

**DATA USABILITY SUMMARY REPORT
5 SCOBIE DRIVE, NEWBURGH, NEW YORK**

Client: C.T. Male Associates, Latham, New York
SDG: L2043931
Laboratory: Alpha Analytical, Westborough, Massachusetts
Site: 5 Scobie Drive, Newburgh, New York
Date: January 19, 2024

EDS ID	Client ID	Laboratory ID	Matrix
1	CTM-MW-5_201013	L2043931-01	Water
1MS	CTM-MW-5_201013MS	L2043931-01MS	Water
1MSD	CTM-MW-5_201013MSD	L2043931-01MSD	Water
2	MW-6_201013	L2043931-02	Water
3	CTM-MW-4_201013	L2043931-03	Water
4	CTM-MW-3_201013	L2043931-04	Water
5	MW-5_201013	L2043931-05	Water
6	GWFD01_201013	L2043931-06	Water
7	GWEB01_201013	L2043931-07	Water
8	GWFB01_201013	L2043931-08	Water
9	GWLTB01_201013	L2043931-09	Water

A Data Usability Summary Review was performed on the analytical data for six water samples, one aqueous equipment blank sample, one aqueous field blank sample, and one aqueous trip blank sample collected on October 13, 2020 by CT Male at the 5 Scobie Drive site in Newburgh, New York. The samples were analyzed under the USEPA Method Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS).

Specific method references are as follows:

Analysis
PFAS

Method References
USEPA Method 537

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods, the NYSDEC Data Review and Validation Guidelines as follows:

- New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), April 2023;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

PFAS

- Holding times and sample preservation
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

Data Usability Assessment

There were no rejections of data.

The data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Perfluorinated Alkyl Substances (PFAS)

Holding Times

- All samples were extracted within 14 days for water samples and analyzed within 28 days.

LC/MS Tuning

- All criteria were met.

Initial Calibration

- All relative standard deviation (%RSD), %R and/or coefficient of determination criteria were met.

Continuing Calibration

- All percent recovery (%R) criteria were met.

Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
WG1424986-1	PFHxA	0.376	U	7-9

Field QC Blank

- The field QC samples are summarized below.

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
GWEB01_201013	None - ND	-	-	-
GWFB01_201013	None - ND	-	-	-
GWLTB01_201013	None - ND	-	-	-

Surrogate Spike Recoveries

- The following table presents samples that exhibited surrogate percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

EDS Sample ID	Surrogate	%R	Qualifier
2	M2-8:2FTS	180%	None - Sample ND
3	M2-8:2FTS	181%	None - Sample ND

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

Sample ID	Compound	MS %R/MSD %R/RPD	Qualifier
1	NMeFOSAA	OK/OK/37	None for RPD alone

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- The following table presents samples that exceeded the -25%/+150% area criteria for internal standard areas. Non-detected results for the associated compounds are considered estimated and qualified (UJ). Positive results for the associated compounds are considered estimated and qualified (J). Non-detected compounds that exceed the lower limit by -10% area criteria are considered rejected (R) and unusable for project objectives.

Sample ID	Internal Standard	Area Count	Qualifier
2	M3PFBA	Low	J - Associated Compound
4	M3PFBA	Low	J - Associated Compound

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- Samples 3 and 6 were analyzed at a 5X dilution due to high concentrations of target compounds. The reporting limits were adjusted accordingly. No action was required.
- The ion ratio was outside of QC limits for several compounds and flagged (F) by the laboratory. These results were qualified estimated (J) unless already qualified.

Field Duplicate Sample Precision

- Field duplicate samples are summarized below. The precision was acceptable.

Compound	CTM-MW-4_201013 ng/L	GWFD01_201013 ng/L	RPD	Qualifier
PFBA	21.2	22.4	6%	None
PFPeA	21.8	19.6	11%	
PFBS	9.25	11.4	21%	
PFHxA	15.8	15.9	1%	
PFHpA	12.3	13.4	9%	
PFHxS	44.4	50.3	12%	
PFOA	100	104	4%	
PFHpS	3.30	4.63	34%	
PFOS	102	125	20%	
NEtFOSAA	29.8	38.2	25%	
PFOA/PFOS, total	202	229	13%	

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed:

Nancy Weaver

Dated: 11/22/24

Nancy Weaver
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-01	Date Collected	: 10/13/20 11:15
Client ID	: CTM-MW-5_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/23/20 22:42
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30963	Analyst	: JW
Sample Amount	: 285.31 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	6.86	1.75	0.358	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	5.82	1.75	0.347	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	3.90	1.75	0.208	
307-24-4	Perfluorohexanoic Acid (PFHxA)	5.77	1.75	0.287	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	4.05	1.75	0.197	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	8.80	1.75	0.329	
335-67-1	Perfluoroctanoic Acid (PFOA)	21.8	1.75	0.207	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.75	1.17	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.852	1.75	0.603	J
375-95-1	Perfluorononanoic Acid (PFNA)	1.03	1.75	0.273	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	30.2	1.75	0.442	
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.75	0.266	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.75	1.06	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.75	0.568	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.75	0.228	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.75	0.859	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.75	0.508	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.75	0.704	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-01	Date Collected	: 10/13/20 11:15
Client ID	: CTM-MW-5_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/23/20 22:42
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30963	Analyst	: JW
Sample Amount	: 285.31 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.75	0.326	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.75	0.287	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.75	0.217	U
NONE	PFOA/PFOS, Total	52.0	1.75	0.207	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

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Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-02	Date Collected	: 10/13/20 11:50
Client ID	: MW-6_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/23/20 23:32
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30966	Analyst	: JW
Sample Amount	: 267.79 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acuity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	5.88	1.87	0.381	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	7.34	1.87	0.370	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	6.06	1.87	0.222	
307-24-4	Perfluorohexanoic Acid (PFHxA)	8.72	1.87	0.306	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	8.79	1.87	0.210	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	17.4	1.87	0.351	
335-67-1	Perfluoroctanoic Acid (PFOA)	75.5	1.87	0.220	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.87	1.24	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	2.00	1.87	0.642	
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.87	0.291	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	61.5	1.87	0.470	
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.87	0.284	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.87	1.13	U
2355-31-9	N-Methyl Perfluoroctanesulfonamidoacetyl c Acid (NMeFOSAA)	ND	1.87	0.605	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.87	0.243	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.87	0.915	U
754-91-6	Perfluoroctanesulfonamide (FOSA)	ND	1.87	0.541	U
2991-50-6	N-Ethyl Perfluoroctanesulfonamidoacetic Acid (NEtFOSAA)	8.58	1.87	0.750	J



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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-02	Date Collected	: 10/13/20 11:50
Client ID	: MW-6_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/23/20 23:32
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30966	Analyst	: JW
Sample Amount	: 267.79 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			
		Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.87	0.347	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.87	0.305	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.87	0.232	U
NONE	PFOA/PFOS, Total	137	1.87	0.220	

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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-03D	Date Collected	: 10/13/20 12:35
Client ID	: CTM-MW-4_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/25/20 12:15
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 5
Lab File ID	: I31066	Analyst	: SG
Sample Amount	: 262.13 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	21.2	9.54	1.94	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	21.8	9.54	1.89	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	9.25	9.54	1.13	J
307-24-4	Perfluorohexanoic Acid (PFHxA)	15.8	9.54	1.56	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	12.3	9.54	1.07	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	44.4	9.54	1.79	FJ
335-67-1	Perfluoroctanoic Acid (PFOA)	100	9.54	1.12	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	9.54	6.35	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	3.30	9.54	3.28	J
375-95-1	Perfluorononanoic Acid (PFNA)	ND	9.54	1.49	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	102	9.54	2.40	
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	9.54	1.45	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	9.54	5.78	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetyl c Acid (NMeFOSAA)	ND	9.54	3.09	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	9.54	1.24	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	9.54	4.67	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	9.54	2.76	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	29.8	9.54	3.83	FJ

**Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution**

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-03D	Date Collected	: 10/13/20 12:35
Client ID	: CTM-MW-4_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/25/20 12:15
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 5
Lab File ID	: I31066	Analyst	: SG
Sample Amount	: 262.13 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			
		Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	9.54	1.77	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	9.54	1.56	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	9.54	1.18	U
NONE	PFOA/PFOS, Total	202	9.54	1.12	

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Results Summary Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-04	Date Collected	: 10/13/20 13:05
Client ID	: CTM-MW-3_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 00:05
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30968	Analyst	: JW
Sample Amount	: 278.67 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acuity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobulanoic Acid (PFBA)	35.6	1.79	0.366	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	72.2	1.79	0.355	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	29.0	1.79	0.214	
307-24-4	Perfluorohexanoic Acid (PFHxA)	88.7	1.79	0.294	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	63.0	1.79	0.202	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	27.0	1.79	0.337	
335-67-1	Perfluoroctanoic Acid (PFOA)	221	1.79	0.212	
27619-97-2	1H,1H,2H,2H-Perfluoroctanesulfonic Acid (6:2FTS)	ND	1.79	1.19	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	3.17	1.79	0.617	
375-95-1	Perfluorononanoic Acid (PFNA)	25.6	1.79	0.280	
1763-23-1	Perfluoroctanesulfonic Acid (PFOS)	78.1	1.79	0.452	F J
335-76-2	Perfluorodecanoic Acid (PFDA)	8.30	1.79	0.273	
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.79	1.09	U
2355-31-9	N-Methyl Perfluoroctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.79	0.581	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.79	0.233	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.79	0.879	U
754-91-6	Perfluoroctanesulfonamide (FOSA)	ND	1.79	0.520	U
2991-50-6	N-Ethyl Perfluoroctanesulfonamidoacetic Acid (NEtFOSAA)	1.90	1.79	0.721	

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**Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution**

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-04	Date Collected	: 10/13/20 13:05
Client ID	: CTM-MW-3_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 00:05
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30968	Analyst	: JW
Sample Amount	: 278.67 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.79	0.334	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.79	0.294	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.79	0.222	U
NONE	PFOA/PFOS, Total	299	1.79	0.212	

MT 19/34

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-05	Date Collected	: 10/13/20 13:45
Client ID	: MW-5_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 00:22
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30969	Analyst	: JW
Sample Amount	: 274.53 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	13.3	1.82	0.372	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	15.8	1.82	0.361	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	9.50	1.82	0.217	
307-24-4	Perfluorohexanoic Acid (PFHxA)	26.0	1.82	0.299	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	27.5	1.82	0.205	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	14.7	1.82	0.342	
335-67-1	Perfluoroctanoic Acid (PFOA)	89.3	1.82	0.215	
27619-97-2	1H,1H,2H,2H-Perfluoroctanesulfonic Acid (6:2FTS)	ND	1.82	1.21	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.943	1.82	0.626	J
375-95-1	Perfluorononanoic Acid (PFNA)	3.97	1.82	0.284	
1763-23-1	Perfluoroctanesulfonic Acid (PFOS)	23.3	1.82	0.459	
335-76-2	Perfluorodecanoic Acid (PFDA)	0.834	1.82	0.277	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.82	1.10	U
2355-31-9	N-Methyl Perfluoroctanesulfonamidoacetyl c Acid (NMeFOSAA)	ND	1.82	0.590	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.82	0.237	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.82	0.892	U
754-91-6	Perfluoroctanesulfonamide (FOSA)	ND	1.82	0.528	U
2991-50-6	N-Ethyl Perfluoroctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.82	0.732	U

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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-05	Date Collected	: 10/13/20 13:45
Client ID	: MW-5_201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 00:22
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30969	Analyst	: JW
Sample Amount	: 274.53 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acuity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			
		Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.82	0.339	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.82	0.298	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.82	0.226	U
NONE	PFOA/PFOS, Total	113	1.82	0.215	

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Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-06D	Date Collected	: 10/13/20 00:00
Client ID	: GWFD01-201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/25/20 12:31
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 5
Lab File ID	: I31067	Analyst	: SG
Sample Amount	: 261.16 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	22.4	9.57	1.95	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	19.6	9.57	1.90	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	11.4	9.57	1.14	
307-24-4	Perfluorohexanoic Acid (PFHxA)	15.9	9.57	1.57	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	13.4	9.57	1.08	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	50.3	9.57	1.80	F
335-67-1	Perfluoroctanoic Acid (PFOA)	104	9.57	1.13	
27619-97-2	1H,1H,2H,2H-Perfluoroctanesulfonic Acid (6:2FTS)	ND	9.57	6.38	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	4.63	9.57	3.29	J
375-95-1	Perfluorononanoic Acid (PFNA)	ND	9.57	1.49	U
1763-23-1	Perfluooctanesulfonic Acid (PFOS)	125	9.57	2.41	
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	9.57	1.46	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	9.57	5.80	U
2355-31-9	N-Methyl Perfluoroctanesulfonamidoacetic Acid (NMeFOSAA)	ND	9.57	3.10	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	9.57	1.24	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	9.57	4.69	U
754-91-6	Perfluoroctanesulfonamide (FOSA)	ND	9.57	2.78	U
2991-50-6	N-Ethyl Perfluoroctanesulfonamidoacetic Acid (NEtFOSAA)	38.2	9.57	3.85	J

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**Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution**

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-06D	Date Collected	: 10/13/20 00:00
Client ID	: GWFD01-201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/25/20 12:31
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 5
Lab File ID	: I31067	Analyst	: SG
Sample Amount	: 261.16 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			
		Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	9.57	1.78	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	9.57	1.57	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	9.57	1.19	U
NONE	PFOA/PFOS, Total	229	9.57	1.13	

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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-07	Date Collected	: 10/13/20 14:15
Client ID	: GWEB01-201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 00:55
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30971	Analyst	: JW
Sample Amount	: 266.9 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acuity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			
		Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.87	0.382	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.87	0.371	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.87	0.223	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	0.348	1.87	0.307	JU
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.87	0.211	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.87	0.352	U
335-67-1	Perfluoroctanoic Acid (PFOA)	ND	1.87	0.221	U
27619-97-2	1H,1H,2H,2H-Perfluoroctanesulfonic Acid (6:2FTS)	ND	1.87	1.25	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.87	0.644	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.87	0.292	U
1763-23-1	Perfluoroctanesulfonic Acid (PFOS)	ND	1.87	0.472	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.87	0.285	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.87	1.14	U
2355-31-9	N-Methyl Perfluoroctanesulfonamidoacetyl c Acid (NMeFOSAA)	ND	1.87	0.607	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.87	0.244	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.87	0.918	U
754-91-6	Perfluoroctanesulfonamide (FOSA)	ND	1.87	0.543	U
2991-50-6	N-Ethyl Perfluoroctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.87	0.753	U



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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-07	Date Collected	: 10/13/20 14:15
Client ID	: GWEB01-201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 00:55
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30971	Analyst	: JW
Sample Amount	: 266.9 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.87	0.348	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.87	0.306	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.87	0.232	U
NONE	PFOA/PFOS, Total	ND	1.87	0.221	U

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Results Summary Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-08	Date Collected	: 10/13/20 14:20
Client ID	: GWFB01-201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 01:11
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30972	Analyst	: JW
Sample Amount	: 268.35 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			
		Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.86	0.380	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.86	0.369	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.86	0.222	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	0.388	1.86	0.306	JU
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.86	0.210	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.86	0.350	U
335-67-1	Perfluoroctanoic Acid (PFOA)	ND	1.86	0.220	U
27619-97-2	1H,1H,2H,2H-Perfluoroctanesulfonic Acid (6:2FTS)	ND	1.86	1.24	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.86	0.641	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.86	0.291	U
1763-23-1	Perfluoroctanesulfonic Acid (PFOS)	ND	1.86	0.470	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.86	0.283	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.86	1.13	U
2355-31-9	N-Methyl Perfluoroctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.86	0.604	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.86	0.242	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.86	0.913	U
754-91-6	Perfluoroctanesulfonamide (FOSA)	ND	1.86	0.540	U
2991-50-6	N-Ethyl Perfluoroctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.86	0.749	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

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Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-08	Date Collected	: 10/13/20 14:20
Client ID	: GWFB01-201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 01:11
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30972	Analyst	: JW
Sample Amount	: 268.35 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			
		Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.86	0.346	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.86	0.305	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.86	0.231	U
NONE	PFOA/PFOS, Total	ND	1.86	0.220	U

My 10/24/20

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**Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution**

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-09	Date Collected	: 10/13/20 00:00
Client ID	: GWLTB01-201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 01:28
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30973	Analyst	: JW
Sample Amount	: 258.38 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.94	0.395	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.94	0.383	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.94	0.230	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	0.383	1.94	0.317	✓ U
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.94	0.218	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.94	0.364	U
335-67-1	Perfluoroctanoic Acid (PFOA)	ND	1.94	0.228	U
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.94	1.29	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.94	0.666	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.94	0.302	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.94	0.488	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.94	0.294	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.94	1.17	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetyl c Acid (NMeFOSAA)	ND	1.94	0.627	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.94	0.252	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.94	0.948	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.94	0.561	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.94	0.778	U

MT 19/24



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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: C.T. Male Associates	Lab Number	: L2043931
Project Name	: 5 SCOBIE DR	Project Number	: 19.9405
Lab ID	: L2043931-09	Date Collected	: 10/13/20 00:00
Client ID	: GWLTB01-201013	Date Received	: 10/13/20
Sample Location	: NEWBURGH, NY	Date Analyzed	: 10/24/20 01:28
Sample Matrix	: WATER	Date Extracted	: 10/22/20
Analytical Method	: 134,LCMSMS-ID	Dilution Factor	: 1
Lab File ID	: I30973	Analyst	: JW
Sample Amount	: 258.38 g	Instrument ID	: LCMS02
Extraction Method	: ALPHA 23528	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l			
		Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.94	0.360	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.94	0.316	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.94	0.240	U
NONE	PFOA/PFOS, Total	ND	1.94	0.228	U