



Wednesday, August 09, 2023

Attn: Roy Barticciotto
CEMCO Water & Wastewater Specialists Inc
59 Healey Lane
Stormville, NY 12582

Project ID: KENT TOWN CENTER
SDG ID: GCO60607
Sample ID#s: CO60607 - CO60608

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

August 09, 2023

SDG I.D.: GCO60607

Project ID: KENT TOWN CENTER

Client Id	Lab Id	Matrix
ENTRY	CO60607	DRINKING WATER
FIELD BLANK	CO60608	DRINKING WATER



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Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

August 09, 2023

FOR: Attn: Roy Barticciotto
CEMCO Water & Wastewater Specialists Inc
59 Healey Lane
Stormville, NY 12582

Sample Information

Matrix: DRINKING WATER
Location Code: CEMCO
Rush Request: Standard
P.O.#:

Custody Information

Collected by:
Received by: LB
Analyzed by: see "By" below

Date

07/27/23
07/27/23

Time

12:15
17:05

Laboratory Data

SDG ID: GCO60607
Phoenix ID: CO60607

Project ID: KENT TOWN CENTER
Client ID: ENTRY

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
PFAS (18)	Completed							08/04/23	***	EPA 537.1	C
PFAS (18)											
11CI-PF3OUdS	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
9CI-PF3ONS	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
ADONA	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
HFPO-DA	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
NEtFOSAA	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
NMeFOSAA	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluorobutanesulfonic Acid (PFBS)	2.85	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluorodecanoic Acid (PFDA)	ND	0.943	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorododecanoic Acid (PFDoA)	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluoroheptanoic Acid (PFHpA)	1.63	0.943	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.943	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorohexanoic Acid (PFHxA)	4.21	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluorononanoic Acid (PFNA)	ND	0.943	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorooctanesulfonic Acid (PFOS)	ND	0.943	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorooctanoic Acid (PFOA)	3.07	0.943	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorotetradecanoic Acid (PFTA)	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluorotridecanoic Acid (PFTTrDA)	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluoroundecanoic Acid (PFUnA)	ND	0.943	1	ng/L				08/08/23	***	EPA 537.1	C
QA/QC Surrogates											
% M3HFPO-DA	91.6		1	%	NA	NA	NA	08/08/23	***	70 - 130 %	C
% MPFDA	84.6		1	%	NA	NA	NA	08/08/23	***	70 - 130 %	C
% MPFHxA	86.8		1	%	NA	NA	NA	08/08/23	***	70 - 130 %	C

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
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C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected

BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)

AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal LOD=Limit of Detection

MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

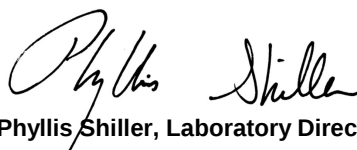
Comments:

*See attached

PFAS (18) (EPA 537.1), PFAS Extraction (EPA 537.1) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.

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Phyllis Shiller, Laboratory Director

August 09, 2023

Reviewed and Released by: Helen Geoghegan, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

August 09, 2023

FOR: Attn: Roy Barticciotto
CEMCO Water & Wastewater Specialists Inc
59 Healey Lane
Stormville, NY 12582

Sample Information

Matrix: DRINKING WATER
Location Code: CEMCO
Rush Request: Standard
P.O.#:

Custody Information

Collected by:
Received by: LB
Analyzed by: see "By" below

Date

07/27/23
07/27/23

Time

12:30
17:05

Laboratory Data

SDG ID: GCO60607
Phoenix ID: CO60608

Project ID: KENT TOWN CENTER
Client ID: FIELD BLANK

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
PFAS (18)	Completed							08/04/23	***	EPA 537.1	C
<u>PFAS (18)</u>											
11CI-PF3OUdS	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
9CI-PF3ONS	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
ADONA	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
HFPO-DA	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
NEtFOSAA	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
NMeFOSAA	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluorobutanesulfonic Acid (PFBS)	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluorodecanoic Acid (PFDA)	ND	0.909	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorododecanoic Acid (PFDoA)	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluoroheptanoic Acid (PFHpA)	ND	0.909	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.909	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorohexanoic Acid (PFHxA)	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluorononanoic Acid (PFNA)	ND	0.909	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorooctanesulfonic Acid (PFOS)	ND	0.909	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorooctanoic Acid (PFOA)	ND	0.909	1	ng/L		10		08/08/23	***	EPA 537.1	C
Perfluorotetradecanoic Acid (PFTA)	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluorotridecanoic Acid (PFTTrDA)	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
Perfluoroundecanoic Acid (PFUnA)	ND	0.909	1	ng/L				08/08/23	***	EPA 537.1	C
<u>QA/QC Surrogates</u>											
% M3HFPO-DA	81.3		1	%	NA	NA	NA	08/08/23	***	70 - 130 %	C
% MPFDA	92.3		1	%	NA	NA	NA	08/08/23	***	70 - 130 %	C
% MPFHxA	81.8		1	%	NA	NA	NA	08/08/23	***	70 - 130 %	C

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
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C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected

BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)

AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal LOD=Limit of Detection

MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

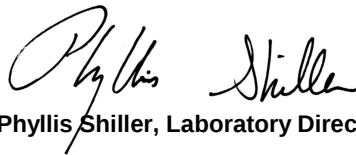
Comments:

*See attached

PFAS (18) (EPA 537.1), PFAS Extraction (EPA 537.1) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.

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Phyllis Shiller, Laboratory Director

August 09, 2023

Reviewed and Released by: Helen Geoghegan, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



QA/QC Report

August 09, 2023

QA/QC Data

SDG I.D.: GCO60607

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 691494 (ng/L), QC Sample No: CO60607 (CO60607, CO60608)													
PFOA & PFOS													
11CI-PF3OUdS	ND	2.00	ND	ND	NC	66.9			58.3			70 - 130	25 I,m
9CI-PF3ONS	ND	2.00	ND	ND	NC	63.9			59.5			70 - 130	25 I,m
ADONA	ND	2.00	ND	ND	NC	73.1			62.8			70 - 130	25 m
HFPO-DA	ND	2.00	ND	ND	NC	65.9			64.9			70 - 130	25 I,m
NEtFOSAA	ND	2.00	ND	ND	NC	80.6			68.5			70 - 130	25 m
NMeFOSAA	ND	2.00	ND	ND	NC	74.2			69.8			70 - 130	25
PFBS	ND	2.00	2.85	ND	NC	68.5			61.1			70 - 130	25 I,m
PFDA	ND	2.00	ND	ND	NC	70.6			66.9			70 - 130	25 m
PFDaA	ND	2.00	ND	ND	NC	75.8			66.0			70 - 130	25 m
PFHpA	ND	2.00	1.63	ND	NC	75.1			66.0			70 - 130	25 m
PFHxA	ND	2.00	4.21	ND	NC	71.4			65.3			70 - 130	25 m
PFHxS	ND	2.00	ND	ND	NC	58.8			60.4			70 - 130	25 I,m
PFNA	ND	2.00	ND	ND	NC	73.3			71.1			70 - 130	25
PFOA	ND	2.00	3.07	ND	NC	71.1			68.5			70 - 130	25 m
PFOS	ND	2.00	ND	ND	NC	70.7			58.2			70 - 130	25 m
PFTA	ND	2.00	ND	ND	NC	74.7			67.3			70 - 130	25 m
PFTrDA	ND	2.00	ND	ND	NC	75.3			69.2			70 - 130	25 m
PFUnA	ND	2.00	ND	ND	NC	72.2			68.7			70 - 130	25 m
% M3HFPO-DA	65.2	2.00		100	NC	91.0			78.3			70 - 130	s
% MPFDA	85.2	2.00		90.6	NC	95.1			82.7			70 - 130	
% MPFHxA	74.1	2.00		96.6	NC	92.9			80.3			70 - 130	

Comment:

Sample CO60607 was not used for MS due to insufficient volume., Sample CO60607 was not used for DUP due to insufficient volume.

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

s = This parameter is outside laboratory Blank Surrogate specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis Shiller, Laboratory Director

August 09, 2023

Wednesday, August 09, 2023

Criteria: NY: DW
State: NY

Sample Criteria Exceedances Report
GCO60607 - CEMCO

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



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Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

August 09, 2023

SDG I.D.: GCO60607

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.



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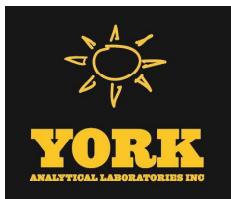


NY Temperature Narration

August 09, 2023

SDG I.D.: GCO60607

The samples in this delivery group were received at 1.1°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



Technical Report for Emerging Contaminants

prepared for:

Phoenix Environmental Laboratories, Inc.

P.O. Box 370, 587 East Middle Turnpike

Manchester CT, 06040

Attention: Helen Geoghegan

Report Date: 08/09/2023

Client Project ID: CO60607-CO60608

York Project (SDG) No.: 23G1717



CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037

New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 08/09/2023
Client Project ID: CO60607-CO60608
York Project (SDG) No.: 23G1717

Phoenix Environmental Laboratories, Inc.
P.O. Box 370, 587 East Middle Turnpike
Manchester CT, 06040
Attention: Helen Geoghegan

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 31, 2023 and listed below. The project was identified as your project: **CO60607-CO60608**.

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.

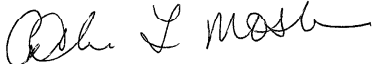
All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

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>
23G1717-01	CO60607	Drinking Water	07/27/2023	07/31/2023
23G1717-02	CO60608	Drinking Water	07/27/2023	07/31/2023

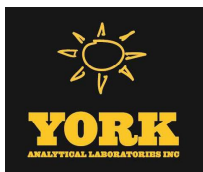
General Notes for York Project (SDG) No.: 23G1717

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

Approved By: 
Cassie L. Mosher
Laboratory Manager

Date: 08/09/2023





Sample Information

Client Sample ID: CO60607

York Sample ID: 23G1717-01

York Project (SDG) No.
23G1717

Client Project ID
CO60607-CO60608

Matrix
Drinking Water

Collection Date/Time
July 27, 2023 12:15 pm

Date Received
07/31/2023

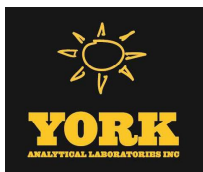
PFAS, EPA 537.1 List

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						
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.85		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-PH-0721		08/08/2023 18:38	
307-24-4	Perfluorohexanoic acid (PFHxA)	4.21		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-PH-0721		08/08/2023 18:38	
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.63		10		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-PH-0721		08/08/2023 18:38	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		10		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
335-67-1	Perfluorooctanoic acid (PFOA)	3.07		10		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-PH-0721		08/08/2023 18:38	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		10		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
375-95-1	Perfluorononanoic acid (PFNA)	ND		10		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
335-76-2	Perfluorodecanoic acid (PFDA)	ND		10		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
2355-31-9	N-MeFOSAA	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
2991-50-6	N-EtFOSAA	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
756426-58-1	9CL-PF3ONS	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
763051-92-9	11CL-PF3OUdS	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
13252-13-6	HFPO-DA (Gen-X)	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
919005-14-4	ADONA	ND		-		ng/L	0.943	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-		08/08/2023 18:38	
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: d5-N-EtFOSAA		75.5 %	70-130							
Surrogate: MPFDA		84.6 %	70-130							
Surrogate: MPFHxA		86.8 %	70-130							
Surrogate: M3HFPO-DA		91.6 %	70-130							



Sample Information

Client Sample ID: CO60607

York Sample ID: 23G1717-01

York Project (SDG) No.
23G1717

Client Project ID
CO60607-CO60608

Matrix
Drinking Water

Collection Date/Time
July 27, 2023 12:15 pm

Date Received
07/31/2023

Sample Information

Client Sample ID: CO60608

York Sample ID: 23G1717-02

York Project (SDG) No.
23G1717

Client Project ID
CO60607-CO60608

Matrix
Drinking Water

Collection Date/Time
July 27, 2023 12:30 pm

Date Received
07/31/2023

PFAS, EPA 537.1 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 537.1 SPE DVB

Maximum Contaminant Level									
CAS No.	Parameter	Result	Flag	MCL	Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		10	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		10	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
335-67-1	Perfluorooctanoic acid (PFOA)	ND		10	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		10	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
375-95-1	Perfluorononanoic acid (PFNA)	ND		10	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
335-76-2	Perfluorodecanoic acid (PFDA)	ND		10	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
2355-31-9	N-MeFOSAA	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
2991-50-6	N-EtFOSAA	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
756426-58-1	9CL-PF3ONS	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
763051-92-9	11CL-PF3OUdS	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
13252-13-6	HFPO-DA (Gen-X)	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	
919005-14-4	ADONA	ND		-	ng/L	0.909	EPA 537.1	08/04/2023 15:28	WEL
						Certifications:	NELAC-NY12058,CTDPH-	08/08/2023 18:51	



Sample Information

Client Sample ID: CO60608

York Sample ID: 23G1717-02

York Project (SDG) No.
23G1717

Client Project ID
CO60607-CO60608

Matrix
Drinking Water

Collection Date/Time
July 27, 2023 12:30 pm

Date Received
07/31/2023

PFAS, EPA 537.1 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						
	Surrogate Recoveries	Result		Acceptance Range						
	Surrogate: d5-N-EtFOSAA	103 %		70-130						
	Surrogate: MPFDA	92.3 %		70-130						
	Surrogate: MPFHxA	81.8 %		70-130						
	Surrogate: M3HFPO-DA	81.3 %		70-130						



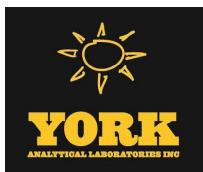
Analytical Batch Summary

Batch ID: BH30327

Preparation Method: EPA 537.1 SPE DVB

Prepared By: WJH

YORK Sample ID	Client Sample ID	Preparation Date
23G1717-01	CO60607	08/04/23
23G1717-02	CO60608	08/04/23
BH30327-BLK1	Blank	08/04/23
BH30327-BS1	LCS	08/04/23
BH30327-DUP1	Duplicate	08/04/23
BH30327-MS1	Matrix Spike	08/04/23



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	Limit	Flag
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Batch BH30327 - EPA 537.1 SPE DVB

Blank (BH30327-BLK1)

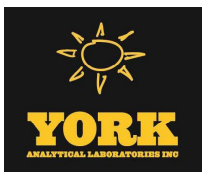
Prepared: 08/04/2023 Analyzed: 08/08/2023

Perfluorobutanesulfonic acid (PFBS)	ND	2.00	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.00	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	2.00	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTriDA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
N-EtFOSAA	ND	2.00	"								
9CL-PF3ONS	ND	2.00	"								
11CL-PF3OUdS	ND	2.00	"								
HFPO-DA (Gen-X)	ND	2.00	"								
ADONA	ND	2.00	"								
Surrogate: d5-N-EtFOSAA	290		"	320		90.6	70-130				
Surrogate: MPFDA	68.1		"	80.0		85.2	70-130				
Surrogate: MPFHxA	59.3		"	80.0		74.1	70-130				
Surrogate: M3HFPO-DA	52.2		"	80.0		65.2	70-130				

LCS (BH30327-BS1)

Prepared: 08/04/2023 Analyzed: 08/08/2023

Perfluorobutanesulfonic acid (PFBS)	24.3	2.00	ng/L	35.4		68.5	70-130	Low Bias		25	
Perfluorohexanoic acid (PFHxA)	28.6	2.00	"	40.0		71.4	70-130			25	
Perfluoroheptanoic acid (PFHpA)	30.0	2.00	"	40.0		75.1	70-130			25	
Perfluorohexanesulfonic acid (PFHxS)	22.3	2.00	"	38.0		58.8	70-130	Low Bias		25	
Perfluorooctanoic acid (PFOA)	28.4	2.00	"	40.0		71.1	70-130			25	
Perfluorooctanesulfonic acid (PFOS)	27.1	2.00	"	38.4		70.7	70-130			25	
Perfluorononanoic acid (PFNA)	29.3	2.00	"	40.0		73.3	70-130			25	
Perfluorodecanoic acid (PFDA)	28.3	2.00	"	40.0		70.6	70-130			25	
Perfluoroundecanoic acid (PFUnA)	28.9	2.00	"	40.0		72.2	70-130			25	
Perfluorododecanoic acid (PFDoA)	30.3	2.00	"	40.0		75.8	70-130			25	
Perfluorotridecanoic acid (PFTriDA)	30.1	2.00	"	40.0		75.3	70-130			25	
Perfluorotetradecanoic acid (PFTA)	29.9	2.00	"	40.0		74.7	70-130			25	
N-MeFOSAA	29.7	2.00	"	40.0		74.2	70-130			25	
N-EtFOSAA	32.2	2.00	"	40.0		80.6	70-130			25	
9CL-PF3ONS	23.9	2.00	"	37.4		63.9	70-130	Low Bias		25	
11CL-PF3OUdS	25.3	2.00	"	37.8		66.9	70-130	Low Bias		25	
HFPO-DA (Gen-X)	26.4	2.00	"	40.0		65.9	70-130	Low Bias		25	
ADONA	27.6	2.00	"	37.8		73.1	70-130			25	
Surrogate: d5-N-EtFOSAA	303		"	320		94.7	70-130				
Surrogate: MPFDA	76.1		"	80.0		95.1	70-130				
Surrogate: MPFHxA	74.3		"	80.0		92.9	70-130				
Surrogate: M3HFPO-DA	72.8		"	80.0		91.0	70-130				



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	Limit	Flag
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Batch BH30327 - EPA 537.1 SPE DVB

Duplicate (BH30327-DUP1)		*Source sample: 23G1671-01 (Duplicate)						Prepared: 08/04/2023 Analyzed: 08/08/2023			
Perfluorobutanesulfonic acid (PFBS)	ND	0.909	ng/L		ND					25	
Perfluorohexanoic acid (PFHxA)	ND	0.909	"		ND					25	
Perfluoroheptanoic acid (PFHpA)	ND	0.909	"		ND					25	
Perfluorooctanesulfonic acid (PFHxS)	ND	0.909	"		ND					25	
Perfluorooctanoic acid (PFOA)	ND	0.909	"		ND					25	
Perfluorooctanesulfonic acid (PFOS)	ND	0.909	"		ND					25	
Perfluorononanoic acid (PFNA)	ND	0.909	"		ND					25	
Perfluorodecanoic acid (PFDA)	ND	0.909	"		ND					25	
Perfluoroundecanoic acid (PFUnA)	ND	0.909	"		ND					25	
Perfluorododecanoic acid (PFDoA)	ND	0.909	"		ND					25	
Perfluorotridecanoic acid (PFTrDA)	ND	0.909	"		ND					25	
Perfluorotetradecanoic acid (PFTA)	ND	0.909	"		ND					25	
N-MeFOSAA	ND	0.909	"		ND					25	
N-EtFOSAA	ND	0.909	"		ND					25	
9CL-PF3ONS	ND	0.909	"		ND					25	
11CL-PF3OUdS	ND	0.909	"		ND					25	
HFPO-DA (Gen-X)	ND	0.909	"		ND					25	
ADONA	ND	0.909	"		ND					25	
Surrogate: d5-N-EtFOSAA	139		"	145		95.8	70-130				
Surrogate: MPFDA	32.9		"	36.4		90.6	70-130				
Surrogate: MPFHxA	35.1		"	36.4		96.6	70-130				
Surrogate: M3HFPO-DA	36.5		"	36.4		100	70-130				

Matrix Spike (BH30327-MS1)		*Source sample: 23G1675-01 (Matrix Spike)						Prepared: 08/04/2023 Analyzed: 08/08/2023			
Perfluorobutanesulfonic acid (PFBS)	19.3	0.893	ng/L	31.6	ND	61.1	70-130	Low Bias		25	
Perfluorohexanoic acid (PFHxA)	23.3	0.893	"	35.7	ND	65.3	70-130	Low Bias		25	
Perfluoroheptanoic acid (PFHpA)	23.6	0.893	"	35.7	ND	66.0	70-130	Low Bias		25	
Perfluorooctanesulfonic acid (PFHxS)	20.5	0.893	"	33.9	ND	60.4	70-130	Low Bias		25	
Perfluorooctanoic acid (PFOA)	24.5	0.893	"	35.7	ND	68.5	70-130	Low Bias		25	
Perfluorooctanesulfonic acid (PFOS)	19.9	0.893	"	34.3	ND	58.2	70-130	Low Bias		25	
Perfluorononanoic acid (PFNA)	25.4	0.893	"	35.7	ND	71.1	70-130			25	
Perfluorodecanoic acid (PFDA)	23.9	0.893	"	35.7	ND	66.9	70-130	Low Bias		25	
Perfluoroundecanoic acid (PFUnA)	24.5	0.893	"	35.7	ND	68.7	70-130	Low Bias		25	
Perfluorododecanoic acid (PFDoA)	23.6	0.893	"	35.7	ND	66.0	70-130	Low Bias		25	
Perfluorotridecanoic acid (PFTrDA)	24.7	0.893	"	35.7	ND	69.2	70-130	Low Bias		25	
Perfluorotetradecanoic acid (PFTA)	24.0	0.893	"	35.7	ND	67.3	70-130	Low Bias		25	
N-MeFOSAA	24.9	0.893	"	35.7	ND	69.8	70-130	Low Bias		25	
N-EtFOSAA	24.5	0.893	"	35.7	ND	68.5	70-130	Low Bias		25	
9CL-PF3ONS	19.9	0.893	"	33.4	ND	59.5	70-130	Low Bias		25	
11CL-PF3OUdS	19.7	0.893	"	33.8	ND	58.3	70-130	Low Bias		25	
HFPO-DA (Gen-X)	23.2	0.893	"	35.7	ND	64.9	70-130	Low Bias		25	
ADONA	21.2	0.893	"	33.8	ND	62.8	70-130	Low Bias		25	
Surrogate: d5-N-EtFOSAA	124		"	143		87.0	70-130				
Surrogate: MPFDA	29.5		"	35.7		82.7	70-130				
Surrogate: MPFHxA	28.7		"	35.7		80.3	70-130				
Surrogate: M3HFPO-DA	28.0		"	35.7		78.3	70-130				





Sample and Data Qualifiers Relating to This Work Order

PFSL The recovery for this PFAS surrogate was below control limits

PFL The recovery for this PFAS compound was below 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.

