

ANALYTICAL REPORT

PREPARED FOR

Attn: Jesse LeBoeuf
Cobb County Water System
680 South Cobb Drive
Marietta, Georgia 30060

Generated 12/11/2023 9:40:51 AM

JOB DESCRIPTION

UCMR5 - GA0670003 - SE2 - Cobb County

JOB NUMBER

810-84037-1

Eurofins Eaton Analytical South Bend

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

Authorization



Generated
12/11/2023 9:40:51 AM

Authorized for release by
Pamela Brown, Project Manager
Pamela.Brown@et.eurofinsus.com
(574)233-4777

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Surrogate Summary	10
Isotope Dilution Summary	11
QC Sample Results	12
QC Association Summary	18
Lab Chronicle	19
Certification Summary	20
Method Summary	21
Sample Summary	22
Chain of Custody	23
Receipt Checklists	24



Definitions/Glossary

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Job ID: 810-84037-1

Laboratory: Eurofins Eaton Analytical South Bend

Narrative

Job Narrative 810-84037-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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 may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 11/7/2023 8:45 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice.

PFAS

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Client Sample ID: Cobb County Water

Lab Sample ID: 810-84037-1

PWSID Number: GA0670003

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	0.0029		0.0029	ug/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	0.0029		0.0029	ug/L	1		533	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.0035		0.0029	ug/L	1		533	Total/NA

Client Sample ID: Cobb County Water

Lab Sample ID: 810-84037-1FRB

PWSID Number: GA0670003

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Client Sample ID: Cobb County Water

Lab Sample ID: 810-84037-1

Date Collected: 11/06/23 11:20

Matrix: Drinking Water

Date Received: 11/07/23 08:45

PWSID Number: GA0670003

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.0049		0.0049	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluoropentanoic acid (PFPeA)	0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluorohexanoic acid (PFHxA)	0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluoroheptanoic acid (PFHpA)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluorooctanoic acid (PFOA)	<0.0039		0.0039	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluorononanoic acid (PFNA)	<0.0039		0.0039	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluorodecanoic acid (PFDA)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluoroundecanoic acid (PFUnA)	<0.0019		0.0019	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluorododecanoic acid (PFDoA)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluorobutanesulfonic acid (PFBS)	0.0035		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluorohexanesulfonic acid (PFHxS)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.0039		0.0039	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.0039		0.0039	ug/L		11/27/23 13:51	11/29/23 05:55	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.0049		0.0049	ug/L		11/27/23 13:51	11/29/23 05:55	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<0.0019		0.0019	ug/L		11/27/23 13:51	11/29/23 05:55	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid	<0.0049		0.0049	ug/L		11/27/23 13:51	11/29/23 05:55	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.0049		0.0049	ug/L		11/27/23 13:51	11/29/23 05:55	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.0049		0.0049	ug/L		11/27/23 13:51	11/29/23 05:55	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.0194		0.0194	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.0039		0.0039	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.0029		0.0029	ug/L		11/27/23 13:51	11/29/23 05:55	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	88		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C4 PFBA	92		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C3 PFBS	92		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C5 PFPeA	97		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C5 PFHxA	94		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C4 PFHpA	92		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C8 PFOA	93		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C9 PFNA	96		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C6 PFDA	94		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C7 PFUnA	91		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C2 PFDoA	90		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C8 PFOS	92		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C3 PFHxS	91		50 - 200	11/27/23 13:51	11/29/23 05:55	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Client Sample ID: Cobb County Water

Lab Sample ID: 810-84037-1

Date Collected: 11/06/23 11:20

Matrix: Drinking Water

Date Received: 11/07/23 08:45

PWSID Number: GA0670003

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-4:2-FTS	109		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C2-6:2-FTS	95		50 - 200	11/27/23 13:51	11/29/23 05:55	1
13C2-8:2-FTS	102		50 - 200	11/27/23 13:51	11/29/23 05:55	1

Method: EPA 537.1 UCMR5 - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.0050		0.0050	ug/L		11/10/23 07:13	11/11/23 16:19	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.0060		0.0060	ug/L		11/10/23 07:13	11/11/23 16:19	1
Perfluorotetradecanoic acid (PFTA)	<0.0080		0.0080	ug/L		11/10/23 07:13	11/11/23 16:19	1
Perfluorotridecanoic acid (PFTrDA)	<0.0070		0.0070	ug/L		11/10/23 07:13	11/11/23 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	100		70 - 130	11/10/23 07:13	11/11/23 16:19	1
13C2 PFHxA	94		70 - 130	11/10/23 07:13	11/11/23 16:19	1
13C2 PFDA	99		70 - 130	11/10/23 07:13	11/11/23 16:19	1
13C3 HFPO-DA	92		70 - 130	11/10/23 07:13	11/11/23 16:19	1

Method: EPA 200.7 UCMR5 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<9.00		9.00	ug/L		11/14/23 08:22	11/15/23 13:57	1

Client Sample ID: Cobb County Water

Lab Sample ID: 810-84037-1FRB

Date Collected: 11/06/23 11:20

Matrix: Drinking Water

Date Received: 11/07/23 08:45

PWSID Number: GA0670003

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.0005		0.0049	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluoropentanoic acid (PFPeA)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluorohexanoic acid (PFHxA)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluoroheptanoic acid (PFHpA)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluorooctanoic acid (PFOA)	<0.0004		0.0039	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluorononanoic acid (PFNA)	<0.0004		0.0039	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluorodecanoic acid (PFDA)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluoroundecanoic acid (PFUnA)	<0.0004		0.0020	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluorododecanoic acid (PFDoA)	<0.0003		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluorobutanesulfonic acid (PFBS)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluorohexanesulfonic acid (PFHxS)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluorooctanesulfonic acid (PFOS)	<0.0004		0.0039	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluoropentanesulfonic acid (PFPeS)	<0.0004		0.0039	ug/L		12/04/23 07:19	12/05/23 00:50	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.0005		0.0049	ug/L		12/04/23 07:19	12/05/23 00:50	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<0.0004		0.0020	ug/L		12/04/23 07:19	12/05/23 00:50	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<0.0005		0.0049	ug/L		12/04/23 07:19	12/05/23 00:50	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Client Sample ID: Cobb County Water

Lab Sample ID: 810-84037-1FRB

Date Collected: 11/06/23 11:20

Matrix: Drinking Water

Date Received: 11/07/23 08:45

PWSID Number: GA0670003

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.0005		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.0007		0.0049	ug/L		12/04/23 07:19	12/05/23 00:50	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.0006		0.0049	ug/L		12/04/23 07:19	12/05/23 00:50	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.0009		0.0195	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.0003		0.0039	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.0003		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.0004		0.0029	ug/L		12/04/23 07:19	12/05/23 00:50	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	84		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C4 PFBA	92		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C3 PFBS	92		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C5 PFPeA	96		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C5 PFHxA	86		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C4 PFHpA	89		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C8 PFOA	92		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C9 PFNA	95		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C6 PFDA	91		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C7 PFUnA	90		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C2 PFDoA	87		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C8 PFOS	91		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C3 PFHxS	92		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C2-4:2-FTS	85		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C2-6:2-FTS	94		50 - 200			12/04/23 07:19	12/05/23 00:50	1
13C2-8:2-FTS	97		50 - 200			12/04/23 07:19	12/05/23 00:50	1

Surrogate Summary

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method: 537.1 UCMR5 - Perfluorinated Alkyl Acids (LC/MS)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	HFPODA (70-130)
810-84037-1	Cobb County Water	100	94	99	92
LLCS 810-79577/2-A	Lab Control Sample	96	98	101	95
MBL 810-79577/1-A	Method Blank	102	99	91	91

Surrogate Legend

d5NEFOS = d5-NEtFOSAA

PFHxA = 13C2 PFHxA

PFDA = 13C2 PFDA

HFPODA = 13C3 HFPO-DA

Isotope Dilution Summary

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Matrix: Drinking Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (50-200)	PFBA (50-200)	C3PFBS (50-200)	PFPeA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)
810-84037-1	Cobb County Water	88	92	92	97	94	92	93	96
810-84037-1FRB	FRB	84	92	92	96	86	89	92	95
LLCS 810-81065/2-A	Lab Control Sample	91	94	94	96	92	92	95	97
LLCS 810-81720/2-A	Lab Control Sample	87	94	95	98	91	93	96	97
MBL 810-81065/1-A	Method Blank	89	95	95	100	90	91	94	96
MBL 810-81720/1-A	Method Blank	86	94	92	95	91	90	94	93

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	C6PFDA (50-200)	13C7PUA (50-200)	PFDaA (50-200)	C8PFOS (50-200)	C3PFHS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
810-84037-1	Cobb County Water	94	91	90	92	91	109	95	102
810-84037-1FRB	FRB	91	90	87	91	92	85	94	97
LLCS 810-81065/2-A	Lab Control Sample	96	95	92	93	94	86	90	99
LLCS 810-81720/2-A	Lab Control Sample	93	91	90	94	94	91	92	93
MBL 810-81065/1-A	Method Blank	91	91	91	93	93	85	92	95
MBL 810-81720/1-A	Method Blank	92	88	87	90	90	88	91	91

Surrogate Legend

HFPODA = 13C3 HFPO-DA
PFBA = 13C4 PFBA
C3PFBS = 13C3 PFBS
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDaA = 13C2 PFDaA
C8PFOS = 13C8 PFOS
C3PFHS = 13C3 PFHxS
42FTS = 13C2-4:2-FTS
62FTS = 13C2-6:2-FTS
82FTS = 13C2-8:2-FTS

QC Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Lab Sample ID: MBL 810-81065/1-A

Matrix: Drinking Water

Analysis Batch: 81124

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 81065

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.0005		0.0050	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluoropentanoic acid (PFPeA)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluorohexanoic acid (PFHxA)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluoroheptanoic acid (PFHpA)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluorooctanoic acid (PFOA)	<0.0004		0.0040	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluorononanoic acid (PFNA)	<0.0004		0.0040	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluorodecanoic acid (PFDA)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluoroundecanoic acid (PFUnA)	<0.0004		0.0020	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluorododecanoic acid (PFDoA)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluorobutanesulfonic acid (PFBS)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluorohexanesulfonic acid (PFHxS)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluorooctanesulfonic acid (PFOS)	<0.0004		0.0040	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluoropentanesulfonic acid (PFPeS)	<0.0004		0.0040	ug/L		11/27/23 13:51	11/29/23 02:04	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.0005		0.0050	ug/L		11/27/23 13:51	11/29/23 02:04	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<0.0005		0.0020	ug/L		11/27/23 13:51	11/29/23 02:04	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<0.0005		0.0050	ug/L		11/27/23 13:51	11/29/23 02:04	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.0006		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.0007		0.0050	ug/L		11/27/23 13:51	11/29/23 02:04	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.0006		0.0050	ug/L		11/27/23 13:51	11/29/23 02:04	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.0009		0.0200	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.0003		0.0040	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.0004		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.0005		0.0030	ug/L		11/27/23 13:51	11/29/23 02:04	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	89		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C4 PFBA	95		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C3 PFBS	95		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C5 PFPeA	100		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C5 PFHxA	90		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C4 PFHpA	91		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C8 PFOA	94		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C9 PFNA	96		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C6 PFDA	91		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C7 PFUnA	91		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C2 PFDoA	91		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C8 PFOS	93		50 - 200	11/27/23 13:51	11/29/23 02:04	1

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: MBL 810-81065/1-A

Matrix: Drinking Water

Analysis Batch: 81124

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 81065

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFHxS	93		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C2-4:2-FTS	85		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C2-6:2-FTS	92		50 - 200	11/27/23 13:51	11/29/23 02:04	1
13C2-8:2-FTS	95		50 - 200	11/27/23 13:51	11/29/23 02:04	1

Lab Sample ID: LLCS 810-81065/2-A

Matrix: Drinking Water

Analysis Batch: 81124

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 81065

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	0.00200	0.0023		ug/L		117	50 - 150
Perfluoropentanoic acid (PFPeA)	0.00200	0.0024		ug/L		119	50 - 150
Perfluorohexanoic acid (PFHxA)	0.00200	0.0024		ug/L		120	50 - 150
Perfluoroheptanoic acid (PFHpA)	0.00200	0.0024		ug/L		118	50 - 150
Perfluorooctanoic acid (PFOA)	0.00200	0.0023		ug/L		114	50 - 150
Perfluorononanoic acid (PFNA)	0.00200	0.0024		ug/L		121	50 - 150
Perfluorodecanoic acid (PFDA)	0.00200	0.0024		ug/L		119	50 - 150
Perfluoroundecanoic acid (PFUnA)	0.00200	0.0023		ug/L		116	50 - 150
Perfluorododecanoic acid (PFDoA)	0.00200	0.0024		ug/L		119	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.00189	0.0023		ug/L		122	50 - 150
Perfluorobutanesulfonic acid (PFBS)	0.00178	0.0020		ug/L		115	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.00183	0.0020		ug/L		108	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.00191	0.0022		ug/L		114	50 - 150
Perfluorooctanesulfonic acid (PFOS)	0.00186	0.0023		ug/L		126	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	0.00188	0.0021		ug/L		111	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.00200	0.0022		ug/L		112	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.00187	0.0020		ug/L		106	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.00189	0.0021		ug/L		111	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.00188	0.0024		ug/L		126	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.00190	0.0026		ug/L		139	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.00192	0.0024		ug/L		127	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.00200	0.0024		ug/L		119	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.00200	0.0025		ug/L		124	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.00200	0.0023		ug/L		116	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	0.00178	0.0025		ug/L		138	50 - 150

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Isotope Dilution	LLCS LLCS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	91		50 - 200
13C4 PFBA	94		50 - 200
13C3 PFBS	94		50 - 200
13C5 PFPeA	96		50 - 200
13C5 PFHxA	92		50 - 200
13C4 PFHpA	92		50 - 200
13C8 PFOA	95		50 - 200
13C9 PFNA	97		50 - 200
13C6 PFDA	96		50 - 200
13C7 PFUnA	95		50 - 200
13C2 PFDoA	92		50 - 200
13C8 PFOS	93		50 - 200
13C3 PFHxS	94		50 - 200
13C2-4:2-FTS	86		50 - 200
13C2-6:2-FTS	90		50 - 200
13C2-8:2-FTS	99		50 - 200

Lab Sample ID: MBL 810-81720/1-A

Matrix: Drinking Water

Analysis Batch: 81821

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 81720

Analyte	MBL MBL		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Perfluorobutanoic acid (PFBA)	<0.0005		0.0050	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluoropentanoic acid (PFPeA)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluorohexanoic acid (PFHxA)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluoroheptanoic acid (PFHpA)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluorooctanoic acid (PFOA)	<0.0004		0.0040	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluorononanoic acid (PFNA)	<0.0004		0.0040	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluorodecanoic acid (PFDA)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluoroundecanoic acid (PFUnA)	<0.0004		0.0020	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluorododecanoic acid (PFDoA)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluorobutanesulfonic acid (PFBS)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluorohexanesulfonic acid (PFHxS)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluorooctanesulfonic acid (PFOS)	<0.0004		0.0040	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluoropentanesulfonic acid (PFPeS)	<0.0004		0.0040	ug/L		12/04/23 07:17	12/04/23 20:45	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.0005		0.0050	ug/L		12/04/23 07:17	12/04/23 20:45	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<0.0005		0.0020	ug/L		12/04/23 07:17	12/04/23 20:45	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<0.0005		0.0050	ug/L		12/04/23 07:17	12/04/23 20:45	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.0006		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.0007		0.0050	ug/L		12/04/23 07:17	12/04/23 20:45	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.0006		0.0050	ug/L		12/04/23 07:17	12/04/23 20:45	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.0009		0.0200	ug/L		12/04/23 07:17	12/04/23 20:45	1

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: MBL 810-81720/1-A

Matrix: Drinking Water

Analysis Batch: 81821

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 81720

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.0003		0.0040	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.0004		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.0005		0.0030	ug/L		12/04/23 07:17	12/04/23 20:45	1
Isotope Dilution	%Recovery	MBL Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	86		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C4 PFBA	94		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C3 PFBS	92		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C5 PFPeA	95		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C5 PFHxA	91		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C4 PFHpA	90		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C8 PFOA	94		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C9 PFNA	93		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C6 PFDA	92		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C7 PFUnA	88		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C2 PFDoA	87		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C8 PFOS	90		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C3 PFHxS	90		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C2-4:2-FTS	88		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C2-6:2-FTS	91		50 - 200			12/04/23 07:17	12/04/23 20:45	1
13C2-8:2-FTS	91		50 - 200			12/04/23 07:17	12/04/23 20:45	1

Lab Sample ID: LLCS 810-81720/2-A

Matrix: Drinking Water

Analysis Batch: 81821

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 81720

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	0.00200	0.0020		ug/L		100	50 - 150
Perfluoropentanoic acid (PFPeA)	0.00200	0.0020		ug/L		98	50 - 150
Perfluorohexanoic acid (PFHxA)	0.00200	0.0020		ug/L		100	50 - 150
Perfluoroheptanoic acid (PFHpA)	0.00200	0.0019		ug/L		97	50 - 150
Perfluorooctanoic acid (PFOA)	0.00200	0.0019		ug/L		96	50 - 150
Perfluorononanoic acid (PFNA)	0.00200	0.0020		ug/L		100	50 - 150
Perfluorodecanoic acid (PFDA)	0.00200	0.0020		ug/L		100	50 - 150
Perfluoroundecanoic acid (PFUnA)	0.00200	0.0020		ug/L		100	50 - 150
Perfluorododecanoic acid (PFDoA)	0.00200	0.0019		ug/L		97	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.00189	0.0019		ug/L		101	50 - 150
Perfluorobutanesulfonic acid (PFBS)	0.00178	0.0017		ug/L		93	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.00183	0.0017		ug/L		91	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.00191	0.0017		ug/L		88	50 - 150
Perfluorooctanesulfonic acid (PFOS)	0.00186	0.0018		ug/L		99	50 - 150

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: LLCS 810-81720/2-A

Matrix: Drinking Water

Analysis Batch: 81821

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 81720

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	0.00188	0.0017		ug/L		93	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.00200	0.0019		ug/L		95	50 - 150
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	0.00187	0.0016		ug/L		83	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.00189	0.0017		ug/L		92	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.00188	0.0020		ug/L		105	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.00190	0.0020		ug/L		105	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.00192	0.0021		ug/L		110	50 - 150
Nonafluoro-3,6-dioxahепtanoic acid (NFDHA)	0.00200	0.0020		ug/L		98	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.00200	0.0020		ug/L		100	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.00200	0.0019		ug/L		94	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	0.00178	0.0015		ug/L		85	50 - 150

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C3 HFPO-DA	87		50 - 200
13C4 PFBA	94		50 - 200
13C3 PFBS	95		50 - 200
13C5 PFPeA	98		50 - 200
13C5 PFHxA	91		50 - 200
13C4 PFHpA	93		50 - 200
13C8 PFOA	96		50 - 200
13C9 PFNA	97		50 - 200
13C6 PFDA	93		50 - 200
13C7 PFUnA	91		50 - 200
13C2 PFDoA	90		50 - 200
13C8 PFOS	94		50 - 200
13C3 PFHxS	94		50 - 200
13C2-4:2-FTS	91		50 - 200
13C2-6:2-FTS	92		50 - 200
13C2-8:2-FTS	93		50 - 200

Method: 537.1 UCMR5 - Perfluorinated Alkyl Acids (LC/MS)

Lab Sample ID: MBL 810-79577/1-A

Matrix: Drinking Water

Analysis Batch: 79661

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 79577

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.0005		0.0050	ug/L		11/10/23 07:13	11/11/23 13:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.0006		0.0060	ug/L		11/10/23 07:13	11/11/23 13:30	1

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method: 537.1 UCMR5 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: MBL 810-79577/1-A

Matrix: Drinking Water

Analysis Batch: 79661

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 79577

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTA)	<0.0007		0.0080	ug/L		11/10/23 07:13	11/11/23 13:30	1
Perfluorotridecanoic acid (PFTDA)	<0.0006		0.0070	ug/L		11/10/23 07:13	11/11/23 13:30	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	102		70 - 130	11/10/23 07:13	11/11/23 13:30	1
13C2 PFHxA	99		70 - 130	11/10/23 07:13	11/11/23 13:30	1
13C2 PFDA	91		70 - 130	11/10/23 07:13	11/11/23 13:30	1
13C3 HFPO-DA	91		70 - 130	11/10/23 07:13	11/11/23 13:30	1

Lab Sample ID: LLCS 810-79577/2-A

Matrix: Drinking Water

Analysis Batch: 79661

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 79577

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
N-ethylperfluorooctanesulfonami doacetic acid (NEtFOSAA)	0.00200	0.0018		ug/L		90	50 - 150
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	0.00200	0.0017		ug/L		83	50 - 150
Perfluorotetradecanoic acid (PFTA)	0.00200	0.0018		ug/L		89	50 - 150
Perfluorotridecanoic acid (PFTDA)	0.00200	0.0020		ug/L		98	50 - 150

Surrogate	LLCS %Recovery	LLCS Qualifier	Limits
d5-NEtFOSAA	96		70 - 130
13C2 PFHxA	98		70 - 130
13C2 PFDA	101		70 - 130
13C3 HFPO-DA	95		70 - 130

Method: 200.7 UCMR5 - Metals (ICP)

Lab Sample ID: MBL 810-79954/1-A

Matrix: Drinking Water

Analysis Batch: 80130

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 79954

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<1.80		9.00	ug/L		11/14/23 08:22	11/15/23 13:07	1

Lab Sample ID: LLCS 810-79954/2-A

Matrix: Drinking Water

Analysis Batch: 80130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 79954

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	9.00	9.04		ug/L		100	50 - 150

QC Association Summary

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

LCMS

Prep Batch: 79577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-84037-1	Cobb County Water	Total/NA	Drinking Water	537.1 DW	
MBL 810-79577/1-A	Method Blank	Total/NA	Drinking Water	537.1 DW	
LLCS 810-79577/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW	

Analysis Batch: 79661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-84037-1	Cobb County Water	Total/NA	Drinking Water	537.1 UCMR5	79577
MBL 810-79577/1-A	Method Blank	Total/NA	Drinking Water	537.1 UCMR5	79577
LLCS 810-79577/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 UCMR5	79577

Prep Batch: 81065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-84037-1	Cobb County Water	Total/NA	Drinking Water	533	
MBL 810-81065/1-A	Method Blank	Total/NA	Drinking Water	533	
LLCS 810-81065/2-A	Lab Control Sample	Total/NA	Drinking Water	533	

Analysis Batch: 81124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-84037-1	Cobb County Water	Total/NA	Drinking Water	533	81065
MBL 810-81065/1-A	Method Blank	Total/NA	Drinking Water	533	81065
LLCS 810-81065/2-A	Lab Control Sample	Total/NA	Drinking Water	533	81065

Prep Batch: 81720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-84037-1FRB	FRB	Total/NA	Drinking Water	533	
MBL 810-81720/1-A	Method Blank	Total/NA	Drinking Water	533	
LLCS 810-81720/2-A	Lab Control Sample	Total/NA	Drinking Water	533	

Analysis Batch: 81821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-84037-1FRB	FRB	Total/NA	Drinking Water	533	81720
MBL 810-81720/1-A	Method Blank	Total/NA	Drinking Water	533	81720
LLCS 810-81720/2-A	Lab Control Sample	Total/NA	Drinking Water	533	81720

Metals

Prep Batch: 79954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-84037-1	Cobb County Water	Total/NA	Drinking Water	200.7 UCMR5	
MBL 810-79954/1-A	Method Blank	Total/NA	Drinking Water	200.7 UCMR5	
LLCS 810-79954/2-A	Lab Control Sample	Total/NA	Drinking Water	200.7 UCMR5	

Analysis Batch: 80130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-84037-1	Cobb County Water	Total/NA	Drinking Water	200.7 UCMR5	79954
MBL 810-79954/1-A	Method Blank	Total/NA	Drinking Water	200.7 UCMR5	79954
LLCS 810-79954/2-A	Lab Control Sample	Total/NA	Drinking Water	200.7 UCMR5	79954

Lab Chronicle

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Client Sample ID: Cobb County Water

Lab Sample ID: 810-84037-1

Date Collected: 11/06/23 11:20

Matrix: Drinking Water

Date Received: 11/07/23 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			81065	ER	EA SB	11/27/23 13:51
Total/NA	Analysis	533		1	81124	KB	EA SB	11/29/23 05:55
Total/NA	Prep	537.1 DW			79577	SS	EA SB	11/10/23 07:13
Total/NA	Analysis	537.1 UCMR5		1	79661	PP	EA SB	11/11/23 16:19
Total/NA	Prep	200.7 UCMR5			79954	AC	EA SB	11/14/23 08:22
Total/NA	Analysis	200.7 UCMR5		1	80130	AC	EA SB	11/15/23 13:57

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Accreditation/Certification Summary

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Laboratory: Eurofins Eaton Analytical South Bend

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Georgia (DW)	State	929	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
200.7 UCMR5	200.7 UCMR5	Drinking Water	Lithium

Method Summary

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Method	Method Description	Protocol	Laboratory
533	Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water	EPA	EA SB
537.1 UCMR5	Perfluorinated Alkyl Acids (LC/MS)	EPA	EA SB
200.7 UCMR5	Metals (ICP)	EPA	EA SB
200.7 UCMR5	Preparation, Total Recoverable Metals	EPA	EA SB
533	Extraction of Perfluorinated and Polyfluorinated Alkyl Acids	EPA	EA SB
537.1 DW	Extraction of Perfluorinated Alkyl Acids	EPA	EA SB

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Sample Summary

Client: Cobb County Water System
Project/Site: UCMR5 - GA0670003 - SE2 - Cobb County

Job ID: 810-84037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
810-84037-1	Cobb County Water	Drinking Water	11/06/23 11:20	11/07/23 08:45	GA0670003
810-84037-1FRB	Cobb County Water	Drinking Water	11/06/23 11:20	11/07/23 08:45	GA0670003

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

South Bend, IN

110 S Hill Street

South Bend, IN 46617

Phone (574) 233-4777; Phone (574) 233-8207

"UCMR 5 Sampling Form for Single Collection Site"

(Separate form is needed for each collection site)



Environment Testing
America

Company Contact: Jesse LeBoeuf

Company Name: Cobb County Water

Company Address: 600 South Cobb Dr.
Marietta, GA 30060

Phone: 770 419 6361

Email: Jesse.LeBoeuf@cobbcounty.org

Purchase Order: _____

Lab PM(name): Pamela Brown

PM Email: _____

EEA Project: 81005692

PWSID: GA0670003

FacID: _____

SPID: _____

FacName: Cobb County Water

SPName: _____

Sampling

Event: UCMR5 and sample

Water System Name: Cobb County Water

Collection Location: 3610 Mars Hill Rd, Acworth GA

Scheduled Collection
Date: 11/6/2023

Sampler Name (Print): Jesse LeBoeuf

Date/Time
Sampled: 11/6/2023 11:20am

Client Storage temp, if > 2 days from collection: _____

AREA BELOW FOR LAB USE ONLY

For UCMR 5 specific criteria see: REC-WI55108 Guidance Document for UCMR 5 Sample Receiving Req



810-84037 Chain of Custody

		IR Gun#: <u>30</u>		<u>Ice</u> <u>Wet</u> / Blue					
Method	Type	# Bot	Temp °C (10°C within 2 days of collection, 6°C for > 2 days) Initial / Corrected	pH* value	✓if receipt pH acceptable	✓if pH needs adjustment	Cl (P/A) **	Sample Comments	sample is invalid
200.7	FS	1			✓				
200.7	FS	2							
533	FS	1	<u>2.4 / 2.2</u>		✓		<u>A</u>		
533	FS	2	<u>2.8 / 2.6</u>		✓		<u>A</u>		
533	FS	3	<u>2.2 / 2.0</u>		✓		<u>A</u>		
533	FRB	1	<u>2.4 / 2.2</u>		✓		<u>A</u>		
537.1	FS	1	<u>2.6 / 2.4</u>		✓		<u>A</u>		
537.1	FS	2	<u>2.6 / 2.4</u>		✓		<u>A</u>		
537.1	FS	3	<u>2.4 / 2.2</u>		✓		<u>A</u>		
537.1	FRB	1	<u>2.4 / 2.2</u>		✓		<u>A</u>		

* pH < 2 for 200.7. pH 6-8 for 533 & 537.1. Note: 200.7 & 533 pH may be adjusted upon receipt.

** A = Absent if Free Cl < 0.1 mg/L; P = Chlorine is present

Received By

[Signature]

Date/Time

11/7/23 845am

Login Sample Receipt Checklist

Client: Cobb County Water System

Job Number: 810-84037-1

Login Number: 84037

List Number: 1

Creator: Moffitt, Tisha

List Source: Eurofins Eaton Analytical South Bend

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	