¹	376-06-7	1.7 U	1.7	1
14070	Perfluorotridecanoic acid ¹	72629-94-8	1.7 U	1.7	1
14070	Perfluoroundecanoic acid ¹	2058-94-8	1.7 U	1.7	1

LC/MS/MS Miscellaneous EPA 537 Version 1.1 Modified			ng/l	ng/l	
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	4.5 U	4.5	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	2.7 U	2.7	1
14473	Perfluorobutanoic acid ¹	375-22-4	6.2 U	6.2	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	1.8 U	1.8	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	1.8 U	1.8	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	1.8 U	1.8	1
14473	Perfluoropentanoic acid ¹	2706-90-3	1.8 U	1.8	1

Sample Comments

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14070	14 PFAS Drinking Water List	EPA 537 Version 1.1	1	20097001	04/07/2020 17:31	Marissa C Drexinger	1
14473	7 PFAS Compounds	EPA 537 Version 1.1 Modified	1	20097012	04/07/2020 16:25	Jason W Knight	1
14381	DW PFAS Prep	EPA 537 Version 1.1	1	20097001	04/06/2020 06:47	Katherine Mora	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20097012	04/06/2020 15:30	Eric Hockley	1

Sample Description: GAC-Effluent Grab Drinking Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: PW 1292558
ELLE Group #: 2094814
Matrix: Drinking Water

Project Name: Hoosick Falls WTP

Submission Date/Time: 04/03/2020 10:10
Collection Date/Time: 04/02/2020 10:40
SDG#: HOO44-05

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1			ng/l	ng/l	
14070	NEtFOSAA ¹ NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.	2991-50-6	1.7 U	1.7	1
14070	NMeFOSAA ¹ NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.	2355-31-9	1.7 U	1.7	1
14070	Perfluorobutanesulfonic acid ¹	375-73-5	1.7 U	1.7	1
14070	Perfluorodecanoic acid ¹	335-76-2	1.7 U	1.7	1
14070	Perfluorododecanoic acid ¹	307-55-1	1.7 U	1.7	1
14070	Perfluoroheptanoic acid ¹	375-85-9	1.7 U	1.7	1
14070	Perfluorohexanesulfonic acid ¹	355-46-4	1.7 U	1.7	1
14070	Perfluorohexanoic acid ¹	307-24-4	1.7 U	1.7	1
14070	Perfluorononanoic acid ¹	375-95-1	1.7 U	1.7	1
14070	Perfluorooctanesulfonic acid	1763-23-1	1.7 U	1.7	1
14070	Perfluorooctanoic acid	335-67-1	1.7 U	1.7	1
14070	Perfluorotetradecanoic acid ¹	376-06-7	1.7 U	1.7	1
14070	Perfluorotridecanoic acid ¹	72629-94-8	1.7 U	1.7	1
14070	Perfluoroundecanoic acid ¹	2058-94-8	1.7 U	1.7	1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous EPA 537 Version 1.1 Modified			ng/l	ng/l	
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	4.4 U	4.4	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	2.7 U	2.7	1
14473	Perfluorobutanoic acid ¹	375-22-4	6.2 U	6.2	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	1.8 U	1.8	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	1.8 U	1.8	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	1.8 U	1.8	1
14473	Perfluoropentanoic acid ¹	2706-90-3	1.8 U	1.8	1

Sample Comments

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14070	14 PFAS Drinking Water List	EPA 537 Version 1.1	1	20097001	04/07/2020 17:42	Marissa C Drexinger	1
14473	7 PFAS Compounds	EPA 537 Version 1.1 Modified	1	20097012	04/07/2020 16:34	Jason W Knight	1
14381	DW PFAS Prep	EPA 537 Version 1.1	1	20097001	04/06/2020 06:47	Katherine Mora	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20097012	04/06/2020 15:30	Eric Hockley	1

Quality Control Summary

Client Name: C. T. Male Associates
Reported: 04/14/2020 13:04

Group Number: 2094814

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result ng/l	LOQ ng/l
Batch number: 20097001	Sample number(s): 1292554,1292556-1292558	
NEtFOSAA	2.0 U	2.0
NMeFOSAA	2.0 U	2.0
Perfluorobutanesulfonic acid	2.0 U	2.0
Perfluorodecanoic acid	2.0 U	2.0
Perfluorododecanoic acid	2.0 U	2.0
Perfluoroheptanoic acid	2.0 U	2.0
Perfluorohexanesulfonic acid	2.0 U	2.0
Perfluorohexanoic acid	2.0 U	2.0
Perfluorononanoic acid	2.0 U	2.0
Perfluorooctanesulfonic acid	2.0 U	2.0
Perfluorooctanoic acid	2.0 U	2.0
Perfluorotetradecanoic acid	2.0 U	2.0
Perfluorotridecanoic acid	2.0 U	2.0
Perfluoroundecanoic acid	2.0 U	2.0
Batch number: 20097012	Sample number(s): 1292554-1292558	
6:2-Fluorotelomersulfonic acid	5.0 U	5.0
8:2-Fluorotelomersulfonic acid	3.0 U	3.0
Perfluorobutanoic acid	5.0 U	5.0
Perfluorodecanesulfonic acid	2.0 U	2.0
Perfluoroheptanesulfonic acid	2.0 U	2.0
Perfluorooctanesulfonamide	2.0 U	2.0
Perfluoropentanoic acid	2.0 U	2.0
Batch number: 20100009	Sample number(s): 1292555	
NEtFOSAA	2.0 U	2.0
NMeFOSAA	2.0 U	2.0
Perfluorobutanesulfonic acid	2.0 U	2.0
Perfluorodecanoic acid	2.0 U	2.0
Perfluorododecanoic acid	2.0 U	2.0
Perfluoroheptanoic acid	2.0 U	2.0
Perfluorohexanesulfonic acid	2.0 U	2.0
Perfluorohexanoic acid	2.0 U	2.0
Perfluorononanoic acid	2.0 U	2.0
Perfluorooctanesulfonic acid	2.0 U	2.0
Perfluorooctanoic acid	2.0 U	2.0
Perfluorotetradecanoic acid	2.0 U	2.0
Perfluorotridecanoic acid	2.0 U	2.0
Perfluoroundecanoic acid	2.0 U	2.0

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: C. T. Male Associates
Reported: 04/14/2020 13:04

Group Number: 2094814

LCS/LCSD

Analysis Name	LCS Spike Added ng/l	LCS Conc ng/l	LCSD Spike Added ng/l	LCSD Conc ng/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 20097001	Sample number(s): 1292554,1292556-1292558								
NEtFOSAA	3.84	3.71	3.84	4.10	97	107	50-150	10	30
NMeFOSAA	3.84	3.87	3.84	4.00	101	104	50-150	3	30
Perfluorobutanesulfonic acid	3.40	3.42	3.40	3.58	101	105	50-150	5	30
Perfluorodecanoic acid	3.84	4.06	3.84	4.13	106	108	50-150	2	30
Perfluorododecanoic acid	3.84	4.00	3.84	3.78	104	98	50-150	6	30
Perfluoroheptanoic acid	3.84	4.08	3.84	4.28	106	111	50-150	5	30
Perfluorohexanesulfonic acid	3.50	3.46	3.50	3.76	99	107	50-150	8	30
Perfluorohexanoic acid	3.84	4.02	3.84	4.09	105	107	50-150	2	30
Perfluorononanoic acid	3.84	3.96	3.84	4.08	103	106	50-150	3	30
Perfluorooctanesulfonic acid	3.55	3.66	3.55	3.92	103	110	50-150	7	30
Perfluorooctanoic acid	3.84	4.11	3.84	4.31	107	112	50-150	5	30
Perfluorotetradecanoic acid	3.84	3.79	3.84	3.89	99	101	50-150	3	30
Perfluorotridecanoic acid	3.84	3.90	3.84	3.90	102	102	50-150	0	30
Perfluoroundecanoic acid	3.84	3.96	3.84	4.18	103	109	50-150	5	30
Batch number: 20097012	Sample number(s): 1292554-1292558								
6:2-Fluorotelomersulfonic acid	24.28	24.68	24.28	24.97	102	103	56-140	1	30
8:2-Fluorotelomersulfonic acid	24.52	22.37	24.52	21.3	91	87	58-143	5	30
Perfluorobutanoic acid	25.6	23.02	25.6	23.06	90	90	63-160	0	30
Perfluorodecanesulfonic acid	24.64	21.73	24.64	23.07	88	94	62-135	6	30
Perfluoroheptanesulfonic acid	24.36	23.72	24.36	21.9	97	90	67-138	8	30
Perfluorooctanesulfonamide	25.6	23.63	25.6	23.99	92	94	67-126	2	30
Perfluoropentanoic acid	25.6	24.53	25.6	25.47	96	99	73-135	4	30
Batch number: 20100009	Sample number(s): 1292555								
NEtFOSAA	3.84	3.62	3.84	3.92	94	102	50-150	8	30
NMeFOSAA	3.84	3.50	3.84	3.67	91	96	50-150	5	30
Perfluorobutanesulfonic acid	3.40	3.33	3.40	3.54	98	104	50-150	6	30
Perfluorodecanoic acid	3.84	3.68	3.84	3.93	96	102	50-150	7	30
Perfluorododecanoic acid	3.84	3.68	3.84	3.60	96	94	50-150	2	30
Perfluoroheptanoic acid	3.84	3.92	3.84	3.94	102	103	50-150	0	30
Perfluorohexanesulfonic acid	3.50	3.18	3.50	3.44	91	98	50-150	8	30
Perfluorohexanoic acid	3.84	3.84	3.84	3.77	100	98	50-150	2	30
Perfluorononanoic acid	3.84	3.77	3.84	3.66	98	95	50-150	3	30
Perfluorooctanesulfonic acid	3.55	3.67	3.55	3.70	103	104	50-150	1	30
Perfluorooctanoic acid	3.84	3.73	3.84	3.88	97	101	50-150	4	30
Perfluorotetradecanoic acid	3.84	3.30	3.84	3.25	86	85	50-150	2	30
Perfluorotridecanoic acid	3.84	3.59	3.84	3.61	93	94	50-150	0	30
Perfluoroundecanoic acid	3.84	3.76	3.84	4.12	98	107	50-150	9	30

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: C. T. Male Associates
Reported: 04/14/2020 13:04

Group Number: 2094814

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 14 PFAS Drinking Water List
Batch number: 20097001

	13C2-PFHxA	13C2-PFDA	D5-NetFOSAA
1292554	86	101	74
1292556	120	121	104
1292557	109	109	106
1292558	121	122	117
Blank	112	113	104
LCS	90	92	89
LCSD	90	95	90
Limits:	70-130	70-130	70-130

Analysis Name: 7 PFAS Compounds
Batch number: 20097012

	13C4-PFBA	13C5-PFPeA	13C3-PFHxS	13C2-6:2-FTS	13C8-PFOS	13C2-8:2-FTS
1292554	115	115	110	106	111	107
1292555	95	98	96	87	99	86
1292556	110	126	130	100	118	97
1292557	91	90	92	84	90	83
1292558	101	101	102	96	101	91
Blank	106	108	107	108	111	103
LCS	89	90	92	91	98	81
LCSD	103	104	111	100	108	97
Limits:	43-130	38-150	35-143	29-182	52-121	37-169

	13C8-PFOSA
1292554	92
1292555	74
1292556	92
1292557	83
1292558	90
Blank	92
LCS	70
LCSD	90
Limits:	10-134

Analysis Name: 14 PFAS Drinking Water List
Batch number: 20100009

	13C2-PFHxA	13C2-PFDA	D5-NetFOSAA
1292555	109	99	108

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: C. T. Male Associates
Reported: 04/14/2020 13:04

Group Number: 2094814

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 14 PFAS Drinking Water List
Batch number: 20100009

	13C2-PFHxA	13C2-PFDA	D5-NetFOSAA
Blank	106	97	104
LCS	107	108	111
LCSD	105	103	111
Limits:	70-130	70-130	70-130

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Services Analysis Request/Chain of Custody

Acct. #: 37191

Group #: 2094814

Sample #: 1292554-58

COC#: 20026

Client: C.T. Male Associates				Matrix				Analyses Requested										For Lab Use Only			
Project Name#: Hoosick Falls WTP		Site ID:		<input type="checkbox"/> Sediment		<input type="checkbox"/> Ground		Preservation and Filtration Codes										SF#: 303216			
Project Manager: Kirk Moline		P.O. #: 14.4756		<input type="checkbox"/> Surface		<input checked="" type="checkbox"/> Potable												Water		NPDES	
Sampler: <i>C. Bondi</i>		Quote #: 219169		<input type="checkbox"/> Soil		<input type="checkbox"/> Water		<input type="checkbox"/> Other: <i>Potable water</i>		Total # of Containers		7 PFAS (EPA 537 mod.)		14 PFAS (EPA 537 ver. 1.1)		Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ P = H ₃ PO ₄ O = Other Z = Trizma					
Phone #: <i>(518) 756-7400</i>		For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>		<input type="checkbox"/> Composite		<input type="checkbox"/> Grab															
State where sample(s) were collected: NY				Collection														Remarks			
Sample Identification		Date	Time	Grab	Composite																
<i>SGI-LTB01-200402</i>		<i>4/2/20</i>		<input checked="" type="checkbox"/>																	
<i>SGI-FTB01-200402</i>			<i>1030</i>	<input checked="" type="checkbox"/>																	
<i>GAC - Influent</i>			<i>1035</i>	<input checked="" type="checkbox"/>																	
<i>GAC - Midpoint</i>			<i>1037</i>	<input checked="" type="checkbox"/>																	
<i>GAC - Effluent</i>			<i>1040</i>	<input checked="" type="checkbox"/>																	
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> RUSH <input type="checkbox"/>				Relinquished by: <i>CM</i>				Date: <i>4/2/20</i>		Time: <i>1245</i>		Received by:				Date:		Time:			
(RUSH TAT is subject to Eurofins Lancaster Laboratories approval and surcharges.)				Relinquished by:				Date:		Time:		Received by:				Date:		Time:			
Date results are needed:				Relinquished by:				Date:		Time:		Received by:				Date:		Time:			
E-mail address to send RUSH results: <i>k.moline@ctmale.com</i>				Relinquished by:				Date:		Time:		Received by:				Date:		Time:			
Data Package Options (please check if required)				Relinquished by:				Date:		Time:		Received by:				Date:		Time:			
Type I (Validation/non-CLP) <input type="checkbox"/>		MA MCP <input type="checkbox"/>		TX TRRP - 13 <input type="checkbox"/>		Relinquished by:				Date:		Time:		Received by:				Date:		Time:	
Type III (Reduced non-CLP) <input type="checkbox"/>		CT RCP <input type="checkbox"/>		Relinquished by:				Date:		Time:		Received by:				Date:		Time:			
Type IV (CLP SOW) <input type="checkbox"/>		ASP Type A <input type="checkbox"/>		Relinquished by:				Date:		Time:		Received by:				Date:		Time:			
Type VI (Raw Data Only) <input type="checkbox"/>		ASP Type B <input checked="" type="checkbox"/>		Relinquished by:				Date:		Time:		Received by: <i>Chris Kelly</i>				Date: <i>4/3/20</i>		Time: <i>10:10</i>			
EDD Format: EQUIS				Airbill No.:				Relinquished by Commercial Carrier:		UPS <input type="checkbox"/> FedEx <input checked="" type="checkbox"/> Other <input type="checkbox"/>		Temperature upon receipt <i>1.5</i> °C									
If site-specific QC (MS/MSD/Dup) required, indicate QC samples and submit triplicate volume.																					



Client: C.T. MALE ASSOCIATES

Delivery and Receipt Information

Delivery Method: Fed Ex Arrival Date: 04/03/2020
 Number of Packages: 1 Number of Projects: 1
 State/Province of Origin: New York

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	Total Trip Blank Qty:	4
Samples Chilled:	Yes	Trip Blank Type:	See Below
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Trip Blank Type(s): 2 UNP/ 2 TRIZMA

Unpacked by Julissa Rivera-Santa

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	46730060WS	1.5	IR	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mL	milliliter(s)
C	degrees Celsius	MPN	Most Probable Number
cfu	colony forming units	N.D.	non-detect
CP Units	cobalt-chloroplatinate units	ng	nanogram(s)
F	degrees Fahrenheit	NTU	nephelometric turbidity units
g	gram(s)	pg/L	picogram/liter
IU	International Units	RL	Reporting Limit
kg	kilogram(s)	TNTC	Too Numerous To Count
L	liter(s)	µg	microgram(s)
lb.	pound(s)	µL	microliter(s)
m3	cubic meter(s)	umhos/cm	micromhos/cm
meq	milliequivalents	MCL	Maximum Contamination Limit
mg	milligram(s)		
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is less than the LOQ
K2	Continuing Calibration Blank is above the QC limit and the sample result is less than the LOQ
K3	Initial Calibration Verification is above the QC limit and the sample result is less than the LOQ
K4	Continuing Calibration Verification is above the QC limit and the sample result is less than the LOQ
J (or G, I, X)	Estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
P^	Concentration difference between the primary and confirmation column $> 40\%$. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.