

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

C. T. Male Associates
ELLE Sample #: PW 9649565
ELLE Group #: 1952894
Matrix: Drinking Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 06/08/2018 10:30
Collection Date/Time: 06/07/2018 09:30
SDG#: HOO04-01

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 NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.	2991-50-6	1.8 U	1.8	1
14070	NMeFOSAA NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.	2355-31-9	1.8 U	1.8	1
14070	Perfluorobutanesulfonate	375-73-5	1.8 U	1.8	1
14070	Perfluorodecanoic acid	335-76-2	1.8 U	1.8	1
14070	Perfluorododecanoic acid	307-55-1	1.8 U	1.8	1
14070	Perfluoroheptanoic acid	375-85-9	14	1.8	1
14070	Perfluorohexanesulfonate	355-46-4	1.8 U	1.8	1
14070	Perfluorohexanoic acid	307-24-4	13	1.8	1
14070	Perfluorononanoic acid	375-95-1	1.8 U	1.8	1
14070	Perfluoro-octanesulfonate	1763-23-1	3.2	1.8	1
14070	Perfluorooctanoic acid	335-67-1	460	18	10
14070	Perfluorotetradecanoic acid	376-06-7	1.8 U	1.8	1
14070	Perfluorotridecanoic acid	72629-94-8	1.8 U	1.8	1
14070	Perfluoroundecanoic acid	2058-94-8	1.8 U	1.8	1

Target analytes in the Laboratory Control Spike(s) pass QC acceptance criteria of 50-150.

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	18162012	06/16/2018 03:56	Joshua P Trost	1
14070	14 PFAS Drinking Water List	EPA 537 Version 1.1	1	18162012	06/20/2018 08:52	Joshua P Trost	10

Sample Description: GAC Midfluent Grab Drinking Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: PW 9649566
ELLE Group #: 1952894
Matrix: Drinking Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 06/08/2018 10:30
Collection Date/Time: 06/07/2018 09:33
SDG#: HOO04-02

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 NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.	2991-50-6	1.8 U	1.8	1
14070	NMeFOSAA NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.	2355-31-9	1.8 U	1.8	1
14070	Perfluorobutanesulfonate	375-73-5	1.8 U	1.8	1
14070	Perfluorodecanoic acid	335-76-2	1.8 U	1.8	1

Reference ID:
1952894250618105722

Sample Description: GAC Midfluent Grab Drinking Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: PW 9649566
ELLE Group #: 1952894
Matrix: Drinking Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 06/08/2018 10:30
Collection Date/Time: 06/07/2018 09:33
SDG#: HOO04-02

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	Perfluorododecanoic acid	307-55-1	1.8 U	1.8	1
14070	Perfluoroheptanoic acid	375-85-9	1.8 U	1.8	1
14070	Perfluorohexanesulfonate	355-46-4	1.8 U	1.8	1
14070	Perfluorohexanoic acid	307-24-4	1.8 U	1.8	1
14070	Perfluorononanoic acid	375-95-1	1.8 U	1.8	1
14070	Perfluoro-octanesulfonate	1763-23-1	1.8 U	1.8	1
14070	Perfluorooctanoic acid	335-67-1	1.8 U	1.8	1
14070	Perfluorotetradecanoic acid	376-06-7	1.8 U	1.8	1
14070	Perfluorotridecanoic acid	72629-94-8	1.8 U	1.8	1
14070	Perfluoroundecanoic acid	2058-94-8	1.8 U	1.8	1

Target analytes in the Laboratory Control Spike(s) pass
QC acceptance criteria of 50-150.

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	18162012	06/16/2018 04:08	Joshua P Trost	1

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

C. T. Male Associates
ELLE Sample #: PW 9649567
ELLE Group #: 1952894
Matrix: Drinking Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 06/08/2018 10:30
Collection Date/Time: 06/07/2018 09:37
SDG#: HOO04-03

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	2991-50-6	1.8 U	1.8	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.				
14070	NMeFOSAA	2355-31-9	1.8 U	1.8	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.				
14070	Perfluorobutanesulfonate	375-73-5	1.8 U	1.8	1
14070	Perfluorodecanoic acid	335-76-2	1.8 U	1.8	1
14070	Perfluorododecanoic acid	307-55-1	1.8 U	1.8	1
14070	Perfluoroheptanoic acid	375-85-9	1.8 U	1.8	1
14070	Perfluorohexanesulfonate	355-46-4	1.8 U	1.8	1
14070	Perfluorohexanoic acid	307-24-4	1.8 U	1.8	1
14070	Perfluorononanoic acid	375-95-1	1.8 U	1.8	1
14070	Perfluoro-octanesulfonate	1763-23-1	1.8 U	1.8	1
14070	Perfluorooctanoic acid	335-67-1	1.8 U	1.8	1
14070	Perfluorotetradecanoic acid	376-06-7	1.8 U	1.8	1

Reference ID:
1952894250618105722

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

C. T. Male Associates
ELLE Sample #: PW 9649567
ELLE Group #: 1952894
Matrix: Drinking Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 06/08/2018 10:30
Collection Date/Time: 06/07/2018 09:37
SDG#: HOO04-03

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	Perfluorotridecanoic acid	72629-94-8	1.8 U	1.8	1
14070	Perfluoroundecanoic acid	2058-94-8	1.8 U	1.8	1
Target analytes in the Laboratory Control Spike(s) pass QC acceptance criteria of 50-150.					

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	18162012	06/16/2018 04:19	Joshua P Trost	1

Sample Description: FTB01-180607 Grab Blank Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: WW 9649568
ELLE Group #: 1952894
Matrix: Blank Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 06/08/2018 10:30
Collection Date/Time: 06/07/2018 09:45
SDG#: HOO04-04TB

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	2991-50-6	1.8 U	1.8	1
NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14070	NMeFOSAA	2355-31-9	1.8 U	1.8	1
NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14070	Perfluorobutanesulfonate	375-73-5	1.8 U	1.8	1
14070	Perfluorodecanoic acid	335-76-2	1.8 U	1.8	1
14070	Perfluorododecanoic acid	307-55-1	1.8 U	1.8	1
14070	Perfluoroheptanoic acid	375-85-9	1.8 U	1.8	1
14070	Perfluorohexanesulfonate	355-46-4	1.8 U	1.8	1
14070	Perfluorohexanoic acid	307-24-4	1.8 U	1.8	1
14070	Perfluorononanoic acid	375-95-1	1.8 U	1.8	1
14070	Perfluoro-octanesulfonate	1763-23-1	1.8 U	1.8	1
14070	Perfluorooctanoic acid	335-67-1	1.8 U	1.8	1
14070	Perfluorotetradecanoic acid	376-06-7	1.8 U	1.8	1
14070	Perfluorotridecanoic acid	72629-94-8	1.8 U	1.8	1
14070	Perfluoroundecanoic acid	2058-94-8	1.8 U	1.8	1
Target analytes in the Laboratory Control Spike(s) pass QC acceptance criteria of 50-150.					

Reference ID:
1952894250618105722

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	18162012	06/16/2018 04:31	Joshua P Trost	1

Sample Description: LTB01-180607 Blank Water
Hoosick Falls Water Treatment Plant

C. T. Male Associates
ELLE Sample #: WW 9649569
ELLE Group #: 1952894
Matrix: Blank Water

Project Name: Hoosick Falls WTP

Submittal Date/Time: 06/08/2018 10:30
 Collection Date/Time: 06/07/2018
 SDG#: HOO04-05TB

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	2991-50-6	1.8 U	1.8	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.				
14070	NMeFOSAA	2355-31-9	1.8 U	1.8	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.				
14070	Perfluorobutanesulfonate	375-73-5	1.8 U	1.8	1
14070	Perfluorodecanoic acid	335-76-2	1.8 U	1.8	1
14070	Perfluorododecanoic acid	307-55-1	1.8 U	1.8	1
14070	Perfluoroheptanoic acid	375-85-9	1.8 U	1.8	1
14070	Perfluorohexanesulfonate	355-46-4	1.8 U	1.8	1
14070	Perfluorohexanoic acid	307-24-4	1.8 U	1.8	1
14070	Perfluorononanoic acid	375-95-1	1.8 U	1.8	1
14070	Perfluoro-octanesulfonate	1763-23-1	1.8 U	1.8	1
14070	Perfluorooctanoic acid	335-67-1	1.8 U	1.8	1
14070	Perfluorotetradecanoic acid	376-06-7	1.8 U	1.8	1
14070	Perfluorotridecanoic acid	72629-94-8	1.8 U	1.8	1
14070	Perfluoroundecanoic acid	2058-94-8	1.8 U	1.8	1

Target analytes in the Laboratory Control Spike(s) pass
 QC acceptance criteria of 50-150.

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	18162012	06/16/2018 04:43	Joshua P Trost	1

Environmental Services Analysis Request/Chain of Custody

Acct. #: 37191

Group #:

1952894

Sample #:

9649565-69

COC#: 19264

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 Codes										SF#: 303216		
Project Manager: Kirk Moline		P.O. #: 14.4756		<input type="checkbox"/> Potable		<input checked="" type="checkbox"/> NPDES												SCR#: 224437		
Sampler: <i>Chris Omsky</i>		Quote #: 214135		<input type="checkbox"/> Surface		<input type="checkbox"/> Other: <i>Reserve Water</i>												Preservation Codes		
State where sample(s) were collected: NY				<input type="checkbox"/> Soil		<input type="checkbox"/> Water												H = HCl T = Thiosulfate		
Sample Identification		Collection		Grab	Composite	Total # of Containers	7 PFCs (EPA 537 mod.)	14 PFCs (EPA 537 ver. 1.1)											Remarks	
		Date	Time																	
<i>GAC Effluent</i>		<i>6/7/18</i>	<i>0930</i>	<input checked="" type="checkbox"/>		<i>4</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											<i>2 Trizma / 2 Non-trizma</i> ↓	
<i>GAC Midpoint</i>		↓	<i>0933</i>	<input checked="" type="checkbox"/>		<i>4</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
<i>GAC Effluent</i>		↓	<i>0937</i>	<input checked="" type="checkbox"/>		<i>4</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
<i>FTB01-180607</i>		↓	<i>0945</i>	<input checked="" type="checkbox"/>		<i>4</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
<i>LTB01-180607</i>		↓	-	<input checked="" type="checkbox"/>		<i>4</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
Turnaround Time Requested (TAT) (please check): Standard <input type="checkbox"/> RUSH <input type="checkbox"/>				Relinquished by: <i>Robert Limbo</i>		Date: <i>5/31/18</i>		Time: <i>11:50</i>		Received by: <i>Christopher Omsky</i>		Date: <i>6/14/18</i>		Time: <i>730</i>						
(RUSH TAT is subject to Eurofins Lancaster Laboratories approval and surcharges.)				Relinquished by: <i>Christopher Omsky</i>		Date: <i>6/7/18</i>		Time: <i>1615</i>												
Date results are needed:				Relinquished by:		Date:		Time:		Received by:		Date:		Time:						
E-mail address to send RUSH results:				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"/>		Date:		Time:		Received by:		Date:		Time:						
Type III (Reduced non-CLP) <input type="checkbox"/>		CT RCP <input type="checkbox"/>				Date:		Time:		Received by:		Date:		Time:						
Type IV (CLP SOW) <input type="checkbox"/>		ASP Type A <input type="checkbox"/>				Date:		Time:		Received by:		Date:		Time:						
Type VI (Raw Data Only) <input type="checkbox"/>		ASP Type B <input checked="" type="checkbox"/>				Date:		Time:		Received by: <i>MWR</i>		Date: <i>6/18/18</i>		Time: <i>1030</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>0.9</i> °C										
If site-specific QC (MS/MSD/Dup) required, indicate QC samples and submit triplicate volume.																				



Client: C.T. Male Associates

Hoosick Falls WWTP

Delivery and Receipt Information

Delivery Method:	<u>Fed Ex</u>	Arrival Timestamp:	<u>06/08/2018 10:30</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>NY</u>		

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	VOA Vial Headspace \geq 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	8
Paperwork Enclosed:	Yes	Trip Blank Type:	See Below
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Trip Blank Type(s): Unpreserved

Unpacked by Nicole Reiff (25684) at 13:51 on 06/08/2018

Samples Chilled Details: Hoosick Falls WWTP

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	DT146	0.9	DT	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	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	non-detect
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	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.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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 ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
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.
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.