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ANALYTICAL REPORT

PREPARED FOR

Attn: Henderson Labs
J. R. Henderson Labs, Inc
123 Seaman Avenue
Beachwood, New Jersey 08722
Generated 4/24/2024 8:41:20 AM

JOB DESCRIPTION

UCMR5 - Stafford
BHW Area

JOB NUMBER

810-100624-1

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.

myEOL

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

Amanda Scott

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Table of Contents

Definitions/Glossary

Client: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

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

Job ID: 810-100624-1 **Eurofins Eaton Analytical South Bend**

Job Narrative
810-100624-1

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 4/12/2024 2:00 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice.

PFAS
Method 533_UCMR5: The pH of the following sample was adjusted to pH 7 in the laboratory: 91003/Mill Creek Rd WTP/TP001003 (810-100624-1)

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: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

Client Sample ID: 91003/Mill Creek Rd WTP/TP001003 **Lab Sample ID: 810-100624-1**
PWSID Number: NJ1530004

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Lithium	13.6		9.00	ug/L	1		200.7 UCMR5	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

Client Sample ID: 91003/Mill Creek Rd WTP/TP001003
Date Collected: 04/11/24 10:50
Date Received: 04/12/24 14:00

Lab Sample ID: 810-100624-1
Matrix: Drinking Water
PWSID Number: NJ1530004

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.0050		0.0050	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluoropentanoic acid (PFPeA)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluorohexanoic acid (PFHxA)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluoroheptanoic acid (PFHpA)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluorooctanoic acid (PFOA)	<0.0040		0.0040	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluorononanoic acid (PFNA)	<0.0040		0.0040	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluorodecanoic acid (PFDA)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluoroundecanoic acid (PFUnA)	<0.0020		0.0020	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluorododecanoic acid (PFDoA)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluorobutanesulfonic acid (PFBS)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluorohexanesulfonic acid (PFHxS)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluorooctanesulfonic acid (PFOS)	<0.0040		0.0040	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluoropentanesulfonic acid (PFPeS)	<0.0040		0.0040	ug/L		04/19/24 08:47	04/20/24 21:45	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.0050		0.0050	ug/L		04/19/24 08:47	04/20/24 21:45	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<0.0020		0.0020	ug/L		04/19/24 08:47	04/20/24 21:45	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<0.0050		0.0050	ug/L		04/19/24 08:47	04/20/24 21:45	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.0050		0.0050	ug/L		04/19/24 08:47	04/20/24 21:45	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.0050		0.0050	ug/L		04/19/24 08:47	04/20/24 21:45	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.0200		0.0200	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.0040		0.0040	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.0030		0.0030	ug/L		04/19/24 08:47	04/20/24 21:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*82*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C4 PFBA	*89*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C3 PFBS	*100*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C5 PFPeA	*92*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C5 PFHxA	*85*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C4 PFHpA	*82*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C8 PFOA	*85*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C9 PFNA	*90*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C6 PFDA	*88*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C7 PFUnA	*91*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C2 PFDoA	*91*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C8 PFOS	*103*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C3 PFHxS	*100*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*

Client Sample ID: 91003/Mill Creek Rd WTP/TP001003
Date Collected: 04/11/24 10:50
Date Received: 04/12/24 14:00

Lab Sample ID: 810-100624-1
Matrix: Drinking Water
PWSID Number: NJ1530004

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	*88*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C2-6:2-FTS	*88*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*1*
13C2-8:2-FTS	*98*		*50 - 200*	*04/19/24 08:47*	*04/20/24 21:45*	*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)	<0.0047		0.0047	ug/L		04/18/24 05:18	04/19/24 18:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.0056		0.0056	ug/L		04/18/24 05:18	04/19/24 18:45	1
Perfluorotetradecanoic acid (PFTA)	<0.0075		0.0075	ug/L		04/18/24 05:18	04/19/24 18:45	1
Perfluorotridecanoic acid (PFTrDA)	<0.0065		0.0065	ug/L		04/18/24 05:18	04/19/24 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*88*		*70 - 130*	*04/18/24 05:18*	*04/19/24 18:45*	*1*
13C2 PFHxA	*87*		*70 - 130*	*04/18/24 05:18*	*04/19/24 18:45*	*1*
13C2 PFDA	*87*		*70 - 130*	*04/18/24 05:18*	*04/19/24 18:45*	*1*
13C3 HFPO-DA	*84*		*70 - 130*	*04/18/24 05:18*	*04/19/24 18:45*	*1*

Method: EPA 200.7 UCMR5 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	13.6		9.00	ug/L		04/17/24 12:20	04/18/24 14:39	1

Surrogate Summary

Client: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

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

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS	PFHxA	PFDA	HFPODA
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
810-100624-1	91003/Mill Creek Rd WTP/TP00	88	87	87	84
LLCS 810-95880/2-A	Lab Control Sample	83	90	88	86
MBL 810-95880/1-A	Method Blank	86	88	88	87

Surrogate Legend

d5NEFOS = d5-NEtFOSAA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
HFPODA = 13C3 HFPO-DA

Isotope Dilution Summary

Client: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

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)
810-100624-1	91003/Mill Creek Rd WTP/TP00	82	89	100	92	85	82	85	90
LLCS 810-96042/2-A	Lab Control Sample	96	103	105	108	102	98	102	106
MBL 810-96042/1-A	Method Blank	101	109	109	112	107	103	107	113

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	C6PFDA (50-200)	13C7PUA (50-200)	PFDoA (50-200)	C8PFOS (50-200)	C3PFHS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
810-100624-1	91003/Mill Creek Rd WTP/TP00	88	91	91	103	100	88	88	98
LLCS 810-96042/2-A	Lab Control Sample	104	107	104	106	103	90	98	107
MBL 810-96042/1-A	Method Blank	109	110	106	109	108	95	95	113

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
PFDoA = 13C2 PFDoA
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: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

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

Lab Sample ID: MBL 810-96042/1-A
Matrix: Drinking Water
Analysis Batch: 96130

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96042

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.0005		0.0050	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluoropentanoic acid (PFPeA)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluorohexanoic acid (PFHxA)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluoroheptanoic acid (PFHpA)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluorooctanoic acid (PFOA)	<0.0004		0.0040	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluorononanoic acid (PFNA)	<0.0004		0.0040	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluorodecanoic acid (PFDA)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluoroundecanoic acid (PFUnA)	<0.0004		0.0020	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluorododecanoic acid (PFDoA)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluorobutanesulfonic acid (PFBS)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluorohexanesulfonic acid (PFHxS)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluorooctanesulfonic acid (PFOS)	<0.0004		0.0040	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluoropentanesulfonic acid (PFPeS)	<0.0004		0.0040	ug/L		04/19/24 08:47	04/20/24 17:13	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.0005		0.0050	ug/L		04/19/24 08:47	04/20/24 17:13	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<0.0005		0.0020	ug/L		04/19/24 08:47	04/20/24 17:13	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<0.0005		0.0050	ug/L		04/19/24 08:47	04/20/24 17:13	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.0006		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.0007		0.0050	ug/L		04/19/24 08:47	04/20/24 17:13	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.0006		0.0050	ug/L		04/19/24 08:47	04/20/24 17:13	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.0009		0.0200	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.0003		0.0040	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.0004		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.0005		0.0030	ug/L		04/19/24 08:47	04/20/24 17:13	1

Isotope Dilution	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*101*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C4 PFBA	*109*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C3 PFBS	*109*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C5 PFPeA	*112*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C5 PFHxA	*107*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C4 PFHpA	*103*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C8 PFOA	*107*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C9 PFNA	*113*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C6 PFDA	*109*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C7 PFUnA	*110*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C2 PFDoA	*106*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*
13C8 PFOS	*109*		*50 - 200*	*04/19/24 08:47*	*04/20/24 17:13*	*1*

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

Lab Sample ID: MBL 810-96042/1-A
Matrix: Drinking Water
Analysis Batch: 96130

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96042

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFHxS	108		50 - 200	04/19/24 08:47	04/20/24 17:13	1
13C2-4:2-FTS	95		50 - 200	04/19/24 08:47	04/20/24 17:13	1
13C2-6:2-FTS	95		50 - 200	04/19/24 08:47	04/20/24 17:13	1
13C2-8:2-FTS	113		50 - 200	04/19/24 08:47	04/20/24 17:13	1

Lab Sample ID: LLCS 810-96042/2-A
Matrix: Drinking Water
Analysis Batch: 96130

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96042

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	0.00200	0.0021		ug/L		103	50 - 150
Perfluoropentanoic acid (PFPeA)	0.00200	0.0021		ug/L		107	50 - 150
Perfluorohexanoic acid (PFHxA)	0.00200	0.0020		ug/L		102	50 - 150
Perfluoroheptanoic acid (PFHpA)	0.00200	0.0021		ug/L		103	50 - 150
Perfluorooctanoic acid (PFOA)	0.00200	0.0021		ug/L		106	50 - 150
Perfluorononanoic acid (PFNA)	0.00200	0.0022		ug/L		112	50 - 150
Perfluorodecanoic acid (PFDA)	0.00200	0.0021		ug/L		105	50 - 150
Perfluoroundecanoic acid (PFUnA)	0.00200	0.0021		ug/L		107	50 - 150
Perfluorododecanoic acid (PFDoA)	0.00200	0.0021		ug/L		106	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.00189	0.0021		ug/L		110	50 - 150
Perfluorobutanesulfonic acid (PFBS)	0.00178	0.0017		ug/L		98	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.00183	0.0018		ug/L		101	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.00191	0.0018		ug/L		96	50 - 150
Perfluorooctanesulfonic acid (PFOS)	0.00186	0.0019		ug/L		103	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	0.00188	0.0018		ug/L		96	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.00200	0.0021		ug/L		105	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.00187	0.0018		ug/L		99	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	0.0023		ug/L		122	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.00190	0.0022		ug/L		116	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.00192	0.0021		ug/L		108	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.00200	0.0020		ug/L		101	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.00200	0.0022		ug/L		110	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.00200	0.0020		ug/L		101	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	0.00178	0.0018		ug/L		103	50 - 150

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

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C3 HFPO-DA	96		50 - 200
13C4 PFBA	103		50 - 200
13C3 PFBS	105		50 - 200
13C5 PFPeA	108		50 - 200
13C5 PFHxA	102		50 - 200
13C4 PFHpA	98		50 - 200
13C8 PFOA	102		50 - 200
13C9 PFNA	106		50 - 200
13C6 PFDA	104		50 - 200
13C7 PFUnA	107		50 - 200
13C2 PFDoA	104		50 - 200
13C8 PFOS	106		50 - 200
13C3 PFHxS	103		50 - 200
13C2-4:2-FTS	90		50 - 200
13C2-6:2-FTS	98		50 - 200
13C2-8:2-FTS	107		50 - 200

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

Lab Sample ID: MBL 810-95880/1-A
Matrix: Drinking Water
Analysis Batch: 96043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95880

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.0007		0.0050	ug/L		04/18/24 05:18	04/19/24 17:01	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.0006		0.0060	ug/L		04/18/24 05:18	04/19/24 17:01	1
Perfluorotetradecanoic acid (PFTA)	<0.0007		0.0080	ug/L		04/18/24 05:18	04/19/24 17:01	1
Perfluorotridecanoic acid (PFTrDA)	<0.0006		0.0070	ug/L		04/18/24 05:18	04/19/24 17:01	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	86		70 - 130	04/18/24 05:18	04/19/24 17:01	1
13C2 PFHxA	88		70 - 130	04/18/24 05:18	04/19/24 17:01	1
13C2 PFDA	88		70 - 130	04/18/24 05:18	04/19/24 17:01	1
13C3 HFPO-DA	87		70 - 130	04/18/24 05:18	04/19/24 17:01	1

Lab Sample ID: LLCS 810-95880/2-A
Matrix: Drinking Water
Analysis Batch: 96043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 95880

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.00200	0.0017		ug/L		87	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.00200	0.0016		ug/L		79	50 - 150
Perfluorotetradecanoic acid (PFTA)	0.00200	0.0015		ug/L		75	50 - 150
Perfluorotridecanoic acid (PFTrDA)	0.00200	0.0015		ug/L		75	50 - 150

Surrogate	LLCS %Recovery	LLCS Qualifier	Limits
d5-NEtFOSAA	83		70 - 130

QC Sample Results

Client: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

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

Lab Sample ID: LLCS 810-95880/2-A
Matrix: Drinking Water
Analysis Batch: 96043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 95880

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C2 PFHxA	*90*		*70 - 130*
13C2 PFDA	*88*		*70 - 130*
13C3 HFPO-DA	*86*		*70 - 130*

Method: 200.7 UCMR5 - Metals (ICP)

Lab Sample ID: MBL 810-95874/1-A
Matrix: Drinking Water
Analysis Batch: 95963

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95874

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<1.80		9.00	ug/L		04/17/24 12:20	04/18/24 13:45	1

Lab Sample ID: LLCS 810-95874/2-A
Matrix: Drinking Water
Analysis Batch: 95963

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 95874

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	9.00	9.98		ug/L		111	50 - 150

QC Association Summary

Client: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

LCMS

Prep Batch: 95880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-100624-1	91003/Mill Creek Rd WTP/TP001003	Total/NA	Drinking Water	537.1 DW	
MBL 810-95880/1-A	Method Blank	Total/NA	Drinking Water	537.1 DW	
LLCS 810-95880/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW	

Prep Batch: 96042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-100624-1	91003/Mill Creek Rd WTP/TP001003	Total/NA	Drinking Water	533	
MBL 810-96042/1-A	Method Blank	Total/NA	Drinking Water	533	
LLCS 810-96042/2-A	Lab Control Sample	Total/NA	Drinking Water	533	

Analysis Batch: 96043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-100624-1	91003/Mill Creek Rd WTP/TP001003	Total/NA	Drinking Water	537.1 UCMR5	95880
MBL 810-95880/1-A	Method Blank	Total/NA	Drinking Water	537.1 UCMR5	95880
LLCS 810-95880/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 UCMR5	95880

Analysis Batch: 96130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-100624-1	91003/Mill Creek Rd WTP/TP001003	Total/NA	Drinking Water	533	96042
MBL 810-96042/1-A	Method Blank	Total/NA	Drinking Water	533	96042
LLCS 810-96042/2-A	Lab Control Sample	Total/NA	Drinking Water	533	96042

Metals

Prep Batch: 95874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-100624-1	91003/Mill Creek Rd WTP/TP001003	Total/NA	Drinking Water	200.7 UCMR5	
MBL 810-95874/1-A	Method Blank	Total/NA	Drinking Water	200.7 UCMR5	
LLCS 810-95874/2-A	Lab Control Sample	Total/NA	Drinking Water	200.7 UCMR5	

Analysis Batch: 95963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-100624-1	91003/Mill Creek Rd WTP/TP001003	Total/NA	Drinking Water	200.7 UCMR5	95874
MBL 810-95874/1-A	Method Blank	Total/NA	Drinking Water	200.7 UCMR5	95874
LLCS 810-95874/2-A	Lab Control Sample	Total/NA	Drinking Water	200.7 UCMR5	95874

Lab Chronicle

Client: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

Client Sample ID: 91003/Mill Creek Rd WTP/TP001003
Date Collected: 04/11/24 10:50
Date Received: 04/12/24 14:00

Lab Sample ID: 810-100624-1
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			96042	LB	EA SB	04/19/24 08:47
Total/NA	Analysis	533		1	96130	PP	EA SB	04/20/24 21:45
Total/NA	Prep	537.1 DW			95880	DB	EA SB	04/18/24 05:18
Total/NA	Analysis	537.1 UCMR5		1	96043	BS	EA SB	04/19/24 18:45
Total/NA	Prep	200.7 UCMR5			95874	AC	EA SB	04/17/24 12:20
Total/NA	Analysis	200.7 UCMR5		1	95963	AC	EA SB	04/18/24 14:39

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: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

Laboratory: Eurofins Eaton Analytical South Bend

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
USEPA UCMR 5	US Federal Programs	IN00035	12-31-25

Method Summary

Client: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

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: J. R. Henderson Labs, Inc
Project/Site: UCMR5 - Stafford

Job ID: 810-100624-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
810-100624-1	91003/Mill Creek Rd WTP/TP001003	Drinking Water	04/11/24 10:50	04/12/24 14:00	NJ1530004

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)

eurofins | Environment Testing America

Company Contact: Hope Miller
Company Name: JR Henderson Labs Inc
Company Address: 123 Seaman Ave Beachwood NJ 08722
Phone: (732) 341-1211
Email: hmiller@henderson-labs.com
Purchase Order:

Lab PM(name):
PM Email:
EEA Project:

PWSID: NJ1530004
FacID: ~~TP~~ 91003
SPID: TP001003
FacName: Mill Creek Rd WTP
SPName: Entry Point to DS
Sampling Event: SE2

[redacted] Stafford Twp MUA
Collection Location: Mill Creek Rd WTP
Scheduled Collection Date: TP001003

Sampler Name (Print): Nick Evans
Date/Time Sampled: 4-11-24 @ 1050

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 Requirements and QA-SOP-SOP48964 UCMR 5 QAPP

IR Gun#: 25

Ice: (Wet) / 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	✓if sample is invalid
200.7	FS	1			✓			810-100624 Chain of Custody	
200.7	FS	2							
533	FS	1	8.6 / 7.8		✓		A		
533	FS	2	8.6 / 7.8		✓		A		
533	FS	3	8.6 / 7.8		✓		A		
533	FRB	1	8.0 / 7.2		✓		A		
537.1	FS	1	8.4 / 7.6		✓		A		
537.1	FS	2	8.4 / 7.6		✓		A		
537.1	FS	3	8.4 / 7.6		✓		A		
537.1	FRB	1	9.0 / 8.2		✓		A		

* 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 Kamaran Williams *Date/Time* 4/12/24 1400

Login Sample Receipt Checklist

Client: J. R. Henderson Labs, Inc

Job Number: 810-100624-1

Login Number: 100624
List Number: 1
Creator: Williams, Kameron

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	