

Ms. Tiffany Minder

Environmental Compliance Supervisor
City of Flint Water Pollution
Water Pollution Control Facilities
G4652 Beecher Rd.
Flint, MI, 48532

RE: ***Discharge Permit Submittal– July 2025 through September 2025***

Permit No.: 6-08-04-04-GML1

FILE: 1088190/1940113233/Docs

Dear **Ms. Minder:**

In accordance with the requirements of the above referenced discharge permit, we are providing you with the following discharge information for the period July 1, 2025 to September 30, 2025 for the Coldwater Road Landfill facility, located at 6220 Horton Avenue, Mount Morris, Michigan. In addition, we are reporting the performance of the per- and polyfluoroalkyl substances (PFAS) pretreatment system in this letter. This report includes the following information:

October 26, 2025

- Periodic Report on Continued Compliance, certification.
- Periodic Report on Continued Compliance Sample (Table 1).
- Daily Discharge Summary Table (Table 2).
- PFAS Sampling Results Table (Table 3).
- Analytical Reports provided by Merit Laboratories, Inc. for samples from the on-Site, above ground collection tank collected on September 9, 2025.
- Analytical Reports provided by Merit Laboratories, Inc. for samples from the on-Site, PFAS pretreatment system collected on September 25, 2025, and September 30, 2025, during the discharge of the liquids from the on-Site, above ground collection tank through the system.
- Copy of Chain-of-Custody forms.

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The laboratory analytical results indicate concentrations in the effluent were below the Sewer Use Permit limits for the required monitoring parameters during the discharge period.

In addition, the PFAS analytical results for the effluent sample were below the Sewer Use Permit limits and were below the current EGLE Part 4, Water Quality Standards, Rule 57 Water Quality Values. Therefore, the PFAS pretreatment system is operating as designed.

Influent and post-GAC vessel samples were collected from the four in-line GAC vessels on September 25, 2025 and September 30, 2025 during the accumulation tank discharge. The influent sample had a detection of 4,300 ng/l for perfluorooctane sulfonic acid (PFOS).

PFOS was detected at a concentration 8.4 ng/l from the primary GAC vessel sample collected at the start of the discharge on September 25, 2025. In the samples collected just before discharge was discontinued on September 30, 2025, PFOS was detected at a concentration of 1.6 ng/l from the primary GAC vessel sample port attached to the discharge hose, and at a concentration of 1.4 ng/l from the secondary (second) GAC vessel sample port. PFOS was not detected above the reporting limit in the tertiary (third) or quaternary (fourth) GAC vessel sample ports.

Based on these data, the GAC vessels will continue to be utilized for the next discharge event, and we will evaluate whether changing out the GAC in the primary vessel will be necessary following that discharge event. If it is determined that the primary GAC vessel should be changed out, then new GAC would be placed in the primary vessel and the system components would be changed so that the existing quaternary (fourth), tertiary (third), and secondary GAC vessels would be moved up in position making the primary vessel the new quaternary vessel (last vessel before discharge) for the approved four-vessel pretreatment system.

Please call me at 313-333-0211 if you have any questions.

Yours sincerely,

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.



Clifford S. Yantz

Project Manager

M 313.333.0211

Clifford.yantz@ramboll.com

cc: Mr. Kevin Forbes – Beecher Metropolitan District, Flint, MI
Ms. Nicole Sanabria – EGLE (via email)
Ms. Christina Hebert – EGLE (via email)
Mr. Brendan Mullen – RACER Trust (via email)
Mr. David Favero – RACER Trust (via email)
Mr. Kevin Schneider – Ramboll (via email)

**City of Flint
Industrial Pretreatment Program**

Periodic Report on Continued Compliance

Company Name: RACER Trust, Coldwater Road
Street Address: 6220 Horton Avenue, Flint, Michigan
Permit Number: 6-08-04-04-GML1
Outfall Number: 001

Reporting Period: July 1, 2025 through September 30, 2025

Average Volume of Daily Discharge (during reporting period): 4,540 gallons
(Two One Day Events)

Complete the following:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name of Authorized Representative: Clifford Yantz

Title of Authorized Representative: Project Manager, Ramboll Americas Engineering Solutions, Inc., As agent for the RACER Trust

Signature of Authorized Representative: *Clifford Yantz, agent for RACER Trust*

Date Signed by Authorized Representative: 10/26/25

If required to implement a Toxic Organics Management Plan (TOMP), complete the following:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last Periodic Report on Continued Compliance. I further certify that, this facility is implementing the toxic organic management plan submitted to the control authority."

Name of Authorized Representative: N/A

Title of Authorized Representative: N/A

Signature of Authorized Representative: N/A

Date Signed by Authorized Representative: N/A

Table 1
Periodic Report on Continued Compliance
City of Flint Sewer User Self-Monitoring Report
Third Quarter - 2025 - GSWVR Sample

RACER Trust - Coldwater Road Landfill Facility Permit Number 6-08-04-04-GML1 6220 Horton Avenue						
Analytical Parameter	Ammonia-N	BOD5	HEM	pH @ 25°C	Phosphorus	TSS
Units	mg/L	mg/L	mg/L	SU	mg/L	mg/L
Sampling Frequency	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch
Sampling Procedure	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample
Daily Maximum Limit	110	1196	100	NA	14	570
Maximum Limit	NA	NA	NA	10.5	NA	NA
Minimum Limit	NA	NA	NA	6	NA	NA
Test Result	1.98	<3	<2	7.26	0.01	12.2
Test Method	4500-NH3 G	10360	1664A	4500-H+ B	4500-PE	2540 D
Test Date	9/11/2025	9/10/2025	9/16/2025	9/9/2025	9/17/2025	9/12/2025
Sample Date	9/9/2025	9/9/2025	9/9/2025	9/9/2025	9/9/2025	9/9/2025
Sample Type	wastewater	wastewater	wastewater	wastewater	wastewater	wastewater
Test Result						
Test Method						
Test Date						
Sample Date						
Sample Type						
Test Result						
Test Method						
Test Date						
Sample Date						
Sample Type						
Average Daily Conc.						
No. of Samples						
Number of Limit Exceedances						

Table 1
Periodic Report on Continued Compliance
City of Flint Sewer User Self-Monitoring Report
Third Quarter - 2025 - GSWVR Sample

RACER Trust - Coldwater Road Landfill Facility Permit Number 6-08-04-04-GML1 6220 Horton Avenue							
Analytical Parameter	Arsenic	Chromium	Copper	Mercury	Nickel	Zinc	Cyanide, available
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Sampling Frequency	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch
Sampling Procedure	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample
Daily Maximum Limit	0.051	1.273	1.714	0.000012	0.543	2.626	0.165
Maximum Limit	NA	NA	NA	NA	NA	NA	NA
Minimum Limit	NA	NA	NA	NA	NA	NA	NA
Test Result	0.003	0.041	0.233	<0.0002	0.079	0.029	<0.0020
Test Method	E200.8	200.8	200.8	245.1	200.8	200.8	1677
Test Date	9/10/2025	9/10/2025	9/10/2025	9/16/2025	9/10/2025	9/10/2025	9/15/2025
Sample Date	9/9/2025	9/9/2025	9/9/2025	9/9/2025	9/9/2025	9/9/2025	9/9/2025
Sample Type	wastewater	wastewater	wastewater	wastewater	wastewater	wastewater	wastewater
Test Result							
Test Method							
Test Date							
Sample Date							
Sample Type							
Test Result							
Test Method							
Test Date							
Sample Date							
Sample Type							
Average Daily Conc.							
No. of Samples							
Number of Limit Exceedances							

Table 1
Periodic Report on Continued Compliance
City of Flint Sewer User Self-Monitoring Report
Third Quarter - 2025 - GSWVR Sample

RACER Trust - Coldwater Road Landfill Facility Permit Number 6-08-04-04-GML1 6220 Horton Avenue							
Analytical Parameter	PFBS	PFHxS	PFHxA	PFNA	PFOA	PFOS	HFPO-DA
Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Sampling Frequency	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch	Per Batch
Sampling Procedure	Grab Sample	Grab Sample	Grab Sample	Grab Sample	Grab Sample	Grab Sample	Grab Sample
Daily Maximum Limit	420	51	400000	6	8	16	370
Maximum Limit	NA	NA	NA	NA	NA	NA	NA
Minimum Limit	NA	NA	NA	NA	NA	NA	NA
Test Result	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<10
Test Method	ASTMD7979-19M	ASTMD7979-19M	ASTMD7979-19M	ASTMD7979-19M	ASTMD7979-19M	ASTMD7979-19M	ASTMD7979-19M
Test Date	10/2/2025	10/2/2025	10/2/2025	10/2/2025	10/2/2025	10/2/2025	10/2/2025
Sample Date	9/30/2025	9/30/2025	9/30/2025	9/30/2025	9/30/2025	9/30/2025	9/30/2025
Sample Type	wastewater	wastewater	wastewater	wastewater	wastewater	wastewater	wastewater
Test Result							
Test Method							
Test Date							
Sample Date							
Sample Type							
Test Result							
Test Method							
Test Date							
Sample Date							
Sample Type							
Average Daily Conc.							
No. of Samples							
Number of Limit Exceedances							

TABLE 2
RACER Trust - Coldwater Road
Daily Discharge Summary Table
Third Quarter 2025
6-08-04-04-GML1

Date	Beginning Flow Meter Reading	End Flow Meter Reading	Gallons Discharged	Begin Time of Discharge	End Time of Discharge	Average Flow (gal/min)	Temperature at Discharge		pH
							(C)	(F)	
9/25/2025 to 9/26/2025	0	4,801	4,801	12:00 p.m. (9/25/2025)	12:00 p.m. (9/26/2025)	3.33	20.1	68.2	7.04
9/29/2025 to 9/30/2025	4,801	9,079	4,278	9:20 a.m. (9/29/2025)	10:40 a.m. (9/30/2025)	2.81	19.8	67.6	7.35

Total Discharge Volume: 9,079
Average Discharge Volume (2 Days): 4,540

NOTES : Accumulation tank discharged continuously from 12:00 p.m. on September 25, 2025 to 12:00 p.m. on September 26, 2025 (1 day, 0 hours, 0 minutes).
and from 9:20 a.m. on September 29, 2025 to 10:40 a.m. on September 30, 2025 (1 day, 1 hour, 20 minutes).

TABLE 3
RACER Trust - Coldwater Road
Pre-and Polyfluoroalkyl Substances (PFAS) Sampling Results - September 2025

Coldwater Road - PFAS Pretreatment System Samples

Perfluorinated Compound	Well/Sample ID: District Sewer Use Permit - Discharge Pollutant Limitations and Monitoring Requirements	03-PRCC-25-INF-20250925 (Influent Sample)	03-PRCC-25-PRIM-20250925 (Primary GAC Vessel Sample)	03-PRCC-25-PRIM-201-20250930 (Primary GAC Vessel Sample after 201 Bed Volumes)	03-PRCC-25-MID-1-201-20250930 (Secondary GAC Vessel Sample after 201 Bed Volumes)	03-PRCC-25-MID-2-201-20250930 (Tertiary GAC Vessel Sample after 201 Bed Volumes)	03-PRCC-25-EFF-201-20250930 (Effluent Sample after 201 Bed Volumes)
Sample Date:		9/25/2025	9/25/2025	9/30/2025	9/30/2025	9/30/2025	9/30/2025
Perfluorobutanoic Acid (PFBA)	--	<10	<11	<10	<10	<10	<10
Perfluoropentanoic Acid (PFPeA)	--	<4.2	<4.2	<4.0	<4.1	<4.0	<4.1
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<2.1 I	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorohexanoic Acid (PFHxA)	400,000	21	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorobutane Sulfonic Acid (PFBS)	420	39	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluoroheptanoic Acid (PFHpA)	--	11	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluoropentane Sulfonic Acid (PFPeS)	--	68	<2.1	<2.0	<2.1	<2.0	<2.1
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorooctanoic Acid (PFOA)	8	43	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorohexane Sulfonic Acid (PFHxS)	51	240	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	190	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	42	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorononanoic Acid (PFNA)	6	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluoroheptane Sulfonic Acid (PFHpS)	--	59	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorodecanoic Acid (PFDA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<4.2	<4.2	<4.0	<4.1	<4.0	<4.1
Perfluorooctane Sulfonic Acid (PFOS)	16	4300	8.4	1.6 J	1.4 J	<2.0	<2.1
Perfluorooctane Sulfonic Acid (PFOS -LN)	--	2600	6.8	1.1 J	<2.1	<2.0	<2.1
Perfluorooctane Sulfonic Acid (PFOS -BR)	--	1700	1.3 J	<2.0	<2.1	<2.0	<2.1
Perfluoroundecanoic Acid (PFUnDA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorononane Sulfonic Acid (PFNS)	--	2.6	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorododecanoic Acid (PFDoDA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorotridecanoic Acid (PFTrDA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorooctane Sulfonamide (FOSA)	--	3.1	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluorotetradecanoic Acid (PFTeDA)	--	<4.2	<4.2	<4.0	<4.1	<4.0	<4.1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UDS)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF30NS)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<10	<11	<10	<10	<10	<10
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	<10	<11	<10	<10	<10	<10
3-Perfluoroheptyl propanoic acid (FPePA (5:3 FTCA))	--	<10	<11	<10	<10	<10	<10
3-Perfluoroheptyl propanoic acid (FPrPA (3:3 FTCA))	--	<10	<11	<10	<10	<10	<10
Perfluorobutanesulfonamide (PFBSA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	6600	2.1	1.0 J	<2.1	<2.0	<2.1
Perfluorohexanesulfonamide (PFHxSA)	--	<2.1	<2.1	<2.0	<2.1	<2.0	<2.1
Total Per-and Polyfluoroalkyl Substances	--	11,386.7	10.5	2.6	1.4	0.0	0.0

Notes

- 1) Detections in **bold**.
- 2) Concentrations in ng/L.
- 3) < = Not detected at specified reporting limit.
- 4) -- = Not analyzed/No criteria.
- 5) Dup = Duplicate sample.
- 6) Beecher Metropolitan District Sewer Use Permit Discharge Pollutant Limitations and Monitoring Requirements - October 15, 2021.
- 7) Concentrations above the discharge limit are highlighted in yellow.
- 8) Number after Prim (Primary GAC vessel), Mid (Secondary GAC vessel), and Eff (Effluent sample after tertiary GAC vessel) samples equals number of GAC Bed volumes discharged through the pretreatment system at the time of sample collection. One bed volume equals 45 gallons.
- 9) Branched and linear values for perfluorohexane sulfonic acid (PFHxS) and perfluorooctane sulfonic acid (PFOS) are reported in the table but are not included in the Total Per-and Polyfluoroalkyl Substances.
- 9) I - Matrix interference with internal standard.
- 10) J - Estimated value less than reporting limit, but greater than MDL.
- 11) r - This analyte is being reported as the best result from multiple runs.
- 12) X - Elevated reporting limit due to matrix interference.
- 13) Y - Elevated reporting limit due to high target concentration.
- 14) QA/QC Samples were either not detected above the reporting limit or below the Beecher Metropolitan District Sewer Use Permit Discharge Limits.



Analytical Laboratory Report

Report ID: S78646.01(01)
Generated on 09/22/2025

Report to
Attention: Clifford Yantz
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2090 Commonwealth Blvd.
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@ramboll.com

Additional Contacts: Kevin Schneider

Report produced by
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2680 East Lansing Drive
East Lansing, MI 48823

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Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary
Lab Sample ID(s): S78646.01
Project: RACER Coldwater Road
Collected Date(s): 09/09/2025
Submitted Date/Time: 09/09/2025 14:50
Sampled by: Savannah Thielbar
P.O. #: 1940011180 TASK 001

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
E1664A	EPA Method 1664 Revision A February 1999
E200.8	EPA Method 200.8 Revision 5.4
E245.1	EPA Method 245.1 Revision 3.0
OIA-1677	EPA Method OIA-1677-09
SM2540D	Standard Method 2540 D 2020
SM2550B	Standard Method 2550 B 2010
SM4500-H+ B	Standard Method 4500 H + B 2021
SM4500-NH3 G	Standard Method 4500 NH3 G 2021
SM4500-PE	Standard Method 4500 P E 2021 / 4500 P B(5) 2021
SM5210B/HACH1036	Standard Method 5210 B 2016 / HACH 10360
SW3015A	SW 846 Method 3015A Revision 1 February 2007



Analytical Laboratory Report

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S78646.01	03-PRCC-25-20250909	Wastewater	09/09/25 12:30



Analytical Laboratory Report

Lab Sample ID: S78646.01

Sample Tag: 03-PRCC-25-20250909

Collected Date/Time: 09/09/2025 12:30

Matrix: Wastewater

COC Reference: 187917

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	3.6	IR
1	125mL Plastic	HNO3	Yes	3.6	IR
2	500mL Plastic	None	Yes	3.6	IR
1	125mL Amber	PbCO3/NaOH	Yes	3.6	IR
1	250mL Plastic	H2SO4	Yes	3.6	IR
1	32oz Glass	HCL	Yes	3.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	09/16/25 12:10	CTV	
TBOD5 - Set*	Completed	SM5210B/HACH1036	09/10/25 14:30	SSM	
Metal Digestion	Completed	SW3015A	09/10/25 10:00	CCM	

Inorganics

Method: E1664A, Run Date: 09/16/25 11:00, Analyst: JW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Oil & Grease n-Hexane Extract.	Not detected	2		mg/L	1		x

Method: SM2540D, Run Date: 09/12/25 18:25, Analyst: SRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	12.2	3		mg/L	1		

Method: SM2550B, Run Date: 09/09/25 12:30, Analyst: ST

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Field Temperature*	67	1		oF	1		

Method: SM4500-H+ B, Run Date: 09/09/25 12:30, Analyst: ST

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Field pH*	7.26	0.01		STD Units	1		

Method: SM4500-NH3 G, Run Date: 09/11/25 14:17, Analyst: MJC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Ammonia-N (Undistilled)*	1.98	0.02		mg/L	1	7664-41-7	

Method: SM4500-PE, Run Date: 09/17/25 13:21, Analyst: MJC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Phosphorus*	0.01	0.01	0.009	mg/L	1	7723-14-0	

Method: SM5210B/HACH1036, Run Date: 09/15/25 16:22, Analyst: SSM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TBOD5*	Not detected	3		mg/L	1.5		

x-Preserved from bulk sample



Analytical Laboratory Report

Lab Sample ID: S78646.01 (continued)
Sample Tag: 03-PRCC-25-20250909

Metals

Method: E200.8, Run Date: 09/10/25 12:16, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.003	0.002		mg/L	5	7440-38-2	
Chromium	0.041	0.005		mg/L	5	7440-47-3	
Copper	0.233	0.005		mg/L	5	7440-50-8	
Nickel	0.079	0.005		mg/L	5	7440-02-0	
Zinc	0.029	0.005		mg/L	5	7440-66-6	

Method: E245.1, Run Date: 09/16/25 16:57, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.0002		mg/L	1	7439-97-6	

Other / Misc.

Method: OIA-1677, Run Date: 09/15/25 02:08, Analyst: MDG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Available Cyanide	Not detected	0.0020		mg/L	1	57-12-5	

Merit Laboratories Login Checklist

Lab Set ID:S78646

Client:RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Submitted:09/09/2025 14:50 Login User: PFD

Attention: Clifford Yantz

Address: Ramboll
2090 Commonwealth Blvd.
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@ramboll.com

Selection	Description	Note
Sample Receiving		
01. ☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.6
02. ☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun	
03. ☐ Yes ☒ No ☐ N/A	Samples shipped	
04. ☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box	
05. ☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody		
06. ☒ Yes ☐ No ☐ N/A	COC adequately filled out	
07. ☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab	
08. ☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC	
09. ☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontacted to:	
Preservation		
10. ☐ Yes ☒ No ☐ N/A	Do sample have correct chemical preservation	No Oil and Grease Bottle Recieved
11. ☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)	
12. ☒ Yes ☐ No ☐ N/A	Did any samples need to be preserved in the lab?	Oil and Grease
Bottle Conditions		
13. ☒ Yes ☐ No ☐ N/A	All bottles intact	
14. ☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used	
15. ☒ Yes ☐ No ☐ N/A	Merit bottles used	
16. ☒ Yes ☐ No ☐ N/A	Sufficient sample volume received	
17. ☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration	
18. ☒ Yes ☐ No ☐ N/A	Samples submitted within holding time	
19. ☐ Yes ☐ No ☒ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S78646 Submitted: 09/09/2025 14:50

Client: RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Initial Preservation Check: 09/09/2025 15:40 PFD

Preservation Recheck (E200.8): N/A

Attention: Clifford Yantz

Address: Ramboll

2090 Commonwealth Blvd.
Ann Arbor, MI 48105

Phone: 313-333-0211

FAX:

Email: Clifford.Yantz@ramboll.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S78646.01	125mL Amber PbCO ₃ /NaOH	>12			
S78646.01	125mL Plastic HNO ₃	<2			
S78646.01	250mL Plastic H ₂ SO ₄	<2			
S78646.01	32oz Glass HCL	7	2.0	<2	Lot# 2020080697



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

187917

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Kevin Schneider/Clifford Yantz		CONTACT NAME ☒ SAME	
COMPANY Ramball		COMPANY	
ADDRESS 2090 Commonwealth Blvd		ADDRESS	
CITY Ann Arbor		CITY	STATE MI
PHONE NO. —	CELL NO. 313-333-0211	ZIP CODE 48105	STATE MI
E-MAIL ADDRESS Kevin.Schneider@ramball.com Clifford.Yantz@ramball.com		P.O. NO. 1940011180 task 1	ZIP CODE
QUOTE NO.		PHONE NO.	E-MAIL ADDRESS

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACER Coldwater Rd			SAMPLER(S) - PLEASE PRINT/SIGN NAME Savannah Thielbar																	
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER																				
DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER																				
MATRIX W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID CODE: SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE			# Containers & Preservatives																	
MERIT LAB NO. FOR LAB USE ONLY	COLLECTION DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	Total metals	Ammonia cyanide	BOD	TSS	Ammonium-Nitrogen	total phosphorus	FAly (Hex-Ext)	Certifications
78646.01	9-9-25	1230	02-PRCC-25-20250909	ww	6	2	1	1	1	1	-	-	X	X	X	X	X	X	X	☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
																				Project Locations ☐ Detroit ☐ New York
																				Special Instructions metals are: As, Cr, Cu, Hg, Ni, Zn
																				Analysis per City of Flint including QC report
																				Field temp = 19.7°C Field pH = 2.26
																				ST

RELINQUISHED BY: Savannah Thielbar ☒ Sampler	DATE 9/9/25 TIME 1300	RELINQUISHED BY:	DATE	TIME
SIGNATURE/ORGANIZATION Ramball		SIGNATURE/ORGANIZATION		
RECEIVED BY: J. Miller	DATE 9/9/25 TIME 13:00	RECEIVED BY:	DATE	TIME
SIGNATURE/ORGANIZATION		SIGNATURE/ORGANIZATION		
RELINQUISHED BY: J. Miller	DATE 9/9/25 TIME 14:18	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SIGNATURE/ORGANIZATION Pat H		SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
RECEIVED BY:		TEMP. ON ARRIVAL 36		
SIGNATURE/ORGANIZATION		☐ ICE (SOLID) ☐ BLUE ICE		
		☐ ICE (MELTED) ☐ NONE		

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Quality Control Report

Report ID: QC-S78646-01
Generated on 09/25/2025

Report to

Attention: Clifford Yantz
Ramboll
2090 Commonwealth Blvd.
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S78646.01
Project: RACER Coldwater Road
Submitted Date/Time: 09/09/2025 14:50
Sampled by: Savannah Thielbar
P.O. #: 1940011180 TASK 001

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Page 2)
Prep Batch Summary (Page 3)
Batch QC Results (Pages 4-12)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S78646.01

Sample Tag: 03-PRCC-25-20250909

Collected Date/Time: 09/09/2025 12:30

Matrix: Wastewater

COC Reference: 187917

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Ammonia-N (Undistilled)	SM4500-NH3 G	09/11/25 14:17	AMN250911B	AMN250911B	No	BLK/LCS/MS/DUP
Oil & Grease n-Hexane Extract.	E1664A	09/16/25 11:00	OGHEX250916W2	OGHEX250916W2	No	BLK/LCS
TBOD5	SM5210B/HACH10309	09/15/25 16:22	BOD250910A	BOD250910A	No	BLK/LCS/DUP
Total Phosphorus	SM4500-PE	09/17/25 13:21	PHS250917QC	PHS250917QC	No	BLK/LCS/MS/DUP
Total Suspended Solids	SM2540D	09/12/25 18:25	TSS250912A	TSS250912A	No	BLK/LCS/DUP
Metals						
Arsenic	E200.8	09/10/25 12:16	MT4-25-0910A	MTD-091025-2	No	BLK/LCS/MS/MSD
Chromium	E200.8	09/10/25 12:16	MT4-25-0910A	MTD-091025-2	No	BLK/LCS/MS/MSD
Copper	E200.8	09/10/25 12:16	MT4-25-0910A	MTD-091025-2	No	BLK/LCS/MS/MSD
Mercury	E245.1	09/16/25 16:57	HG-25-0916A	HGD-091625-2	No	BLK/LCS/MS/MSD
Nickel	E200.8	09/10/25 12:16	MT4-25-0910A	MTD-091025-2	No	BLK/LCS/MS/MSD
Zinc	E200.8	09/10/25 12:16	MT4-25-0910A	MTD-091025-2	No	BLK/LCS/MS/MSD
Other / Misc.						
Available Cyanide	OIA-1677	09/15/25 02:08	ACN250915-W1	ACN250915-W1	No	BLK/LCS/MS/DUP

QC Report - Prep Batch Summary

Inorganics, Prep Batch ID: AMN250911B

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S78646.01	Ammonia-N (Undistilled)	SM4500-NH3 G	09/11/25 14:17	AMN250911B

Inorganics, Prep Batch ID: BOD250910A

Surrogates: No, QC Types: BLK/LCS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S78646.01	TBOD5	SM5210B/HACH10319	09/15/25 16:22	BOD250910A

Inorganics, Prep Batch ID: OGHEX250916W2

Surrogates: No, QC Types: BLK/LCS

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S78646.01	Oil & Grease n-Hexane Extract.	E1664A	09/16/25 11:00	OGHEX250916W2

Inorganics, Prep Batch ID: PHS250917QC

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S78646.01	Total Phosphorus	SM4500-PE	09/17/25 13:21	PHS250917QC

Inorganics, Prep Batch ID: TSS250912A

Surrogates: No, QC Types: BLK/LCS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S78646.01	Total Suspended Solids	SM2540D	09/12/25 18:25	TSS250912A

Metals, Prep Batch ID: HGD-091625-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S78646.01	Mercury	E245.1	09/16/25 16:57	HG-25-0916A

Metals, Prep Batch ID: MTD-091025-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S78646.01	Arsenic	E200.8	09/10/25 12:16	MT4-25-0910A
S78646.01	Chromium	E200.8	09/10/25 12:16	MT4-25-0910A
S78646.01	Copper	E200.8	09/10/25 12:16	MT4-25-0910A
S78646.01	Nickel	E200.8	09/10/25 12:16	MT4-25-0910A
S78646.01	Zinc	E200.8	09/10/25 12:16	MT4-25-0910A

Other / Misc., Prep Batch ID: ACN250915-W1

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S78646.01	Available Cyanide	OIA-1677	09/15/25 02:08	ACN250915-W1

QC Report - Batch QC Results

Inorganics, Prep Batch ID: AMN250911B

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Blank (BLK)

Lab Sample ID: AMN250911B.LRB1

Run in Batch: AMN250911B, Run Date: 09/11/2025 13:41, Prep Date: 09/11/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Ammonia-N (Undistilled)		ND	0.02	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: AMN250911B.LCS1

Run in Batch: AMN250911B, Run Date: 09/11/2025 13:45, Prep Date: 09/11/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Ammonia-N (Undistilled)		100.0	90	110

Matrix Spike (MS)

Lab Sample ID: AMN250911B.MS1, Parent Sample ID: S78446.04

Run in Batch: AMN250911B, Run Date: 09/11/2025 14:03, Prep Date: 09/11/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Ammonia-N (Undistilled)		102.0	80	120

Duplicate (DUP)

Lab Sample ID: AMN250911B.DP1, Parent Sample ID: S78635.01

Run in Batch: AMN250911B, Run Date: 09/11/2025 14:35, Prep Date: 09/11/2025, Matrix: Liquid, Dilution: 50

Analyte	Flags	RPD	RPD CL
Ammonia-N (Undistilled)		5.6	20

QC Report - Batch QC Results

Inorganics, Prep Batch ID: BOD250910A

Surrogates: No, QC Types: BLK/LCS/DUP

Blank (BLK)

Lab Sample ID: BOD250910A.LRB1

Run in Batch: BOD250910A, Run Date: 09/15/2025 16:22, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
TBOD5		ND	3	mg/L

Blank (BLK)

Lab Sample ID: BOD250910A.LRB2

Run in Batch: BOD250910A, Run Date: 09/15/2025 16:22, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
TBOD5		ND	3	mg/L

Blank (BLK)

Lab Sample ID: BOD250910A.LRB3

Run in Batch: BOD250910A, Run Date: 09/15/2025 16:22, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
TBOD5		ND	3	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: BOD250910A.LCS1

Run in Batch: BOD250910A, Run Date: 09/15/2025 16:22, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 20

Analyte	Flags	% Rec	LCL	UCL
TBOD5		98.5	51	166

Laboratory Control Sample (LCS)

Lab Sample ID: BOD250910A.LCS2

Run in Batch: BOD250910A, Run Date: 09/15/2025 16:22, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 20

Analyte	Flags	% Rec	LCL	UCL
TBOD5		97.8	51	166

Laboratory Control Sample (LCS)

Lab Sample ID: BOD250910A.LCS3

Run in Batch: BOD250910A, Run Date: 09/15/2025 16:22, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 20

Analyte	Flags	% Rec	LCL	UCL
TBOD5		92.1	51	166

Duplicate (DUP)

Lab Sample ID: BOD250910A.DP1, Parent Sample ID: S78635.04

Run in Batch: BOD250910A, Run Date: 09/15/2025 16:22, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 150

Analyte	Flags	RPD	RPD CL
TBOD5	*	24.1	20

QC Report - Batch QC Results

Inorganics, Prep Batch ID: OGHEx250916W2

Surrogates: No, QC Types: BLK/LCS

Blank (BLK)

Lab Sample ID: OGHEx250916W2.LRB1

Run in Batch: OGHEx250916W2, Run Date: 09/16/2025 11:00, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Oil & Grease n-Hexane Extract.		ND	1	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: OGHEx250916W2.LCS1

Run in Batch: OGHEx250916W2, Run Date: 09/16/2025 11:00, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Oil & Grease n-Hexane Extract.		85	78	114

Laboratory Control Sample (LCS)

Lab Sample ID: OGHEx250916W2.LCS2

Run in Batch: OGHEx250916W2, Run Date: 09/16/2025 11:00, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Oil & Grease n-Hexane Extract.		88	78	114

QC Report - Batch QC Results

Inorganics, Prep Batch ID: PHS250917QC

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Blank (BLK)

Lab Sample ID: PHS250917QC.LRB1

Run in Batch: PHS250917QC, Run Date: 09/17/2025 12:43, Prep Date: 09/17/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Total Phosphorus		ND	0.01	mg/L

Blank (BLK)

Lab Sample ID: PHS250917QC.LRB2

Run in Batch: PHS250917QC, Run Date: 09/17/2025 12:49, Prep Date: 09/17/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Total Phosphorus		ND	0.01	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: PHS250917QC.LCS1

Run in Batch: PHS250917QC, Run Date: 09/17/2025 12:57, Prep Date: 09/17/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		102	90	110

Matrix Spike (MS)

Lab Sample ID: PHS250917QC.MS1, Parent Sample ID: S78646.01

Run in Batch: PHS250917QC, Run Date: 09/17/2025 18:12, Prep Date: 09/17/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		100	80	120

Duplicate (DUP)

Lab Sample ID: PHS250917QC.DP1, Parent Sample ID: S78701.01

Run in Batch: PHS250917QC, Run Date: 09/17/2025 18:08, Prep Date: 09/17/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Total Phosphorus		10.8	20

QC Report - Batch QC Results

Inorganics, Prep Batch ID: TSS250912A

Surrogates: No, QC Types: BLK/LCS/DUP

Blank (BLK)

Lab Sample ID: TSS250912A.LRB1

Run in Batch: TSS250912A, Run Date: 09/12/2025 18:25, Prep Date: 09/12/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Total Suspended Solids		ND	3	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: TSS250912A.LCS1

Run in Batch: TSS250912A, Run Date: 09/12/2025 18:25, Prep Date: 09/12/2025, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL
Total Suspended Solids		95.9	81.2	112

Duplicate (DUP)

Lab Sample ID: TSS250912A.DP1, Parent Sample ID: S78702.01

Run in Batch: TSS250912A, Run Date: 09/12/2025 18:25, Prep Date: 09/12/2025, Matrix: Liquid, Dilution: 3.3

Analyte	Flags	RPD	RPD CL
Total Suspended Solids	*	24.2	10

QC Report - Batch QC Results

Metals, Prep Batch ID: HGD-091625-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: HG-25-0916A.043.LRB

Run in Batch: HG-25-0916A, Run Date: 09/16/2025 15:41, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Mercury		ND	0.05	ug/L

Laboratory Control Sample (LCS)

Lab Sample ID: HG-25-0916A.042.LCS

Run in Batch: HG-25-0916A, Run Date: 09/16/2025 15:38, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		105	85	115

Matrix Spike (MS)

Lab Sample ID: HG-25-0916A.052.MS, Parent Sample ID: S78711.08

Run in Batch: HG-25-0916A, Run Date: 09/16/2025 16:11, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		111	80	120

Matrix Spike (MS)

Lab Sample ID: HG-25-0916A.063.MS, Parent Sample ID: S78831.07

Run in Batch: HG-25-0916A, Run Date: 09/16/2025 16:47, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		106	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-25-0916A.053.MSD, Parent Sample ID: HG-25-0916A.052.MS

Run in Batch: HG-25-0916A, Run Date: 09/16/2025 16:14, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		111	80	120	0	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-25-0916A.064.MSD, Parent Sample ID: HG-25-0916A.063.MS

Run in Batch: HG-25-0916A, Run Date: 09/16/2025 16:51, Prep Date: 09/16/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		106	80	120	0	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-091025-2

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Blank (BLK)

Lab Sample ID: MT4-25-0910A.021.LRB

Run in Batch: MT4-25-0910A, Run Date: 09/10/2025 11:38, Prep Date: 09/10/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Arsenic		ND	0.0004	mg/L
Chromium		ND	0.001	mg/L
Copper		ND	0.001	mg/L
Nickel		ND	0.001	mg/L
Zinc		ND	0.001	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: MT4-25-0910A.020.LCS

Run in Batch: MT4-25-0910A, Run Date: 09/10/2025 11:33, Prep Date: 09/10/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Arsenic		102	85	115
Chromium		99	85	115
Copper		101	85	115
Nickel		101	85	115
Zinc		101	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-25-0910A.036.MS, Parent Sample ID: S78595.11

Run in Batch: MT4-25-0910A, Run Date: 09/10/2025 12:01, Prep Date: 09/10/2025, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		115	75	125
Chromium		112	75	125
Copper		107	75	125
Nickel		110	75	125
Zinc		112	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-25-0910A.053.MS, Parent Sample ID: S78486.01

Run in Batch: MT4-25-0910A, Run Date: 09/10/2025 12:32, Prep Date: 09/10/2025, Matrix: Liquid, Dilution: 25

Analyte	Flags	% Rec	LCL	UCL
Arsenic		116	75	125
Chromium		113	75	125
Copper		100	75	125
Nickel		110	75	125
Zinc		106	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-25-0910A.037.MSD, Parent Sample ID: MT4-25-0910A.036.MS

Run in Batch: MT4-25-0910A, Run Date: 09/10/2025 12:02, Prep Date: 09/10/2025, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		110	75	125	4	20
Chromium		110	75	125	2	20
Copper		107	75	125	0	20
Nickel		108	75	125	2	20
Zinc		110	75	125	3	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-091025-2 (continued)

Surrogates: No, QC Types: BLK/LCS/MS/MSD

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-25-0910A.054.MSD, Parent Sample ID: MT4-25-0910A.053.MS

Run in Batch: MT4-25-0910A, Run Date: 09/10/2025 12:34, Prep Date: 09/10/2025, Matrix: Liquid, Dilution: 25

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		118	75	125	1	20
Chromium		110	75	125	3	20
Copper		104	75	125	4	20
Nickel		113	75	125	2	20
Zinc		111	75	125	5	20

QC Report - Batch QC Results

Other / Misc., Prep Batch ID: ACN250915-W1

Surrogates: No, QC Types: BLK/LCS/MS/DUP

Blank (BLK)

Lab Sample ID: ACN250915-W1.LRB1

Run in Batch: ACN250915-W1, Run Date: 09/15/2025 01:37, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Available Cyanide		ND	0.002	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: ACN250915-W1.LCS1

Run in Batch: ACN250915-W1, Run Date: 09/15/2025 01:42, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Available Cyanide		98	88	109

Laboratory Control Sample (LCS)

Lab Sample ID: ACN250915-W1.LCS2

Run in Batch: ACN250915-W1, Run Date: 09/15/2025 01:44, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Available Cyanide		99	88	109

Matrix Spike (MS)

Lab Sample ID: ACN250915-W1.MS1, Parent Sample ID: S78672.01

Run in Batch: ACN250915-W1, Run Date: 09/15/2025 01:54, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Available Cyanide		102	82	130

Duplicate (DUP)

Lab Sample ID: ACN250915-W1.DP1, Parent Sample ID: S78672.01

Run in Batch: ACN250915-W1, Run Date: 09/15/2025 01:52, Prep Date: 09/15/2025, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Available Cyanide		NC	15



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C.O.C. PAGE # 1 OF 1

187917

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Kevin Schneider/Clifford Yantz		CONTACT NAME ☒ SAME	
COMPANY Ramball		COMPANY	
ADDRESS 2090 Commonwealth Blvd		ADDRESS	
CITY Ann Arbor		CITY	STATE MI
PHONE NO. —	CELL NO. 313-333-0211	ZIP CODE 48105	STATE MI
E-MAIL ADDRESS Kevin.Schneider@ramball.com Clifford.Yantz@ramball.com		P.O. NO. 1940011180 task 1	ZIP CODE
QUOTE NO.		PHONE NO.	E-MAIL ADDRESS

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACER Coldwater Rd			SAMPLER(S) - PLEASE PRINT/SIGN NAME Savannah Thielbar																	
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER																				
DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER																				
MATRIX W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID CODE: SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE			# Containers & Preservatives																	
MERIT LAB NO. FOR LAB USE ONLY	COLLECTION DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	Total metals	Ammonia cyanide	BOD	TSS	Ammonium-Nitrogen	total phosphorus	FAly (Hex-Ext)	Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other Special Instructions
78646.01	9-9-25	1230	02-PRCC-25-20250909	ww	6	2	1	1	1	1	-	-	X	X	X	X	X	X	X	metals are: As, Cr, Cu, Hg, Ni, Zn
ST																				Analysis per City of Flint including QC report
																				Field temp = 19.7°C
																				Field pH = 2.26

RELINQUISHED BY: Savannah Thielbar ☒ Sampler	DATE 9/9/25 TIME 1300	RELINQUISHED BY:	DATE	TIME
SIGNATURE/ORGANIZATION Ramball		SIGNATURE/ORGANIZATION		
RECEIVED BY: J. Miller	DATE 9/9/25 TIME 13:00	RECEIVED BY:	DATE	TIME
SIGNATURE/ORGANIZATION		SIGNATURE/ORGANIZATION		
RELINQUISHED BY: J. Miller	DATE 9/9/25 TIME 14:18	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SIGNATURE/ORGANIZATION		SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
RECEIVED BY: Pat H	DATE 9/9/25 TIME 19:45	TEMP. ON ARRIVAL 36		
SIGNATURE/ORGANIZATION		ICE (SOLID) ☐ BLUE ICE ☐		
		ICE (MELTED) ☐ NONE ☐		

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Analytical Laboratory Report

Report ID: S79284.01(01)
Generated on 09/29/2025

Report to
Attention: Clifford Yantz
Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@ramboll.com

Additional Contacts: Kevin Schneider

Report produced by
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Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary
Lab Sample ID(s): S79284.01-S79284.02
Project: RACER Coldwater Road
Collected Date(s): 09/25/2025
Submitted Date/Time: 09/25/2025 13:10
Sampled by: Kevin Schneider
P.O. #: 1940011180 TASK37

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- General Report Notes (Page 2)
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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

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Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
ASTMD7979-19M	ASTM Method D7979 - 19 Modified (Isotopic Dilution)

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6
FHpPA (7:3 FTCA)	3-Perfluoroheptyl propanoic acid	812-70-4
FPePA (5:3 FTCA)	3-Perfluoropentyl propanoic acid	914637-49-3
FPrPA (3:3 FTCA)	3-Perfluoropropyl propanoic acid	356-02-5
PFBSA	Perfluorobutanesulfonamide	30334-69-1
PFECHS	Perfluoro-4-ethylcyclohexanesulfonate	80988-54-1
PFHxSA	Perfluorohexanesulfonamide	41997-13-1



Analytical Laboratory Report

Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S79284.01	03-PRCC-25-INF-180-20250925	Wastewater	09/25/25 12:00
S79284.02	03-PRCC-25-PRIM-180-20250925	Wastewater	09/25/25 12:10



Analytical Laboratory Report

Lab Sample ID: S79284.01

Sample Tag: 03-PRCC-25-INF-180-20250925

Collected Date/Time: 09/25/2025 12:00

Matrix: Wastewater

COC Reference: 172724

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.26/6.48/10	ASTMD7979-19M	09/26/25 14:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 09/26/25 16:11, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	2.1	ng/L	2.09	375-22-4	
PFPeA*	Not detected	4.2	1.3	ng/L	2.09	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.09	757124-72-4	I
PFHxA*	21	2.1	1.3	ng/L	2.09	307-24-4	
PFBS*	39	2.1	0.63	ng/L	2.09	375-73-5	
PFHpA*	11	2.1	0.84	ng/L	2.09	375-85-9	
PFPeS*	68	2.1	1.9	ng/L	2.09	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.0	ng/L	2.09	27619-97-2	
PFOA*	43	2.1	0.84	ng/L	2.09	335-67-1	
PFHxS*	240	2.1	1.0	ng/L	2.09	355-46-4	
PFHxS-LN*	190	2.1	1.0	ng/L	2.09	355-46-4-LN	
PFHxS-BR*	42	2.1	1.0	ng/L	2.09	355-46-4-BR	
PFNA*	Not detected	2.1	1.0	ng/L	2.09	375-95-1	
8:2 FTSA*	Not detected	2.1	1.3	ng/L	2.09	39108-34-4	
PFHpS*	59	2.1	0.84	ng/L	2.09	375-92-8	
PFDA*	Not detected	2.1	1.3	ng/L	2.09	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.0	ng/L	2.09	2355-31-9	
EtFOSAA*	Not detected	4.2	1.0	ng/L	2.09	2991-50-6	
PFOS*	4,300	2.1	0.84	ng/L	2.09	1763-23-1	
PFOS-LN*	2,600	2.1	0.84	ng/L	2.09	1763-23-1-LN	
PFOS-BR*	1,700	2.1	0.84	ng/L	2.09	1763-23-1-BR	
PFUnDA*	Not detected	2.1	0.84	ng/L	2.09	2058-94-8	
PFNS*	2.6	2.1	1.0	ng/L	2.09	68259-12-1	
PFDODA*	Not detected	2.1	0.63	ng/L	2.09	307-55-1	
PFDS*	Not detected	2.1	1.0	ng/L	2.09	335-77-3	
PFTTrDA*	Not detected	2.1	0.84	ng/L	2.09	72629-94-8	
FOSA*	3.1	2.1	0.84	ng/L	2.09	754-91-6	
PFTeDA*	Not detected	4.2	0.63	ng/L	2.09	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.0	ng/L	2.09	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.0	ng/L	2.09	756426-58-1	
ADONA*	Not detected	2.1	0.63	ng/L	2.09	919005-14-4	
HFPO-DA*	Not detected	10	2.1	ng/L	2.09	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10	8.4	ng/L	2.09	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10	4.2	ng/L	2.09	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10	4.2	ng/L	2.09	356-02-5	
PFBSA*	Not detected	2.1	0.63	ng/L	2.09	30334-69-1	

I-Matrix interference with internal standard



Analytical Laboratory Report

Lab Sample ID: S79284.01 (continued)
Sample Tag: 03-PRCC-25-INF-180-20250925

34 PFAs, Method: ASTMD7979-19M, Run Date: 09/26/25 16:11, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFECHS*	6,600	2.1	0.84	ng/L	2.09	80988-54-1	
PFHxSA*	Not detected	2.1	0.63	ng/L	2.09	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S79284.02

Sample Tag: 03-PRCC-25-PRIM-180-20250925

Collected Date/Time: 09/25/2025 12:10

Matrix: Wastewater

COC Reference: 172724

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	3.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.13/6.48/12	ASTMD7979-19M	09/26/25 14:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 09/26/25 16:31, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	11	2.1	ng/L	2.12	375-22-4	
PFPeA*	Not detected	4.2	1.3	ng/L	2.12	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.12	757124-72-4	
PFHxA*	Not detected	2.1	1.3	ng/L	2.12	307-24-4	
PFBS*	Not detected	2.1	0.64	ng/L	2.12	375-73-5	
PFHpA*	Not detected	2.1	0.85	ng/L	2.12	375-85-9	
PFPeS*	Not detected	2.1	1.9	ng/L	2.12	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.1	ng/L	2.12	27619-97-2	
PFOA*	Not detected	2.1	0.85	ng/L	2.12	335-67-1	
PFHxS*	Not detected	2.1	1.1	ng/L	2.12	355-46-4	
PFHxS-LN*	Not detected	2.1	1.1	ng/L	2.12	355-46-4-LN	
PFHxS-BR*	Not detected	2.1	1.1	ng/L	2.12	355-46-4-BR	
PFNA*	Not detected	2.1	1.1	ng/L	2.12	375-95-1	
8:2 FTSA*	Not detected	2.1	1.3	ng/L	2.12	39108-34-4	
PFHpS*	Not detected	2.1	0.85	ng/L	2.12	375-92-8	
PFDA*	Not detected	2.1	1.3	ng/L	2.12	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.1	ng/L	2.12	2355-31-9	
EtFOSAA*	Not detected	4.2	1.1	ng/L	2.12	2991-50-6	
PFOS*	8.4	2.1	0.85	ng/L	2.12	1763-23-1	
PFOS-LN*	6.8	2.1	0.85	ng/L	2.12	1763-23-1-LN	
PFOS-BR*	1.3	2.1	0.85	ng/L	2.12	1763-23-1-BR	J
PFUnDA*	Not detected	2.1	0.85	ng/L	2.12	2058-94-8	
PFNS*	Not detected	2.1	1.1	ng/L	2.12	68259-12-1	
PFDODA*	Not detected	2.1	0.64	ng/L	2.12	307-55-1	
PFDS*	Not detected	2.1	1.1	ng/L	2.12	335-77-3	
PFTTrDA*	Not detected	2.1	0.85	ng/L	2.12	72629-94-8	
FOSA*	Not detected	2.1	0.85	ng/L	2.12	754-91-6	
PFTeDA*	Not detected	4.2	0.64	ng/L	2.12	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.1	ng/L	2.12	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.1	ng/L	2.12	756426-58-1	
ADONA*	Not detected	2.1	0.64	ng/L	2.12	919005-14-4	
HFPO-DA*	Not detected	11	2.1	ng/L	2.12	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	11	8.5	ng/L	2.12	812-70-4	
FPePA (5:3 FTCA)*	Not detected	11	4.2	ng/L	2.12	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	11	4.2	ng/L	2.12	356-02-5	
PFBSA*	Not detected	2.1	0.64	ng/L	2.12	30334-69-1	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S79284.02 (continued)
Sample Tag: 03-PRCC-25-PRIM-180-20250925

34 PFAs, Method: ASTMD7979-19M, Run Date: 09/26/25 16:31, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFECHS*	2.1	2.1	0.85	ng/L	2.12	80988-54-1	J
PFHxSA*	Not detected	2.1	0.64	ng/L	2.12	41997-13-1	

J-Estimated value less than reporting limit, but greater than MDL

Merit Laboratories Login Checklist

Lab Set ID:S79284

Client:RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Submitted:09/25/2025 13:10 Login User: MMC

Attention: Clifford Yantz

Address: Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211

FAX:

Email: Clifford.Yantz@ramboll.com

Selection	Description	Note
Sample Receiving		
01.	☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 3.1
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontracted to:
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☐ Yes ☐ No ☒ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☐ No ☒ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

172724

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME		Kevin Schneider / Clifford Yant z	
COMPANY		Ramboll	
ADDRESS		2090 Commonwealth Blvd	
CITY	Ann Arbor	STATE	MI
PHONE NO.	CELL NO.	P.O. NO.	ZIP CODE
	313-333-0211	194061180	48105
E-MAIL ADDRESS		QUOTE NO.	
clifford.yantz@ramboll.com		Task 37	
kevin.schneider@ramboll.com			

CONTACT NAME		X SAME	
COMPANY			
ADDRESS			
CITY		STATE	
PHONE NO.		E-MAIL ADDRESS	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME	RACER Coldwater Road	SAMPLER(S) - PLEASE PRINT/SIGN NAME	Kevin Schneider KCS
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER			
DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER			

MATRIX W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
CODE: SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR WS=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	COLLECTION		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PFA	Special Instructions	
	DATE	TIME												☐ Other	
79284.01	9/25/25	1200	03-PRCC-25-INF-20250925	ur	3	X							X		low level reports
.02	9/25/25	1210	03-PRCC-25-PRIM-20250925	ur	3	X							X		with estimated values
/															
Please email data to RACERS EQUIS															

RELINQUISHED BY:		X	Sampler	DATE	TIME
SIGNATURE/ORGANIZATION	KCS			9/25/25	12:00
RECEIVED BY:				DATE	TIME
SIGNATURE/ORGANIZATION	J. Smith			9/25/25	12:10
RELINQUISHED BY:				DATE	TIME
SIGNATURE/ORGANIZATION	J. Smith			9/25/25	13:10
RECEIVED BY:				DATE	TIME
SIGNATURE/ORGANIZATION	M. Albrecht			9/25/25	13:10

RELINQUISHED BY:			DATE	TIME
SIGNATURE/ORGANIZATION				
RECEIVED BY:			DATE	TIME
SIGNATURE/ORGANIZATION				
SEAL NO.	SEAL INTACT	INITIALS	NOTES:	TEMP. ON ARRIVAL
	YES ☐ NO ☐			
SEAL NO.	SEAL INTACT	INITIALS		
	YES ☐ NO ☐			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Quality Control Report

Report ID: QC-S79284-01
Generated on 10/06/2025

Report to

Attention: Clifford Yantz
Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S79284.01-S79284.02
Project: RACER Coldwater Road
Submitted Date/Time: 09/25/2025 13:10
Sampled by: Kevin Schneider
P.O. #: 1940011180 TASK37

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-3)
Prep Batch Summary (Page 4)
Internal Standards per Lab Sample (Pages 5-6)
Internal Standards per QC Sample (Pages 7-11)
Batch QC Results (Pages 12-17)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S79284.01
Sample Tag: 03-PRCC-25-INF-180-20250925
Collected Date/Time: 09/25/2025 12:00
Matrix: Wastewater
COC Reference: 172724

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	09/26/25 16:11	AK250926W1	PF250926W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Analysis Summary

Lab Sample ID: S79284.02
Sample Tag: 03-PRCC-25-PRIM-180-20250925
Collected Date/Time: 09/25/2025 12:10
Matrix: Wastewater
COC Reference: 172724

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	09/26/25 16:31	AK250926W1	PF250926W1	Yes	BLK/LCS/LCSD/MS/MS

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: PF250926W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79284.01	34 PFAs	ASTMD7979-19M	09/26/25 16:11	AK250926W1
S79284.02	34 PFAs	ASTMD7979-19M	09/26/25 16:31	AK250926W1

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79284.01

Sample Tag: 03-PRCC-25-INF-180-20250925

Collected Date/Time: 09/25/2025 12:00

Matrix: Wastewater

COC Reference: 172724

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK250926W1, Run Date: 09/26/2025 16:11, Matrix: WW, Dilution: 2.09

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA	*	154.7	50.0	150.0
M2-6:2FTSA		134.7	50.0	150.0
M2-8:2FTSA		84.5	50.0	150.0
M2PFTeDA		108.5	12.0	218.0
M3PFBS		108.0	50.0	150.0
M3PFHxS		99.1	50.0	150.0
M4PFHpA		109.8	50.0	150.0
M5PFHxA		112.2	50.0	150.0
M5PFPeA		115.3	50.0	150.0
M6PFDA		107.6	50.0	150.0
M7PFUnDA		105.5	50.0	150.0
M8FOSA		106.4	50.0	150.0
M8PFOA		118.2	50.0	150.0
M8PFOS		96.1	50.0	150.0
M9-PFNA		126.6	50.0	150.0
MPFBA		95.9	50.0	150.0
MPFDoDA		99.6	50.0	150.0
d3N-MeFOSAA		114.4	50.0	150.0
d5EtFOSAA		113.5	50.0	150.0
MHFPO-DA		106.7	50.0	150.0
d-N-EtFOSA-M		112.4	50.0	150.0
d-N-MeFOSA-M		111.2	50.0	150.0
d7-N-MeFOSE-M		119.1	50.0	150.0
d9-N-EtFOSE-M		99.2	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79284.02

Sample Tag: 03-PRCC-25-PRIM-180-20250925

Collected Date/Time: 09/25/2025 12:10

Matrix: Wastewater

COC Reference: 172724

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK250926W1, Run Date: 09/26/2025 16:31, Matrix: WW, Dilution: 2.12

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		82.2	50.0	150.0
M2-6:2FTSA		88.5	50.0	150.0
M2-8:2FTSA		93.8	50.0	150.0
M2PFTeDA		96.9	12.0	218.0
M3PFBS		105.6	50.0	150.0
M3PFHxS		95.9	50.0	150.0
M4PFHpA		109.2	50.0	150.0
M5PFHxA		103.3	50.0	150.0
M5PFPeA		116.0	50.0	150.0
M6PFDA		102.7	50.0	150.0
M7PFUnDA		105.6	50.0	150.0
M8FOSA		108.5	50.0	150.0
M8PFOA		109.2	50.0	150.0
M8PFOS		104.6	50.0	150.0
M9-PFNA		107.1	50.0	150.0
MPFBA		109.1	50.0	150.0
MPFDoDA		99.9	50.0	150.0
d3N-MeFOSAA		109.1	50.0	150.0
d5EtFOSAA		103.0	50.0	150.0
MHFPO-DA		111.8	50.0	150.0
d-N-EtFOSA-M		114.9	50.0	150.0
d-N-MeFOSA-M		110.1	50.0	150.0
d7-N-MeFOSE-M		114.0	50.0	150.0
d9-N-EtFOSE-M		102.8	50.0	150.0

QC Report - Internal Standards per QC Sample

Organics - Volatiles, Prep Batch ID: PF250926W1

QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: AK250926MS.BLK250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 15:31, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		84.6	50.0	150.0
M2-6:2FTSA		105.3	50.0	150.0
M2-8:2FTSA		98.5	50.0	150.0
M2PFTeDA		104.6	12.0	218.0
M3PFBS		108.9	50.0	150.0
M3PFHxS		90.2	50.0	150.0
M4PFHpA		106.5	50.0	150.0
M5PFHxA		102.6	50.0	150.0
M5PFPeA		112.4	50.0	150.0
M6PFDA		102.9	50.0	150.0
M7PFUnDA		100.2	50.0	150.0
M8FOSA		100.2	50.0	150.0
M8PFOA		100.4	50.0	150.0
M8PFOS		105.5	50.0	150.0
M9-PFNA		94.8	50.0	150.0
MPFBA		107.7	50.0	150.0
MPFDoDA		101.8	50.0	150.0
d3N-MeFOSAA		103.3	50.0	150.0
d5EtFOSAA		101.1	50.0	150.0
MHFPO-DA		93.5	50.0	150.0
d-N-EtFOSA-M		104.4	50.0	150.0
d-N-MeFOSA-M		110.0	50.0	150.0
d7-N-MeFOSE-M		120.7	50.0	150.0
d9-N-EtFOSE-M		96.4	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample (LCS)

Lab Sample ID: AK250926MS.LCS250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 14:51, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		90.3	50.0	150.0
M2-6:2FTSA		111.1	50.0	150.0
M2-8:2FTSA		109.1	50.0	150.0
M2PFTeDA		99.0	12.0	218.0
M3PFBS		104.8	50.0	150.0
M3PFHxS		94.9	50.0	150.0
M4PFHpA		95.5	50.0	150.0
M5PFHxA		99.2	50.0	150.0
M5PFPeA		110.3	50.0	150.0
M6PFDA		109.1	50.0	150.0
M7PFUnDA		95.5	50.0	150.0
M8FOSA		100.7	50.0	150.0
M8PFOA		103.1	50.0	150.0
M8PFOS		99.4	50.0	150.0
M9-PFNA		100.1	50.0	150.0
MPFBA		106.3	50.0	150.0
MPFDoDA		99.9	50.0	150.0
d3N-MeFOSAA		102.3	50.0	150.0
d5EtFOSAA		98.5	50.0	150.0
MHFPO-DA		107.8	50.0	150.0
d-N-EtFOSA-M		106.9	50.0	150.0
d-N-MeFOSA-M		112.5	50.0	150.0
d7-N-MeFOSE-M		113.7	50.0	150.0
d9-N-EtFOSE-M		94.4	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK250926MS.LCSD250926, Parent Sample ID: AK250926MS.LCS250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 15:11, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		88.7	50.0	150.0
M2-6:2FTSA		104.8	50.0	150.0
M2-8:2FTSA		98.1	50.0	150.0
M2PFTeDA		85.2	12.0	218.0
M3PFBS		104.9	50.0	150.0
M3PFHxS		89.1	50.0	150.0
M4PFHpA		93.2	50.0	150.0
M5PFHxA		104.7	50.0	150.0
M5PFPeA		108.6	50.0	150.0
M6PFDA		100.0	50.0	150.0
M7PFUnDA		96.7	50.0	150.0
M8FOSA		101.7	50.0	150.0
M8PFOA		103.9	50.0	150.0
M8PFOS		92.0	50.0	150.0
M9-PFNA		113.0	50.0	150.0
MPFBA		107.2	50.0	150.0
MPFDoDA		88.2	50.0	150.0
d3N-MeFOSAA		92.7	50.0	150.0
d5EtFOSAA		102.7	50.0	150.0
MHFPO-DA		100.9	50.0	150.0
d-N-EtFOSA-M		105.4	50.0	150.0
d-N-MeFOSA-M		104.1	50.0	150.0
d7-N-MeFOSE-M		107.0	50.0	150.0
d9-N-EtFOSE-M		98.2	50.0	150.0

QC Report - Internal Standards per QC Sample

Matrix Spike (MS)

Lab Sample ID: AK250926MS.7932609M, Parent Sample ID: S79326.08

Run in Batch: AK250926MS, Run Date: 09/26/2025 18:51, Prep Date: 09/26/2025, Matrix: WW, Dilution: 2.1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		89.8	50.0	150.0
M2-6:2FTSA		84.8	50.0	150.0
M2-8:2FTSA		91.1	50.0	150.0
M2PFTeDA		88.8	12.0	218.0
M3PFBS		113.0	50.0	150.0
M3PFHxS		97.1	50.0	150.0
M4PFHpA		116.7	50.0	150.0
M5PFHxA		110.9	50.0	150.0
M5PFPeA		118.2	50.0	150.0
M6PFDA		108.8	50.0	150.0
M7PFUnDA		95.8	50.0	150.0
M8FOSA		108.1	50.0	150.0
M8PFOA		108.3	50.0	150.0
M8PFOS		107.4	50.0	150.0
M9-PFNA		107.7	50.0	150.0
MPFBA		113.9	50.0	150.0
MPFDoDA		103.8	50.0	150.0
d3N-MeFOSAA		114.0	50.0	150.0
d5EtFOSAA		89.8	50.0	150.0
MHFPO-DA		117.2	50.0	150.0
d-N-EtFOSA-M		98.6	50.0	150.0
d-N-MeFOSA-M		104.3	50.0	150.0
d7-N-MeFOSE-M		112.0	50.0	150.0
d9-N-EtFOSE-M		94.8	50.0	150.0

QC Report - Internal Standards per QC Sample

Matrix Spike Duplicate (MSD)

Lab Sample ID: AK250926MS.7932610N, Parent Sample ID: AK250926MS.7932609M

Run in Batch: AK250926MS, Run Date: 09/26/2025 19:11, Prep Date: 09/26/2025, Matrix: WW, Dilution: 2.02

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		83.2	50.0	150.0
M2-6:2FTSA		94.9	50.0	150.0
M2-8:2FTSA		79.9	50.0	150.0
M2PFTeDA		86.8	12.0	218.0
M3PFBS		100.5	50.0	150.0
M3PFHxS		88.7	50.0	150.0
M4PFHpA		98.1	50.0	150.0
M5PFHxA		100.0	50.0	150.0
M5PFPeA		107.7	50.0	150.0
M6PFDA		95.7	50.0	150.0
M7PFUnDA		95.2	50.0	150.0
M8FOSA		106.8	50.0	150.0
M8PFOA		107.9	50.0	150.0
M8PFOS		104.2	50.0	150.0
M9-PFNA		97.9	50.0	150.0
MPFBA		107.3	50.0	150.0
MPFDoDA		95.6	50.0	150.0
d3N-MeFOSAA		93.6	50.0	150.0
d5EtFOSAA		99.9	50.0	150.0
MHFPO-DA		97.3	50.0	150.0
d-N-EtFOSA-M		102.2	50.0	150.0
d-N-MeFOSA-M		100.8	50.0	150.0
d7-N-MeFOSE-M		104.1	50.0	150.0
d9-N-EtFOSE-M		96.1	50.0	150.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF250926W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK)

Lab Sample ID: AK250926MS.BLK250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 15:31, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFBA		ND	5	ng/l
PFMPA		ND	1	ng/l
FPrPA (3:3 FTCA)		ND	5	ng/l
PFPeA		ND	2	ng/l
PFPPrS		ND	1	ng/l
PFMBA		ND	1	ng/l
4:2 FTSA		ND	1	ng/l
NFDHA		ND	1	ng/l
PFHxA		ND	1	ng/l
PFBS		ND	1	ng/l
HFPO-DA		ND	5	ng/l
FPePA (5:3 FTCA)		ND	5	ng/l
PFEESA		ND	1	ng/l
PFHpA		ND	1	ng/l
ADONA		ND	1	ng/l
PFPeS		ND	1	ng/l
6:2 FTSA		ND	1	ng/l
PFOA		ND	1	ng/l
PFBSA		ND	1	ng/l
PFHxS-BR		ND	1	ng/l
PFHxS		ND	1	ng/l
PFHxS-LN		ND	1	ng/l
PFNA		ND	1	ng/l
FHpPA (7:3 FTCA)		ND	5	ng/l
8:2 FTSA		ND	1	ng/l
PFECHS		ND	1	ng/l
PFHpS		ND	1	ng/l
N-MeFOSAA		ND	1	ng/l
PFDA		ND	1	ng/l
PFOS-BR		ND	1	ng/l
EtFOSAA		ND	2	ng/l
PFOS		ND	1	ng/l
PFOS-LN		ND	1	ng/l
PFUnDA		ND	1	ng/l
PFHxSA		ND	1	ng/l
9CL-PF3ONS		ND	1	ng/l
PFNS		ND	1	ng/l
PFDoDA		ND	1	ng/l
PFDS		ND	1	ng/l
PFTTrDA		ND	1	ng/l
11CL-PF3OUdS		ND	1	ng/l
PFTeDA		ND	2	ng/l
FOSA		ND	1	ng/l
PFDOS		ND	2	ng/l
NMeFOSE		ND	2	ng/l
NMeFOSAM		ND	1	ng/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF250926W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Blank (BLK) (continued)

Lab Sample ID: AK250926MS.BLK250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 15:31, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
NEtFOSE		ND	2	ng/l
NEtFOSAM		ND	1	ng/l

Laboratory Control Sample (LCS)

Lab Sample ID: AK250926MS.LCS250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 14:51, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBA		91.8	70.0	130.0
PFMPA		77.4	70.0	130.0
FPrPA (3:3 FTCA)		96.0	70.0	130.0
PFPeA		96.8	70.0	130.0
PFPPrS		90.0	70.0	130.0
PFMBA		76.6	70.0	130.0
4:2 FTSA		111.4	70.0	130.0
NFDHA		85.4	70.0	130.0
PFHxA		94.8	70.0	130.0
PFBS		102.2	70.0	130.0
HFPO-DA		86.2	70.0	130.0
FPePA (5:3 FTCA)		92.0	70.0	130.0
PFEESA		83.4	70.0	130.0
PFHpA		98.6	70.0	130.0
ADONA		80.8	70.0	130.0
PFPeS		88.4	70.0	130.0
6:2 FTSA		103.6	70.0	130.0
PFOA		80.4	70.0	130.0
PFBSA		92.4	70.0	130.0
PFHxS		94.4	70.0	130.0
PFNA		106.2	70.0	130.0
FHpPA (7:3 FTCA)		94.2	70.0	130.0
8:2 FTSA		91.6	70.0	130.0
PFECHS		87.2	70.0	130.0
PFHpS		91.4	70.0	130.0
N-MeFOSAA		96.2	70.0	130.0
PFDA		88.6	70.0	130.0
EtFOSAA		109.2	70.0	130.0
PFOS		93.8	70.0	130.0
PFUnDA		87.6	70.0	130.0
PFHxSA		92.2	70.0	130.0
9CL-PF3ONS		93.0	70.0	130.0
PFNS		88.6	70.0	130.0
PFDoDA		91.0	70.0	130.0
PFDS		96.2	70.0	130.0
PFTTrDA		100.8	70.0	130.0
11CL-PF3OUdS		99.2	70.0	130.0
PFTeDA		90.8	70.0	130.0
FOSA		96.8	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF250926W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK250926MS.LCS250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 14:51, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFDOS		121.8	70.0	130.0
NMeFOSE		97.4	70.0	130.0
NMeFOSAM		88.0	70.0	130.0
NEtFOSE		94.2	70.0	130.0
NEtFOSAM		93.8	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK250926MS.LCSD250926, Parent Sample ID: AK250926MS.LCS250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 15:11, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		90.8	70.0	130.0	1.1	30.0
PFMPA		83.4	70.0	130.0	7.5	30.0
FPrPA (3:3 FTCA)		82.8	70.0	130.0	14.8	30.0
PFPeA		98.6	70.0	130.0	1.8	30.0
PFPPrS		88.4	70.0	130.0	1.8	30.0
PFMBA		84.2	70.0	130.0	9.5	30.0
4:2 FTSA		109.2	70.0	130.0	2.0	30.0
NFDHA		95.0	70.0	130.0	10.6	30.0
PFHxA		91.2	70.0	130.0	3.9	30.0
PFBS		99.2	70.0	130.0	3.0	30.0
HFPO-DA		83.6	70.0	130.0	3.1	30.0
FPePA (5:3 FTCA)		84.6	70.0	130.0	8.4	30.0
PFEESA		90.6	70.0	130.0	8.3	30.0
PFHpA		104.2	70.0	130.0	5.5	30.0
ADONA		91.8	70.0	130.0	12.7	30.0
PFPeS		90.0	70.0	130.0	1.8	30.0
6:2 FTSA		113.0	70.0	130.0	8.7	30.0
PFOA		92.0	70.0	130.0	13.5	30.0
PFBSA		91.2	70.0	130.0	1.3	30.0
PFHxS		96.2	70.0	130.0	1.9	30.0
PFNA		88.2	70.0	130.0	18.5	30.0
FHpPA (7:3 FTCA)		90.0	70.0	130.0	4.6	30.0
8:2 FTSA		97.0	70.0	130.0	5.7	30.0
PFECHS		89.4	70.0	130.0	2.5	30.0
PFHpS		96.0	70.0	130.0	4.9	30.0
N-MeFOSAA		100.4	70.0	130.0	4.3	30.0
PFDA		95.8	70.0	130.0	7.8	30.0
EtFOSAA		94.8	70.0	130.0	14.1	30.0
PFOS		91.0	70.0	130.0	3.0	30.0
PFUnDA		94.0	70.0	130.0	7.0	30.0
PFHxSA		96.8	70.0	130.0	4.9	30.0
9CL-PF3ONS		93.8	70.0	130.0	0.9	30.0
PFNS		95.8	70.0	130.0	7.8	30.0
PFDODA		105.2	70.0	130.0	14.5	30.0
PFDS		105.6	70.0	130.0	9.3	30.0
PFTTrDA		104.8	70.0	130.0	3.9	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF250926W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK250926MS.LCSD250926, Parent Sample ID: AK250926MS.LCS250926

Run in Batch: AK250926MS, Run Date: 09/26/2025 15:11, Prep Date: 09/26/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
11CL-PF3OUdS		107.2	70.0	130.0	7.8	30.0
PFTeDA		84.8	70.0	130.0	6.8	30.0
FOSA		92.2	70.0	130.0	4.9	30.0
PFDOS		121.2	70.0	130.0	0.5	30.0
NMeFOSE		100.0	70.0	130.0	2.6	30.0
NMeFOSAM		90.8	70.0	130.0	3.1	30.0
NEtFOSE		90.2	70.0	130.0	4.3	30.0
NEtFOSAM		94.2	70.0	130.0	0.4	30.0

Matrix Spike (MS)

Lab Sample ID: AK250926MS.7932609M, Parent Sample ID: S79326.08

Run in Batch: AK250926MS, Run Date: 09/26/2025 18:51, Prep Date: 09/26/2025, Matrix: WW, Dilution: 2.1

Analyte	Flags	% Rec	LCL	UCL
PFBA		91.4	70.0	130.0
PFPeA		92.4	70.0	130.0
4:2 FTSA		95.2	70.0	130.0
PFHxA		78.1	70.0	130.0
PFBS		94.3	70.0	130.0
PFHpA		83.8	70.0	130.0
PFPeS		83.8	70.0	130.0
6:2 FTSA		104.8	70.0	130.0
PFOA		77.1	70.0	130.0
PFHxS		104.8	70.0	130.0
PFNA		93.3	70.0	130.0
8:2 FTSA		94.3	70.0	130.0
PFHpS		91.4	70.0	130.0
PFDA		87.6	70.0	130.0
N-MeFOSAA		83.8	70.0	130.0
EtFOSAA		114.3	70.0	130.0
PFOS		81.0	70.0	130.0
PFUnDA		93.3	70.0	130.0
PFNS		81.0	70.0	130.0
PFDoDA		83.8	70.0	130.0
PFDS		95.2	70.0	130.0
PFTTrDA		92.4	70.0	130.0
FOSA		87.6	70.0	130.0
PFTeDA		87.6	70.0	130.0
11CL-PF3OUdS		87.6	70.0	130.0
9CL-PF3ONS		91.4	70.0	130.0
ADONA		90.5	70.0	130.0
HFPO-DA		87.6	70.0	130.0
FHpPA (7:3 FTCA)		85.7	70.0	130.0
FPePA (5:3 FTCA)		81.0	70.0	130.0
FPrPA (3:3 FTCA)		86.7	70.0	130.0
NFDHA		83.8	70.0	130.0
PFBSA		93.3	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF250926W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike (MS) (continued)

Lab Sample ID: AK250926MS.7932609M, Parent Sample ID: S79326.08

Run in Batch: AK250926MS, Run Date: 09/26/2025 18:51, Prep Date: 09/26/2025, Matrix: WW, Dilution: 2.1

Analyte	Flags	% Rec	LCL	UCL
PFECHS		83.8	70.0	130.0
PFEESA		78.1	70.0	130.0
PFHxSA		86.7	70.0	130.0
PFMBA		73.3	70.0	130.0
PFMPA		75.2	70.0	130.0
PFPPrS		85.7	70.0	130.0

Matrix Spike Duplicate (MSD)

Lab Sample ID: AK250926MS.7932610N, Parent Sample ID: AK250926MS.7932609M

Run in Batch: AK250926MS, Run Date: 09/26/2025 19:11, Prep Date: 09/26/2025, Matrix: WW, Dilution: 2.02

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		92.1	70.0	130.0	3.2	30.0
PFPeA		96.0	70.0	130.0	0.0	30.0
4:2 FTSA		99.0	70.0	130.0	0.0	30.0
PFHxA		95.0	70.0	130.0	15.7	30.0
PFBS		95.0	70.0	130.0	3.1	30.0
PFHpA		108.9	70.0	130.0	22.2	30.0
PFPeS		94.1	70.0	130.0	7.7	30.0
6:2 FTSA		108.9	70.0	130.0	0.0	30.0
PFOA		70.3	70.0	130.0	13.2	30.0
PFHxS		97.0	70.0	130.0	11.5	30.0
PFNA		108.9	70.0	130.0	11.5	30.0
8:2 FTSA		118.8	70.0	130.0	19.2	30.0
PFHpS		95.0	70.0	130.0	0.0	30.0
PFDA		97.0	70.0	130.0	6.3	30.0
N-MeFOSAA		90.1	70.0	130.0	3.4	30.0
EtFOSAA		92.1	70.0	130.0	25.4	30.0
PFOS		83.2	70.0	130.0	1.2	30.0
PFUnDA		87.1	70.0	130.0	10.8	30.0
PFNS		85.1	70.0	130.0	1.2	30.0
PFDoDA		96.0	70.0	130.0	9.7	30.0
PFDS		97.0	70.0	130.0	2.0	30.0
PFTTrDA		99.0	70.0	130.0	3.0	30.0
FOSA		90.1	70.0	130.0	1.1	30.0
PFTeDA		96.0	70.0	130.0	5.3	30.0
11CL-PF3OUdS		99.0	70.0	130.0	8.3	30.0
9CL-PF3ONS		78.2	70.0	130.0	19.4	30.0
ADONA		90.1	70.0	130.0	4.3	30.0
HFPO-DA		99.0	70.0	130.0	8.3	30.0
FHpPA (7:3 FTCA)		88.1	70.0	130.0	1.1	30.0
FPePA (5:3 FTCA)		99.0	70.0	130.0	16.2	30.0
FPrPA (3:3 FTCA)		92.1	70.0	130.0	2.2	30.0
NFDHA		77.2	70.0	130.0	12.0	30.0
PFBSA		91.1	70.0	130.0	6.3	30.0
PFECHS		80.2	70.0	130.0	8.3	30.0
PFEESA		75.2	70.0	130.0	7.6	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF250926W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/MSD

Matrix Spike Duplicate (MSD) (continued)

Lab Sample ID: AK250926MS.7932610N, Parent Sample ID: AK250926MS.7932609M

Run in Batch: AK250926MS, Run Date: 09/26/2025 19:11, Prep Date: 09/26/2025, Matrix: WW, Dilution: 2.02

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFHxSA		87.1	70.0	130.0	3.4	30.0
PFMBA	*	68.3	70.0	130.0	11.0	30.0
PFMPA		75.2	70.0	130.0	3.9	30.0
PFPrS		93.1	70.0	130.0	4.3	30.0



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www.meritlabs.com

C.O.C. PAGE # 1 OF 1

172724

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME		Kevin Schneider / Clifford Yant z	
COMPANY		Ramboll	
ADDRESS		2090 Commonwealth Blvd	
CITY	Ann Arbor	STATE	MI
PHONE NO.	CELL NO.	P.O. NO.	ZIP CODE
	313-333-0211	194061180	48105
E-MAIL ADDRESS		QUOTE NO.	
clifford.yantz@ramboll.com		Task 37	
kevin.schneider@ramboll.com			

CONTACT NAME		X SAME	
COMPANY			
ADDRESS			
CITY		STATE	
PHONE NO.		E-MAIL ADDRESS	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME	RACER Coldwater Road	SAMPLER(S) - PLEASE PRINT/SIGN NAME	Kevin Schneider KCS
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER			
DELIVERABLES REQUIRED ☒ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER			

MATRIX W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
CODE: SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR WS=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	COLLECTION		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PFAs																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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RELINQUISHED BY:		X	Sampler	DATE	TIME
SIGNATURE/ORGANIZATION	KCS			9/25/25	12:00
RECEIVED BY:				DATE	TIME
SIGNATURE/ORGANIZATION	J. Smith			9/25/25	12:10
RELINQUISHED BY:				DATE	TIME
SIGNATURE/ORGANIZATION	J. Smith			9/25/25	13:10
RECEIVED BY:				DATE	TIME
SIGNATURE/ORGANIZATION	M. Aliberto			9/25/25	13:10

RELINQUISHED BY:				DATE	TIME
SIGNATURE/ORGANIZATION					
RECEIVED BY:				DATE	TIME
SIGNATURE/ORGANIZATION					
SEAL NO.	SEAL INTACT	INITIALS	NOTES:	TEMP. ON ARRIVAL	
	YES ☐ NO ☐				
SEAL NO.	SEAL INTACT	INITIALS			
	YES ☐ NO ☐				

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Analytical Laboratory Report

Report ID: S79543.01(01)
Generated on 10/16/2025

Report to
Attention: Clifford Yantz
Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:
Email: Clifford.Yantz@ramboll.com

Additional Contacts: Kevin Schneider

Report produced by
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Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary
Lab Sample ID(s): S79543.01-S79543.04
Project: RACER Coldwater Road
Collected Date(s): 09/30/2025
Submitted Date/Time: 10/02/2025 11:00
Sampled by: Lee Trumbull
P.O. #: 1940011180 TASK37

Table of Contents

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
ASTMD7979-19M	ASTM Method D7979 - 19 Modified (Isotopic Dilution)

Parameter Summary

Parameter	Synonym	Cas #
PFBA	Perfluorobutanoic Acid	375-22-4
PFPeA	Perfluoropentanoic Acid	2706-90-3
4:2 FTSA	4:2 Fluorotelomer Sulfonic Acid	757124-72-4
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFPeS	Perfluoropentane Sulfonic Acid	2706-91-4
6:2 FTSA	6:2 Fluorotelomer Sulfonic Acid	27619-97-2
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFHxS-LN	Perfluorohexane Sulfonic Acid - LN	355-46-4-LN
PFHxS-BR	Perfluorohexane Sulfonic Acid - BR	355-46-4-BR
PFNA	Perfluorononanoic Acid	375-95-1
8:2 FTSA	8:2 Fluorotelomer Sulfonic Acid	39108-34-4
PFHpS	Perfluoroheptane Sulfonic Acid	375-92-8
PFDA	Perfluorodecanoic Acid	335-76-2
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991-50-6
PFOS	Perfluorooctane Sulfonic Acid	1763-23-1
PFOS-LN	Perfluorooctane Sulfonic Acid - LN	1763-23-1-LN
PFOS-BR	Perfluorooctane Sulfonic Acid - BR	1763-23-1-BR
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFNS	Perfluorononane Sulfonic Acid	68259-12-1
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFDS	Perfluorodecane Sulfonic Acid	335-77-3
PFTTrDA	Perfluorotridecanoic Acid	72629-94-8
FOSA	Perfluorooctane Sulfonamide	754-91-6
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6
FHpPA (7:3 FTCA)	3-Perfluoroheptyl propanoic acid	812-70-4
FPePA (5:3 FTCA)	3-Perfluoropentyl propanoic acid	914637-49-3
FPrPA (3:3 FTCA)	3-Perfluoropropyl propanoic acid	356-02-5
PFBSA	Perfluorobutanesulfonamide	30334-69-1
PFECHS	Perfluoro-4-ethylcyclohexanesulfonate	80988-54-1
PFHxSA	Perfluorohexanesulfonamide	41997-13-1



Analytical Laboratory Report

Sample Summary (4 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S79543.01	03-PRCC-25-EFF-201-20250930	Wastewater	09/30/25 10:05
S79543.02	03-PRCC-25-MID-2-201-20250930	Wastewater	09/30/25 10:08
S79543.03	03-PRCC-25-MID-1-201-20250930	Wastewater	09/30/25 10:11
S79543.04	03-PRCC-25-PRIM-201-20250930	Wastewater	09/30/25 10:13



Analytical Laboratory Report

Lab Sample ID: S79543.01

Sample Tag: 03-PRCC-25-EFF-201-20250930

Collected Date/Time: 09/30/2025 10:05

Matrix: Wastewater

COC Reference: 172725

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.83/6.48/11	ASTMD7979-19M	10/02/25 13:45	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 10/02/25 17:26, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	2.1	ng/L	2.06	375-22-4	
PFPeA*	Not detected	4.1	1.2	ng/L	2.06	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.06	757124-72-4	
PFHxA*	Not detected	2.1	1.2	ng/L	2.06	307-24-4	
PFBS*	Not detected	2.1	0.62	ng/L	2.06	375-73-5	
PFHpA*	Not detected	2.1	0.82	ng/L	2.06	375-85-9	
PFPeS*	Not detected	2.1	1.9	ng/L	2.06	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.0	ng/L	2.06	27619-97-2	
PFOA*	Not detected	2.1	0.82	ng/L	2.06	335-67-1	
PFHxS*	Not detected	2.1	1.0	ng/L	2.06	355-46-4	
PFHxS-LN*	Not detected	2.1	1.0	ng/L	2.06	355-46-4-LN	
PFHxS-BR*	Not detected	2.1	1.0	ng/L	2.06	355-46-4-BR	
PFNA*	Not detected	2.1	1.0	ng/L	2.06	375-95-1	
8:2 FTSA*	Not detected	2.1	1.2	ng/L	2.06	39108-34-4	
PFHpS*	Not detected	2.1	0.82	ng/L	2.06	375-92-8	
PFDA*	Not detected	2.1	1.2	ng/L	2.06	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.0	ng/L	2.06	2355-31-9	
EtFOSAA*	Not detected	4.1	1.0	ng/L	2.06	2991-50-6	
PFOS*	Not detected	2.1	0.82	ng/L	2.06	1763-23-1	
PFOS-LN*	Not detected	2.1	0.82	ng/L	2.06	1763-23-1-LN	
PFOS-BR*	Not detected	2.1	0.82	ng/L	2.06	1763-23-1-BR	
PFUnDA*	Not detected	2.1	0.82	ng/L	2.06	2058-94-8	
PFNS*	Not detected	2.1	1.0	ng/L	2.06	68259-12-1	
PFDODA*	Not detected	2.1	0.62	ng/L	2.06	307-55-1	
PFDS*	Not detected	2.1	1.0	ng/L	2.06	335-77-3	
PFTTrDA*	Not detected	2.1	0.82	ng/L	2.06	72629-94-8	
FOSA*	Not detected	2.1	0.82	ng/L	2.06	754-91-6	
PFTeDA*	Not detected	4.1	0.62	ng/L	2.06	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.0	ng/L	2.06	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.0	ng/L	2.06	756426-58-1	
ADONA*	Not detected	2.1	0.62	ng/L	2.06	919005-14-4	
HFPO-DA*	Not detected	10	2.1	ng/L	2.06	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10	8.2	ng/L	2.06	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10	4.1	ng/L	2.06	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10	4.1	ng/L	2.06	356-02-5	
PFBSA*	Not detected	2.1	0.62	ng/L	2.06	30334-69-1	
PFECHS*	Not detected	2.1	0.82	ng/L	2.06	80988-54-1	



Analytical Laboratory Report

Lab Sample ID: S79543.01 (continued)

Sample Tag: 03-PRCC-25-EFF-201-20250930

34 PFAs, Method: ASTMD7979-19M, Run Date: 10/02/25 17:26, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFHxSA*	Not detected	2.1	0.62	ng/L	2.06	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S79543.02

Sample Tag: 03-PRCC-25-MID-2-201-20250930

Collected Date/Time: 09/30/2025 10:08

Matrix: Wastewater

COC Reference: 172725

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.00/6.48/11	ASTMD7979-19M	10/02/25 13:45	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 10/02/25 18:06, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10.0	2.0	ng/L	1.99	375-22-4	
PFPeA*	Not detected	4.0	1.2	ng/L	1.99	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.20	ng/L	1.99	757124-72-4	
PFHxA*	Not detected	2.0	1.2	ng/L	1.99	307-24-4	
PFBS*	Not detected	2.0	0.60	ng/L	1.99	375-73-5	
PFHpA*	Not detected	2.0	0.80	ng/L	1.99	375-85-9	
PFPeS*	Not detected	2.0	1.8	ng/L	1.99	2706-91-4	
6:2 FTSA*	Not detected	2.0	1.00	ng/L	1.99	27619-97-2	
PFOA*	Not detected	2.0	0.80	ng/L	1.99	335-67-1	
PFHxS*	Not detected	2.0	1.00	ng/L	1.99	355-46-4	
PFHxS-LN*	Not detected	2.0	1.00	ng/L	1.99	355-46-4-LN	
PFHxS-BR*	Not detected	2.0	1.00	ng/L	1.99	355-46-4-BR	
PFNA*	Not detected	2.0	1.00	ng/L	1.99	375-95-1	
8:2 FTSA*	Not detected	2.0	1.2	ng/L	1.99	39108-34-4	
PFHpS*	Not detected	2.0	0.80	ng/L	1.99	375-92-8	
PFDA*	Not detected	2.0	1.2	ng/L	1.99	335-76-2	
N-MeFOSAA*	Not detected	2.0	1.00	ng/L	1.99	2355-31-9	
EtFOSAA*	Not detected	4.0	1.00	ng/L	1.99	2991-50-6	
PFOS*	Not detected	2.0	0.80	ng/L	1.99	1763-23-1	
PFOS-LN*	Not detected	2.0	0.80	ng/L	1.99	1763-23-1-LN	
PFOS-BR*	Not detected	2.0	0.80	ng/L	1.99	1763-23-1-BR	
PFUnDA*	Not detected	2.0	0.80	ng/L	1.99	2058-94-8	
PFNS*	Not detected	2.0	1.00	ng/L	1.99	68259-12-1	
PFDODA*	Not detected	2.0	0.60	ng/L	1.99	307-55-1	
PFDS*	Not detected	2.0	1.00	ng/L	1.99	335-77-3	
PFTTrDA*	Not detected	2.0	0.80	ng/L	1.99	72629-94-8	
FOSA*	Not detected	2.0	0.80	ng/L	1.99	754-91-6	
PFTeDA*	Not detected	4.0	0.60	ng/L	1.99	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	1.00	ng/L	1.99	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	1.00	ng/L	1.99	756426-58-1	
ADONA*	Not detected	2.0	0.60	ng/L	1.99	919005-14-4	
HFPO-DA*	Not detected	10.0	2.0	ng/L	1.99	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10.0	8.0	ng/L	1.99	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10.0	4.0	ng/L	1.99	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10.0	4.0	ng/L	1.99	356-02-5	
PFBSA*	Not detected	2.0	0.60	ng/L	1.99	30334-69-1	
PFECHS*	Not detected	2.0	0.80	ng/L	1.99	80988-54-1	



Analytical Laboratory Report

Lab Sample ID: S79543.02 (continued)

Sample Tag: 03-PRCC-25-MID-2-201-20250930

34 PFAs, Method: ASTMD7979-19M, Run Date: 10/02/25 18:06, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFHxSA*	Not detected	2.0	0.60	ng/L	1.99	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S79543.03

Sample Tag: 03-PRCC-25-MID-1-201-20250930

Collected Date/Time: 09/30/2025 10:11

Matrix: Wastewater

COC Reference: 172725

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.83/6.48/11	ASTMD7979-19M	10/02/25 13:45	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 10/02/25 18:26, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	2.1	ng/L	2.06	375-22-4	
PFPeA*	Not detected	4.1	1.2	ng/L	2.06	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.06	757124-72-4	
PFHxA*	Not detected	2.1	1.2	ng/L	2.06	307-24-4	
PFBS*	Not detected	2.1	0.62	ng/L	2.06	375-73-5	
PFHpA*	Not detected	2.1	0.82	ng/L	2.06	375-85-9	
PFPeS*	Not detected	2.1	1.9	ng/L	2.06	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.0	ng/L	2.06	27619-97-2	
PFOA*	Not detected	2.1	0.82	ng/L	2.06	335-67-1	
PFHxS*	Not detected	2.1	1.0	ng/L	2.06	355-46-4	
PFHxS-LN*	Not detected	2.1	1.0	ng/L	2.06	355-46-4-LN	
PFHxS-BR*	Not detected	2.1	1.0	ng/L	2.06	355-46-4-BR	
PFNA*	Not detected	2.1	1.0	ng/L	2.06	375-95-1	
8:2 FTSA*	Not detected	2.1	1.2	ng/L	2.06	39108-34-4	
PFHpS*	Not detected	2.1	0.82	ng/L	2.06	375-92-8	
PFDA*	Not detected	2.1	1.2	ng/L	2.06	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.0	ng/L	2.06	2355-31-9	
EtFOSAA*	Not detected	4.1	1.0	ng/L	2.06	2991-50-6	
PFOS*	1.4	2.1	0.82	ng/L	2.06	1763-23-1	J
PFOS-LN*	Not detected	2.1	0.82	ng/L	2.06	1763-23-1-LN	
PFOS-BR*	Not detected	2.1	0.82	ng/L	2.06	1763-23-1-BR	
PFUnDA*	Not detected	2.1	0.82	ng/L	2.06	2058-94-8	
PFNS*	Not detected	2.1	1.0	ng/L	2.06	68259-12-1	
PFDODA*	Not detected	2.1	0.62	ng/L	2.06	307-55-1	
PFDS*	Not detected	2.1	1.0	ng/L	2.06	335-77-3	
PFTTrDA*	Not detected	2.1	0.82	ng/L	2.06	72629-94-8	
FOSA*	Not detected	2.1	0.82	ng/L	2.06	754-91-6	
PFTeDA*	Not detected	4.1	0.62	ng/L	2.06	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.0	ng/L	2.06	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.0	ng/L	2.06	756426-58-1	
ADONA*	Not detected	2.1	0.62	ng/L	2.06	919005-14-4	
HFPO-DA*	Not detected	10	2.1	ng/L	2.06	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10	8.2	ng/L	2.06	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10	4.1	ng/L	2.06	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10	4.1	ng/L	2.06	356-02-5	
PFBSA*	Not detected	2.1	0.62	ng/L	2.06	30334-69-1	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S79543.03 (continued)
Sample Tag: 03-PRCC-25-MID-1-201-20250930

34 PFAs, Method: ASTMD7979-19M, Run Date: 10/02/25 18:26, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFECHS*	Not detected	2.1	0.82	ng/L	2.06	80988-54-1	
PFHxSA*	Not detected	2.1	0.62	ng/L	2.06	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S79543.04

Sample Tag: 03-PRCC-25-PRIM-201-20250930

Collected Date/Time: 09/30/2025 10:13

Matrix: Wastewater

COC Reference: 172725

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.3	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.93/6.48/11	ASTMD7979-19M	10/02/25 13:45	CED	
Initial wt. (g) / Final wt. (g) / Volume (ml) (Rep1)	11.93/6.48/11	ASTMD7979-19M	10/10/25 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 10/10/25 13:47, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	2.0	ng/L	2.02	375-22-4	
PFPeA*	Not detected	4.0	1.2	ng/L	2.02	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.20	ng/L	2.02	757124-72-4	
PFHxA*	Not detected	2.0	1.2	ng/L	2.02	307-24-4	
PFBS*	Not detected	2.0	0.61	ng/L	2.02	375-73-5	
PFHpA*	Not detected	2.0	0.81	ng/L	2.02	375-85-9	
PFPeS*	Not detected	2.0	1.8	ng/L	2.02	2706-91-4	
6:2 FTSA*	Not detected	2.0	1.0	ng/L	2.02	27619-97-2	
PFOA*	Not detected	2.0	0.81	ng/L	2.02	335-67-1	
PFHxS*	Not detected	2.0	1.0	ng/L	2.02	355-46-4	
PFHxS-LN*	Not detected	2.0	1.0	ng/L	2.02	355-46-4-LN	
PFHxS-BR*	Not detected	2.0	1.0	ng/L	2.02	355-46-4-BR	
PFNA*	Not detected	2.0	1.0	ng/L	2.02	375-95-1	
8:2 FTSA*	Not detected	2.0	1.2	ng/L	2.02	39108-34-4	
PFHpS*	Not detected	2.0	0.81	ng/L	2.02	375-92-8	
PFDA*	Not detected	2.0	1.2	ng/L	2.02	335-76-2	
N-MeFOSAA*	Not detected	2.0	1.0	ng/L	2.02	2355-31-9	
EtFOSAA*	Not detected	4.0	1.0	ng/L	2.02	2991-50-6	
PFOS*	1.6	2.0	0.81	ng/L	2.02	1763-23-1	J
PFOS-LN*	1.1	2.0	0.81	ng/L	2.02	1763-23-1-LN	J
PFOS-BR*	Not detected	2.0	0.81	ng/L	2.02	1763-23-1-BR	
PFUnDA*	Not detected	2.0	0.81	ng/L	2.02	2058-94-8	
PFNS*	Not detected	2.0	1.0	ng/L	2.02	68259-12-1	
PFDODA*	Not detected	2.0	0.61	ng/L	2.02	307-55-1	
PFDS*	Not detected	2.0	1.0	ng/L	2.02	335-77-3	
PFTDA*	Not detected	2.0	0.81	ng/L	2.02	72629-94-8	
FOSA*	Not detected	2.0	0.81	ng/L	2.02	754-91-6	
PFTeDA*	Not detected	4.0	0.61	ng/L	2.02	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	1.0	ng/L	2.02	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	1.0	ng/L	2.02	756426-58-1	
ADONA*	Not detected	2.0	0.61	ng/L	2.02	919005-14-4	
HFPO-DA*	Not detected	10	2.0	ng/L	2.02	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10	8.1	ng/L	2.02	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10	4.0	ng/L	2.02	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10	4.0	ng/L	2.02	356-02-5	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S79543.04 (continued)
Sample Tag: 03-PRCC-25-PRIM-201-20250930

34 PFAs, Method: ASTMD7979-19M, Run Date: 10/10/25 13:47, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBSA*	Not detected	2.0	0.61	ng/L	2.02	30334-69-1	
PFECHS*	1.0	2.0	0.81	ng/L	2.02	80988-54-1	J
PFHxSA*	Not detected	2.0	0.61	ng/L	2.02	41997-13-1	

J-Estimated value less than reporting limit, but greater than MDL

Merit Laboratories Login Checklist

Lab Set ID:S79543

Client:RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Submitted: 10/02/2025 11:00 Login User: GDP

Attention: Clifford Yantz

Address: Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211

FAX:

Email: Clifford.Yantz@ramboll.com

Selection	Description	Note
Sample Receiving		
01.	☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 4.3
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontacted to:
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☐ Yes ☐ No ☒ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☐ No ☒ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____



Quality Control Report

Report ID: QC-S79543-01
Generated on 10/21/2025

Report to

Attention: Clifford Yantz
Ramboll Americas
2090 Commonwealth Blvd
Ann Arbor, MI 48105

Phone: 313-333-0211 FAX:

Report Produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S79543.01-S79543.04
Project: RACER Coldwater Road
Submitted Date/Time: 10/02/2025 11:00
Sampled by: Lee Trumbull
P.O. #: 1940011180 TASK37

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-5)
Prep Batch Summary (Page 6)
Internal Standards per Lab Sample (Pages 7-10)
Internal Standards per QC Sample (Pages 11-20)
Batch QC Results (Pages 21-30)

Report Flag Descriptions

*: QC result is outside of indicated control limits
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball
Quality Assurance Manager

QC Report - Analysis Summary

Lab Sample ID: S79543.01
Sample Tag: 03-PRCC-25-EFF-201-20250930
Collected Date/Time: 09/30/2025 10:05
Matrix: Wastewater
COC Reference: 172725

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	10/02/25 17:26	AK251002W1	PF251002W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S79543.02
Sample Tag: 03-PRCC-25-MID-2-201-20250930
Collected Date/Time: 09/30/2025 10:08
Matrix: Wastewater
COC Reference: 172725

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	10/02/25 18:06	AK251002W1	PF251002W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S79543.03
Sample Tag: 03-PRCC-25-MID-1-201-20250930
Collected Date/Time: 09/30/2025 10:11
Matrix: Wastewater
COC Reference: 172725

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	10/02/25 18:26	AK251002W1	PF251002W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S79543.04
Sample Tag: 03-PRCC-25-PRIM-201-20250930
Collected Date/Time: 09/30/2025 10:13
Matrix: Wastewater
COC Reference: 172725

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	10/10/25 13:47	AK251010W1	PF251010W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: PF251002W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79543.01	34 PFAs	ASTMD7979-19M	10/02/25 17:26	AK251002W1
S79543.02	34 PFAs	ASTMD7979-19M	10/02/25 18:06	AK251002W1
S79543.03	34 PFAs	ASTMD7979-19M	10/02/25 18:26	AK251002W1

Organics - Volatiles, Prep Batch ID: PF251010W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79543.04	34 PFAs	ASTMD7979-19M	10/10/25 13:47	AK251010W1

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79543.01

Sample Tag: 03-PRCC-25-EFF-201-20250930

Collected Date/Time: 09/30/2025 10:05

Matrix: Wastewater

COC Reference: 172725

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK251002W1, Run Date: 10/02/2025 17:26, Matrix: WW, Dilution: 2.06

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		94.3	50.0	150.0
M2-6:2FTSA		96.6	50.0	150.0
M2-8:2FTSA		105.4	50.0	150.0
M2PFTeDA		114.4	12.0	218.0
M3PFBS		103.0	50.0	150.0
M3PFHxS		95.2	50.0	150.0
M4PFHpA		111.1	50.0	150.0
M5PFHxA		99.3	50.0	150.0
M5PFPeA		103.9	50.0	150.0
M6PFDA		112.6	50.0	150.0
M7PFUnDA		108.3	50.0	150.0
M8FOSA		100.8	50.0	150.0
M8PFOA		107.6	50.0	150.0
M8PFOS		115.7	50.0	150.0
M9-PFNA		101.2	50.0	150.0
MPFBA		100.3	50.0	150.0
MPFDoDA		108.6	50.0	150.0
d3N-MeFOSAA		107.8	50.0	150.0
d5EtFOSAA		112.9	50.0	150.0
MHFPO-DA		90.1	50.0	150.0
d-N-EtFOSA-M		106.8	50.0	150.0
d-N-MeFOSA-M		100.3	50.0	150.0
d7-N-MeFOSE-M		101.6	50.0	150.0
d9-N-EtFOSE-M		93.4	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79543.02

Sample Tag: 03-PRCC-25-MID-2-201-20250930

Collected Date/Time: 09/30/2025 10:08

Matrix: Wastewater

COC Reference: 172725

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK251002W1, Run Date: 10/02/2025 18:06, Matrix: WW, Dilution: 1.99

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		100.8	50.0	150.0
M2-6:2FTSA		117.0	50.0	150.0
M2-8:2FTSA		103.4	50.0	150.0
M2PFTeDA		92.0	12.0	218.0
M3PFBS		90.6	50.0	150.0
M3PFHxS		99.5	50.0	150.0
M4PFHpA		105.3	50.0	150.0
M5PFHxA		104.2	50.0	150.0
M5PFPeA		107.0	50.0	150.0
M6PFDA		114.5	50.0	150.0
M7PFUnDA		108.5	50.0	150.0
M8FOSA		102.2	50.0	150.0
M8PFOA		110.9	50.0	150.0
M8PFOS		108.3	50.0	150.0
M9-PFNA		95.0	50.0	150.0
MPFBA		101.6	50.0	150.0
MPFDoDA		111.6	50.0	150.0
d3N-MeFOSAA		109.6	50.0	150.0
d5EtFOSAA		105.2	50.0	150.0
MHFPO-DA		98.6	50.0	150.0
d-N-EtFOSA-M		90.0	50.0	150.0
d-N-MeFOSA-M		93.8	50.0	150.0
d7-N-MeFOSE-M		99.0	50.0	150.0
d9-N-EtFOSE-M		101.5	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79543.03

Sample Tag: 03-PRCC-25-MID-1-201-20250930

Collected Date/Time: 09/30/2025 10:11

Matrix: Wastewater

COC Reference: 172725

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK251002W1, Run Date: 10/02/2025 18:26, Matrix: WW, Dilution: 2.06

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		89.5	50.0	150.0
M2-6:2FTSA		91.0	50.0	150.0
M2-8:2FTSA		104.8	50.0	150.0
M2PFTeDA		85.7	12.0	218.0
M3PFBS		92.4	50.0	150.0
M3PFHxS		96.1	50.0	150.0
M4PFHpA		93.4	50.0	150.0
M5PFHxA		92.1	50.0	150.0
M5PFPeA		98.4	50.0	150.0
M6PFDA		102.4	50.0	150.0
M7PFUnDA		90.6	50.0	150.0
M8FOSA		91.2	50.0	150.0
M8PFOA		98.2	50.0	150.0
M8PFOS		94.0	50.0	150.0
M9-PFNA		91.3	50.0	150.0
MPFBA		91.0	50.0	150.0
MPFDoDA		95.9	50.0	150.0
d3N-MeFOSAA		89.2	50.0	150.0
d5EtFOSAA		97.4	50.0	150.0
MHFPO-DA		89.9	50.0	150.0
d-N-EtFOSA-M		86.3	50.0	150.0
d-N-MeFOSA-M		92.2	50.0	150.0
d7-N-MeFOSE-M		93.2	50.0	150.0
d9-N-EtFOSE-M		88.3	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79543.04

Sample Tag: 03-PRCC-25-PRIM-201-20250930

Collected Date/Time: 09/30/2025 10:13

Matrix: Wastewater

COC Reference: 172725

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK251010W1, Run Date: 10/10/2025 13:47, Matrix: WW, Dilution: 2.02

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		88.4	50.0	150.0
M2-6:2FTSA		90.2	50.0	150.0
M2-8:2FTSA		97.0	50.0	150.0
M2PFTeDA		97.9	12.0	218.0
M3PFBS		89.2	50.0	150.0
M3PFHxS		108.9	50.0	150.0
M4PFHpA		93.1	50.0	150.0
M5PFHxA		91.4	50.0	150.0
M5PFPeA		92.9	50.0	150.0
M6PFDA		103.8	50.0	150.0
M7PFUnDA		84.0	50.0	150.0
M8FOSA		89.1	50.0	150.0
M8PFOA		93.2	50.0	150.0
M8PFOS		101.1	50.0	150.0
M9-PFNA		76.9	50.0	150.0
MPFBA		97.8	50.0	150.0
MPFDoDA		90.2	50.0	150.0
d3N-MeFOSAA		98.7	50.0	150.0
d5EtFOSAA		100.4	50.0	150.0
MHFPO-DA		77.6	50.0	150.0
d-N-EtFOSA-M		89.6	50.0	150.0
d-N-MeFOSA-M		94.0	50.0	150.0
d7-N-MeFOSE-M		92.6	50.0	150.0
d9-N-EtFOSE-M		94.6	50.0	150.0

QC Report - Internal Standards per QC Sample

Organics - Volatiles, Prep Batch ID: PF251002W1

QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK251002W1.BLK251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 16:06, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		123.8	50.0	150.0
M2-6:2FTSA		109.8	50.0	150.0
M2-8:2FTSA		126.3	50.0	150.0
M2PFTeDA		93.1	12.0	218.0
M3PFBS		105.8	50.0	150.0
M3PFHxS		98.1	50.0	150.0
M4PFHpA		100.1	50.0	150.0
M5PFHxA		104.9	50.0	150.0
M5PFPeA		108.6	50.0	150.0
M6PFDA		107.4	50.0	150.0
M7PFUnDA		102.4	50.0	150.0
M8FOSA		99.3	50.0	150.0
M8PFOA		110.5	50.0	150.0
M8PFOS		113.9	50.0	150.0
M9-PFNA		102.5	50.0	150.0
MPFBA		104.3	50.0	150.0
MPFDoDA		117.4	50.0	150.0
d3N-MeFOSAA		109.5	50.0	150.0
d5EtFOSAA		118.4	50.0	150.0
MHFPO-DA		114.7	50.0	150.0
d-N-EtFOSA-M		98.7	50.0	150.0
d-N-MeFOSA-M		96.2	50.0	150.0
d7-N-MeFOSE-M		105.2	50.0	150.0
d9-N-EtFOSE-M		99.5	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample (LCS)

Lab Sample ID: AK251002W1.LCS251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 15:26, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		116.6	50.0	150.0
M2-6:2FTSA		110.6	50.0	150.0
M2-8:2FTSA		109.3	50.0	150.0
M2PFTeDA		99.4	12.0	218.0
M3PFBS		101.7	50.0	150.0
M3PFHxS		103.0	50.0	150.0
M4PFHpA		103.3	50.0	150.0
M5PFHxA		101.3	50.0	150.0
M5PFPeA		106.4	50.0	150.0
M6PFDA		112.4	50.0	150.0
M7PFUnDA		111.0	50.0	150.0
M8FOSA		107.5	50.0	150.0
M8PFOA		103.0	50.0	150.0
M8PFOS		100.4	50.0	150.0
M9-PFNA		97.1	50.0	150.0
MPFBA		102.7	50.0	150.0
MPFDoDA		104.5	50.0	150.0
d3N-MeFOSAA		108.9	50.0	150.0
d5EtFOSAA		107.7	50.0	150.0
MHFPO-DA		105.3	50.0	150.0
d-N-EtFOSA-M		99.7	50.0	150.0
d-N-MeFOSA-M		103.3	50.0	150.0
d7-N-MeFOSE-M		108.1	50.0	150.0
d9-N-EtFOSE-M		105.2	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK251002W1.LCSD251002, Parent Sample ID: AK251002W1.LCS251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 15:46, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		111.5	50.0	150.0
M2-6:2FTSA		107.7	50.0	150.0
M2-8:2FTSA		113.0	50.0	150.0
M2PFTeDA		95.9	12.0	218.0
M3PFBS		103.6	50.0	150.0
M3PFHxS		100.7	50.0	150.0
M4PFHpA		118.9	50.0	150.0
M5PFHxA		97.9	50.0	150.0
M5PFPeA		115.2	50.0	150.0
M6PFDA		112.1	50.0	150.0
M7PFUnDA		110.9	50.0	150.0
M8FOSA		103.0	50.0	150.0
M8PFOA		114.4	50.0	150.0
M8PFOS		107.4	50.0	150.0
M9-PFNA		105.9	50.0	150.0
MPFBA		102.8	50.0	150.0
MPFDoDA		103.3	50.0	150.0
d3N-MeFOSAA		93.6	50.0	150.0
d5EtFOSAA		107.7	50.0	150.0
MHFPO-DA		99.3	50.0	150.0
d-N-EtFOSA-M		105.7	50.0	150.0
d-N-MeFOSA-M		102.8	50.0	150.0
d7-N-MeFOSE-M		100.4	50.0	150.0
d9-N-EtFOSE-M		100.5	50.0	150.0

QC Report - Internal Standards per QC Sample

Matrix Spike (MS)

Lab Sample ID: AK251002W1.7954301M, Parent Sample ID: S79543.01

Run in Batch: AK251002W1, Run Date: 10/02/2025 17:46, Prep Date: 10/02/2025, Matrix: WW, Dilution: 2.06

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		98.8	50.0	150.0
M2-6:2FTSA		96.3	50.0	150.0
M2-8:2FTSA		116.2	50.0	150.0
M2PFTeDA		114.8	12.0	218.0
M3PFBS		104.6	50.0	150.0
M3PFHxS		102.4	50.0	150.0
M4PFHpA		120.9	50.0	150.0
M5PFHxA		104.0	50.0	150.0
M5PFPeA		106.4	50.0	150.0
M6PFDA		109.9	50.0	150.0
M7PFUnDA		110.8	50.0	150.0
M8FOSA		97.2	50.0	150.0
M8PFOA		102.1	50.0	150.0
M8PFOS		110.8	50.0	150.0
M9-PFNA		95.4	50.0	150.0
MPFBA		100.5	50.0	150.0
MPFDoDA		109.1	50.0	150.0
d3N-MeFOSAA		97.2	50.0	150.0
d5EtFOSAA		109.0	50.0	150.0
MHFPO-DA		104.2	50.0	150.0
d-N-EtFOSA-M		97.7	50.0	150.0
d-N-MeFOSA-M		109.0	50.0	150.0
d7-N-MeFOSE-M		99.4	50.0	150.0
d9-N-EtFOSE-M		97.4	50.0	150.0

QC Report - Internal Standards per QC Sample

Duplicate (DUP)

Lab Sample ID: AK251002W1.7954701D, Parent Sample ID: S79547.01

Run in Batch: AK251002W1, Run Date: 10/02/2025 16:46, Prep Date: 10/02/2025, Matrix: WW, Dilution: 2.08

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		94.0	50.0	150.0
M2-6:2FTSA		81.6	50.0	150.0
M2-8:2FTSA		104.0	50.0	150.0
M2PFTeDA		94.8	12.0	218.0
M3PFBS		102.0	50.0	150.0
M3PFHxS		98.8	50.0	150.0
M4PFHpA		105.0	50.0	150.0
M5PFHxA		105.4	50.0	150.0
M5PFPeA		106.4	50.0	150.0
M6PFDA		116.2	50.0	150.0
M7PFUnDA		108.2	50.0	150.0
M8FOSA		105.7	50.0	150.0
M8PFOA		105.8	50.0	150.0
M8PFOS		101.9	50.0	150.0
M9-PFNA		98.8	50.0	150.0
MPFBA		103.6	50.0	150.0
MPFDoDA		113.4	50.0	150.0
d3N-MeFOSAA		100.3	50.0	150.0
d5EtFOSAA		112.7	50.0	150.0
MHFPO-DA		95.5	50.0	150.0
d-N-EtFOSA-M		104.0	50.0	150.0
d-N-MeFOSA-M		109.6	50.0	150.0
d7-N-MeFOSE-M		105.8	50.0	150.0
d9-N-EtFOSE-M		106.6	50.0	150.0

QC Report - Internal Standards per QC Sample

Organics - Volatiles, Prep Batch ID: PF251010W1

QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK251010W1.BLK251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 13:07, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		88.8	50.0	150.0
M2-6:2FTSA		107.0	50.0	150.0
M2-8:2FTSA		79.4	50.0	150.0
M2PFTeDA		96.6	12.0	218.0
M3PFBS		98.7	50.0	150.0
M3PFHxS		101.3	50.0	150.0
M4PFHpA		89.4	50.0	150.0
M5PFHxA		90.9	50.0	150.0
M5PFPeA		95.9	50.0	150.0
M6PFDA		105.6	50.0	150.0
M7PFUnDA		86.6	50.0	150.0
M8FOSA		94.7	50.0	150.0
M8PFOA		94.4	50.0	150.0
M8PFOS		104.2	50.0	150.0
M9-PFNA		73.6	50.0	150.0
MPFBA		98.2	50.0	150.0
MPFDoDA		92.4	50.0	150.0
d3N-MeFOSAA		98.3	50.0	150.0
d5EtFOSAA		101.7	50.0	150.0
MHFPO-DA		80.5	50.0	150.0
d-N-EtFOSA-M		83.7	50.0	150.0
d-N-MeFOSA-M		99.0	50.0	150.0
d7-N-MeFOSE-M		94.4	50.0	150.0
d9-N-EtFOSE-M		103.4	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample (LCS)

Lab Sample ID: AK251010W1.LCS251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 12:27, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		91.0	50.0	150.0
M2-6:2FTSA		93.6	50.0	150.0
M2-8:2FTSA		86.2	50.0	150.0
M2PFTeDA		97.2	12.0	218.0
M3PFBS		93.7	50.0	150.0
M3PFHxS		103.0	50.0	150.0
M4PFHpA		91.0	50.0	150.0
M5PFHxA		85.6	50.0	150.0
M5PFPeA		97.4	50.0	150.0
M6PFDA		97.6	50.0	150.0
M7PFUnDA		101.1	50.0	150.0
M8FOSA		94.8	50.0	150.0
M8PFOA		99.7	50.0	150.0
M8PFOS		99.4	50.0	150.0
M9-PFNA		84.2	50.0	150.0
MPFBA		100.1	50.0	150.0
MPFDoDA		90.8	50.0	150.0
d3N-MeFOSAA		100.0	50.0	150.0
d5EtFOSAA		98.9	50.0	150.0
MHFPO-DA		84.9	50.0	150.0
d-N-EtFOSA-M		91.5	50.0	150.0
d-N-MeFOSA-M		97.1	50.0	150.0
d7-N-MeFOSE-M		91.4	50.0	150.0
d9-N-EtFOSE-M		97.5	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK251010W1.LCSD251010, Parent Sample ID: AK251010W1.LCS251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 12:47, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		93.9	50.0	150.0
M2-6:2FTSA		95.6	50.0	150.0
M2-8:2FTSA		95.8	50.0	150.0
M2PFTeDA		90.6	12.0	218.0
M3PFBS		96.1	50.0	150.0
M3PFHxS		107.3	50.0	150.0
M4PFHpA		87.1	50.0	150.0
M5PFHxA		89.2	50.0	150.0
M5PFPeA		97.8	50.0	150.0
M6PFDA		104.7	50.0	150.0
M7PFUnDA		85.5	50.0	150.0
M8FOSA		89.0	50.0	150.0
M8PFOA		101.7	50.0	150.0
M8PFOS		99.5	50.0	150.0
M9-PFNA		79.0	50.0	150.0
MPFBA		99.8	50.0	150.0
MPFDoDA		86.6	50.0	150.0
d3N-MeFOSAA		97.6	50.0	150.0
d5EtFOSAA		99.9	50.0	150.0
MHFPO-DA		86.5	50.0	150.0
d-N-EtFOSA-M		82.5	50.0	150.0
d-N-MeFOSA-M		93.2	50.0	150.0
d7-N-MeFOSE-M		89.5	50.0	150.0
d9-N-EtFOSE-M		92.1	50.0	150.0

QC Report - Internal Standards per QC Sample

Matrix Spike (MS)

Lab Sample ID: AK251010W1.7983701M, Parent Sample ID: S79837.01

Run in Batch: AK251010W1, Run Date: 10/10/2025 14:27, Prep Date: 10/10/2025, Matrix: WW, Dilution: 2.06

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		86.0	50.0	150.0
M2-6:2FTSA		83.9	50.0	150.0
M2-8:2FTSA		91.1	50.0	150.0
M2PFTeDA		115.0	12.0	218.0
M3PFBS		89.4	50.0	150.0
M3PFHxS		98.3	50.0	150.0
M4PFHpA		83.9	50.0	150.0
M5PFHxA		84.9	50.0	150.0
M5PFPeA		93.4	50.0	150.0
M6PFDA		100.8	50.0	150.0
M7PFUnDA		84.4	50.0	150.0
M8FOSA		91.8	50.0	150.0
M8PFOA		101.5	50.0	150.0
M8PFOS		97.1	50.0	150.0
M9-PFNA		75.7	50.0	150.0
MPFBA		95.4	50.0	150.0
MPFDoDA		92.6	50.0	150.0
d3N-MeFOSAA		92.3	50.0	150.0
d5EtFOSAA		107.3	50.0	150.0
MHFPO-DA		82.1	50.0	150.0
d-N-EtFOSA-M		88.1	50.0	150.0
d-N-MeFOSA-M		94.8	50.0	150.0
d7-N-MeFOSE-M		83.2	50.0	150.0
d9-N-EtFOSE-M		101.5	50.0	150.0

QC Report - Internal Standards per QC Sample

Duplicate (DUP)

Lab Sample ID: AK251010W1.7982301D, Parent Sample ID: S79823.01

Run in Batch: AK251010W1, Run Date: 10/10/2025 15:07, Prep Date: 10/10/2025, Matrix: WW, Dilution: 2.1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		76.3	50.0	150.0
M2-6:2FTSA		87.2	50.0	150.0
M2-8:2FTSA		94.9	50.0	150.0
M2PFTeDA		121.9	12.0	218.0
M3PFBS		101.1	50.0	150.0
M3PFHxS		107.2	50.0	150.0
M4PFHpA		91.5	50.0	150.0
M5PFHxA		79.2	50.0	150.0
M5PFPeA		89.6	50.0	150.0
M6PFDA		105.4	50.0	150.0
M7PFUnDA		97.1	50.0	150.0
M8FOSA		96.5	50.0	150.0
M8PFOA		105.5	50.0	150.0
M8PFOS		94.3	50.0	150.0
M9-PFNA		85.1	50.0	150.0
MPFBA		98.0	50.0	150.0
MPFDoDA		92.0	50.0	150.0
d3N-MeFOSAA		100.4	50.0	150.0
d5EtFOSAA		105.7	50.0	150.0
MHFPO-DA		85.9	50.0	150.0
d-N-EtFOSA-M		88.6	50.0	150.0
d-N-MeFOSA-M		95.1	50.0	150.0
d7-N-MeFOSE-M		89.8	50.0	150.0
d9-N-EtFOSE-M		96.1	50.0	150.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251002W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK251002W1.BLK251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 16:06, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFBA		ND	10	ng/l
PFMPA		ND	2	ng/l
FPrPA (3:3 FTCA)		ND	10	ng/l
PFPeA		ND	4	ng/l
PFPPrS		ND	2	ng/l
PFMBA		ND	2	ng/l
4:2 FTSA		ND	2	ng/l
NFDHA		ND	2	ng/l
PFHxA		ND	2	ng/l
PFBS		ND	2	ng/l
HFPO-DA		ND	10	ng/l
FPePA (5:3 FTCA)		ND	10	ng/l
PFEESA		ND	2	ng/l
PFHpA		ND	2	ng/l
ADONA		ND	2	ng/l
PFPeS		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
PFOA		ND	2	ng/l
PFBSA		ND	2	ng/l
PFHxS-BR		ND	2	ng/l
PFHxS		ND	2	ng/l
PFHxS-LN		ND	2	ng/l
PFNA		ND	2	ng/l
FHpPA (7:3 FTCA)		ND	10	ng/l
8:2 FTSA		ND	2	ng/l
PFECHS		ND	2	ng/l
PFHpS		ND	2	ng/l
PFDA		ND	2	ng/l
N-MeFOSAA		ND	2	ng/l
PFOS-BR		ND	2	ng/l
EtFOSAA		ND	4	ng/l
PFOS		ND	2	ng/l
PFOS-LN		ND	2	ng/l
PFUnDA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFHxSA		ND	2	ng/l
PFNS		ND	2	ng/l
PFDoDA		ND	2	ng/l
PFDS		ND	2	ng/l
PFTTrDA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
PFTeDA		ND	4	ng/l
FOSA		ND	2	ng/l
PFDOS		ND	4	ng/l
NMeFOSE		ND	4	ng/l
NMeFOSAM		ND	2	ng/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251002W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK) (continued)

Lab Sample ID: AK251002W1.BLK251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 16:06, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
NEtFOSE		ND	4	ng/l
NEtFOSAM		ND	2	ng/l

Laboratory Control Sample (LCS)

Lab Sample ID: AK251002W1.LCS251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 15:26, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBA		93.0	70.0	130.0
PFMPA		82.4	70.0	130.0
FPrPA (3:3 FTCA)		90.2	70.0	130.0
PFPeA		94.4	70.0	130.0
PFPPrS		90.4	70.0	130.0
PFMBA		78.0	70.0	130.0
4:2 FTSA		103.0	70.0	130.0
NFDHA		96.0	70.0	130.0
PFHxA		92.6	70.0	130.0
PFBS		102.8	70.0	130.0
HFPO-DA		81.8	70.0	130.0
FPePA (5:3 FTCA)		95.6	70.0	130.0
PFEESA		88.8	70.0	130.0
PFHpA		110.4	70.0	130.0
ADONA		87.6	70.0	130.0
PFPeS		98.8	70.0	130.0
6:2 FTSA		109.4	70.0	130.0
PFOA		80.4	70.0	130.0
PFBSA		86.0	70.0	130.0
PFHxS		91.4	70.0	130.0
PFNA		108.4	70.0	130.0
FHpPA (7:3 FTCA)		106.6	70.0	130.0
8:2 FTSA		97.6	70.0	130.0
PFECHS		84.4	70.0	130.0
PFHpS		93.0	70.0	130.0
PFDA		82.0	70.0	130.0
N-MeFOSAA		84.8	70.0	130.0
EtFOSAA		95.6	70.0	130.0
PFOS		93.0	70.0	130.0
PFUnDA		83.6	70.0	130.0
9CL-PF3ONS		84.6	70.0	130.0
PFHxSA		86.0	70.0	130.0
PFNS		90.8	70.0	130.0
PFDoDA		94.0	70.0	130.0
PFDS		108.2	70.0	130.0
PFTTrDA		87.8	70.0	130.0
11CL-PF3OUdS		102.4	70.0	130.0
PFTeDA		87.2	70.0	130.0
FOSA		90.0	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251002W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK251002W1.LCS251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 15:26, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFDOS		120.4	70.0	130.0
NMeFOSE		92.2	70.0	130.0
NMeFOSAM		91.2	70.0	130.0
NEtFOSE		99.8	70.0	130.0
NEtFOSAM		94.8	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK251002W1.LCSD251002, Parent Sample ID: AK251002W1.LCS251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 15:46, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		90.6	70.0	130.0	2.6	30.0
PFMPA		76.8	70.0	130.0	7.0	30.0
FPrPA (3:3 FTCA)		82.0	70.0	130.0	9.5	30.0
PFPeA		86.4	70.0	130.0	8.8	30.0
PFPPrS		88.4	70.0	130.0	2.2	30.0
PFMBA		72.0	70.0	130.0	8.0	30.0
4:2 FTSA		99.8	70.0	130.0	3.2	30.0
NFDHA		83.6	70.0	130.0	13.8	30.0
PFHxA		88.0	70.0	130.0	5.1	30.0
PFBS		94.8	70.0	130.0	8.1	30.0
HFPO-DA		89.0	70.0	130.0	8.4	30.0
FPePA (5:3 FTCA)		93.4	70.0	130.0	2.3	30.0
PFEESA		79.4	70.0	130.0	11.2	30.0
PFHpA		92.6	70.0	130.0	17.5	30.0
ADONA		83.4	70.0	130.0	4.9	30.0
PFPeS		91.0	70.0	130.0	8.2	30.0
6:2 FTSA		104.2	70.0	130.0	4.9	30.0
PFOA		70.2	70.0	130.0	13.5	30.0
PFBSA		88.6	70.0	130.0	3.0	30.0
PFHxS		98.4	70.0	130.0	7.4	30.0
PFNA		89.6	70.0	130.0	19.0	30.0
FHpPA (7:3 FTCA)		91.0	70.0	130.0	15.8	30.0
8:2 FTSA		111.2	70.0	130.0	13.0	30.0
PFECHS		78.6	70.0	130.0	7.1	30.0
PFHpS		93.2	70.0	130.0	0.2	30.0
PFDA		86.0	70.0	130.0	4.8	30.0
N-MeFOSAA		98.4	70.0	130.0	14.8	30.0
EtFOSAA		99.2	70.0	130.0	3.7	30.0
PFOS		88.6	70.0	130.0	4.8	30.0
PFUnDA		90.0	70.0	130.0	7.4	30.0
9CL-PF3ONS		82.0	70.0	130.0	3.1	30.0
PFHxSA		100.6	70.0	130.0	15.6	30.0
PFNS		86.4	70.0	130.0	5.0	30.0
PFDODA		99.4	70.0	130.0	5.6	30.0
PFDS		94.8	70.0	130.0	13.2	30.0
PFTTrDA		87.2	70.0	130.0	0.7	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251002W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK251002W1.LCSD251002, Parent Sample ID: AK251002W1.LCS251002

Run in Batch: AK251002W1, Run Date: 10/02/2025 15:46, Prep Date: 10/02/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
11CL-PF3OUdS		99.2	70.0	130.0	3.2	30.0
PFTeDA		87.6	70.0	130.0	0.5	30.0
FOSA		94.0	70.0	130.0	4.3	30.0
PFDOS		95.8	70.0	130.0	22.8	30.0
NMeFOSE		99.8	70.0	130.0	7.9	30.0
NMeFOSAM		89.2	70.0	130.0	2.2	30.0
NEtFOSE		95.8	70.0	130.0	4.1	30.0
NEtFOSAM		92.2	70.0	130.0	2.8	30.0

Matrix Spike (MS)

Lab Sample ID: AK251002W1.7954301M, Parent Sample ID: S79543.01

Run in Batch: AK251002W1, Run Date: 10/02/2025 17:46, Prep Date: 10/02/2025, Matrix: WW, Dilution: 2.06

Analyte	Flags	% Rec	LCL	UCL
PFBA		90.3	70.0	130.0
PFPeA		94.2	70.0	130.0
4:2 FTSA		97.1	70.0	130.0
PFHxA		83.5	70.0	130.0
PFBS		93.2	70.0	130.0
PFHpA		86.4	70.0	130.0
PFPeS		93.2	70.0	130.0
6:2 FTSA		97.1	70.0	130.0
PFOA		88.3	70.0	130.0
PFHxS		90.3	70.0	130.0
PFNA		106.8	70.0	130.0
8:2 FTSA		96.1	70.0	130.0
PFHpS		91.3	70.0	130.0
PFDA		75.7	70.0	130.0
N-MeFOSAA		97.1	70.0	130.0
EtFOSAA		91.3	70.0	130.0
PFOS		81.6	70.0	130.0
PFUnDA		82.5	70.0	130.0
PFNS		81.6	70.0	130.0
PFDoDA		97.1	70.0	130.0
PFDS		88.3	70.0	130.0
PFTTrDA		89.3	70.0	130.0
FOSA		97.1	70.0	130.0
PFTeDA		85.4	70.0	130.0
11CL-PF3OUdS		94.2	70.0	130.0
9CL-PF3ONS		80.6	70.0	130.0
ADONA		97.1	70.0	130.0
HFPO-DA		83.5	70.0	130.0
FHpPA (7:3 FTCA)		97.1	70.0	130.0
FPePA (5:3 FTCA)		85.4	70.0	130.0
FPrPA (3:3 FTCA)		90.3	70.0	130.0
PFBSA		97.1	70.0	130.0
PFECHS		79.6	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251002W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Matrix Spike (MS) (continued)

Lab Sample ID: AK251002W1.7954301M, Parent Sample ID: S79543.01

Run in Batch: AK251002W1, Run Date: 10/02/2025 17:46, Prep Date: 10/02/2025, Matrix: WW, Dilution: 2.06

Analyte	Flags	% Rec	LCL	UCL
PFHxSA		97.1	70.0	130.0

Duplicate (DUP)

Lab Sample ID: AK251002W1.7954701D, Parent Sample ID: S79547.01

Run in Batch: AK251002W1, Run Date: 10/02/2025 16:46, Prep Date: 10/02/2025, Matrix: WW, Dilution: 2.08

Analyte	Flags	RPD	RPD CL
PFOS		NC	30.0
PFOS-LN		NC	30.0
PFOS-BR		NC	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251010W1

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK)

Lab Sample ID: AK251010W1.BLK251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 13:07, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFPPrA		ND	1	ng/l
PFBA		ND	10	ng/l
PFMPA		ND	2	ng/l
FPrPA (3:3 FTCA)		ND	10	ng/l
PFPPrS		ND	2	ng/l
PFPpA		ND	4	ng/l
PFMBA		ND	2	ng/l
4:2 FTSA		ND	2	ng/l
NFDHA		ND	2	ng/l
PFHxA		ND	2	ng/l
PFBS		ND	2	ng/l
HFPO-DA		ND	10	ng/l
FPePA (5:3 FTCA)		ND	10	ng/l
PFEESA		ND	2	ng/l
PFHpA		ND	2	ng/l
ADONA		ND	2	ng/l
PFPpS		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
HQ-115		ND	1	ng/l
PFOA		ND	2	ng/l
PFBSA		ND	2	ng/l
PFHxS-BR		ND	2	ng/l
PFHxS		ND	2	ng/l
PFHxS-LN		ND	2	ng/l
PFNA		ND	2	ng/l
FHpPA (7:3 FTCA)		ND	10	ng/l
8:2 FTSA		ND	2	ng/l
PFECHS		ND	2	ng/l
PFHpS		ND	2	ng/l
N-MeFOSAA		ND	2	ng/l
PFDA		ND	2	ng/l
PFOS-BR		ND	2	ng/l
PFOS		ND	2	ng/l
EtFOSAA		ND	4	ng/l
PFOS-LN		ND	2	ng/l
PFUnDA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFHxSA		ND	2	ng/l
PFNS		ND	2	ng/l
PFDODA		ND	2	ng/l
PFDS		ND	2	ng/l
PFTTrDA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
PFTeDA		ND	4	ng/l
FOSA		ND	2	ng/l
PFDOS		ND	4	ng/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251010W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Blank (BLK) (continued)

Lab Sample ID: AK251010W1.BLK251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 13:07, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
NMeFOSE		ND	4	ng/l
NMeFOSAM		ND	2	ng/l
NEtFOSE		ND	4	ng/l
NEtFOSAM		ND	2	ng/l

Laboratory Control Sample (LCS)

Lab Sample ID: AK251010W1.LCS251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 12:27, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFPPrA		77.8	70.0	130.0
PFBA		90.0	70.0	130.0
PFMPA		71.6	70.0	130.0
FPrPA (3:3 FTCA)		80.4	70.0	130.0
PFPPrS		91.6	70.0	130.0
PFPPrA		96.4	70.0	130.0
PFMBA	*	69.0	70.0	130.0
4:2 FTSA		106.4	70.0	130.0
NFDHA		77.8	70.0	130.0
PFHxA		87.8	70.0	130.0
PFBS		105.2	70.0	130.0
HFPO-DA		92.0	70.0	130.0
FPePA (5:3 FTCA)		78.2	70.0	130.0
PFEESA		72.4	70.0	130.0
PFHpA		91.2	70.0	130.0
ADONA		95.6	70.0	130.0
PFPPrS		98.6	70.0	130.0
6:2 FTSA		110.4	70.0	130.0
HQ-115		73.8	70.0	130.0
PFOA		85.2	70.0	130.0
PFBSA		79.4	70.0	130.0
PFHxS		97.4	70.0	130.0
PFNA		87.6	70.0	130.0
FHpPA (7:3 FTCA)		91.4	70.0	130.0
8:2 FTSA		92.2	70.0	130.0
PFECHS		75.8	70.0	130.0
PFHpS		94.6	70.0	130.0
N-MeFOSAA		92.2	70.0	130.0
PFDA		98.0	70.0	130.0
PFOS		82.0	70.0	130.0
EtFOSAA		96.0	70.0	130.0
PFUnDA		78.8	70.0	130.0
9CL-PF3ONS		80.0	70.0	130.0
PFHxSA		90.8	70.0	130.0
PFNS		86.8	70.0	130.0
PFDoDA		108.8	70.0	130.0
PFDS		86.4	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251010W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK251010W1.LCS251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 12:27, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFTTrDA		90.4	70.0	130.0
11CL-PF3OUdS		95.8	70.0	130.0
PFTeDA		95.6	70.0	130.0
FOSA		93.2	70.0	130.0
PFDOS		112.6	70.0	130.0
NMeFOSE		97.2	70.0	130.0
NMeFOSAM		91.6	70.0	130.0
NEtFOSE		97.4	70.0	130.0
NEtFOSAM		93.2	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK251010W1.LCSD251010, Parent Sample ID: AK251010W1.LCS251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 12:47, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFPPrA		78.0	70.0	130.0	0.3	30.0
PFBA		92.6	70.0	130.0	2.8	30.0
PFMPA	*	69.2	70.0	130.0	3.4	30.0
FPrPA (3:3 FTCA)		82.0	70.0	130.0	2.0	30.0
PFPPrS		89.4	70.0	130.0	2.4	30.0
PFPpA		91.8	70.0	130.0	4.9	30.0
PFMBA		71.6	70.0	130.0	3.7	30.0
4:2 FTSA		100.4	70.0	130.0	5.8	30.0
NFDHA		77.6	70.0	130.0	0.3	30.0
PFHxA		85.6	70.0	130.0	2.5	30.0
PFBS		98.6	70.0	130.0	6.5	30.0
HFPO-DA		94.6	70.0	130.0	2.8	30.0
FPePA (5:3 FTCA)		84.4	70.0	130.0	7.6	30.0
PFEESA		73.4	70.0	130.0	1.4	30.0
PFHpA		110.0	70.0	130.0	18.7	30.0
ADONA		90.0	70.0	130.0	6.0	30.0
PFPpS		91.4	70.0	130.0	7.6	30.0
6:2 FTSA		97.0	70.0	130.0	12.9	30.0
HQ-115		73.6	70.0	130.0	0.3	30.0
PFOA		80.8	70.0	130.0	5.3	30.0
PFBSA		89.4	70.0	130.0	11.8	30.0
PFHxS		94.0	70.0	130.0	3.6	30.0
PFNA		101.2	70.0	130.0	14.4	30.0
FHpPA (7:3 FTCA)		82.0	70.0	130.0	10.8	30.0
8:2 FTSA		99.6	70.0	130.0	7.7	30.0
PFECHS		77.6	70.0	130.0	2.3	30.0
PFHpS		96.0	70.0	130.0	1.5	30.0
N-MeFOSAA		95.6	70.0	130.0	3.6	30.0
PFDA		88.6	70.0	130.0	10.1	30.0
PFOS		83.8	70.0	130.0	2.2	30.0
EtFOSAA		77.4	70.0	130.0	21.5	30.0
PFUnDA		94.6	70.0	130.0	18.2	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251010W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK251010W1.LCSD251010, Parent Sample ID: AK251010W1.LCS251010

Run in Batch: AK251010W1, Run Date: 10/10/2025 12:47, Prep Date: 10/10/2025, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
9CL-PF3ONS		72.4	70.0	130.0	10.0	30.0
PFHxSA		88.2	70.0	130.0	2.9	30.0
PFNS		81.6	70.0	130.0	6.2	30.0
PFDODA		103.8	70.0	130.0	4.7	30.0
PFDS		88.8	70.0	130.0	2.7	30.0
PFTTrDA		93.0	70.0	130.0	2.8	30.0
11CL-PF3OUdS		93.2	70.0	130.0	2.8	30.0
PFTeDA		88.2	70.0	130.0	8.1	30.0
FOSA		99.2	70.0	130.0	6.2	30.0
PFDOS		97.6	70.0	130.0	14.3	30.0
NMeFOSE		98.0	70.0	130.0	0.8	30.0
NMeFOSAM		89.8	70.0	130.0	2.0	30.0
NEtFOSE		101.4	70.0	130.0	4.0	30.0
NEtFOSAM		99.8	70.0	130.0	6.8	30.0

Matrix Spike (MS)

Lab Sample ID: AK251010W1.7983701M, Parent Sample ID: S79837.01

Run in Batch: AK251010W1, Run Date: 10/10/2025 14:27, Prep Date: 10/10/2025, Matrix: WW, Dilution: 2.06

Analyte	Flags	% Rec	LCL	UCL
PFBA		106.8	70.0	130.0
PFPeA		100.6	70.0	130.0
4:2 FTSA		106.8	70.0	130.0
PFHxA		102.1	70.0	130.0
PFBS		104.4	70.0	130.0
PFHpA		106.8	70.0	130.0
PFPeS		106.8	70.0	130.0
6:2 FTSA		116.5	70.0	130.0
PFOA		82.5	70.0	130.0
PFHxS		96.1	70.0	130.0
PFNA		106.8	70.0	130.0
8:2 FTSA		88.3	70.0	130.0
PFHpS		97.1	70.0	130.0
PFDA		90.3	70.0	130.0
N-MeFOSAA		116.5	70.0	130.0
EtFOSAA		87.4	70.0	130.0
PFOS		85.8	70.0	130.0
PFUnDA		97.1	70.0	130.0
PFNS		97.1	70.0	130.0
PFDODA		97.1	70.0	130.0
PFDS		97.1	70.0	130.0
PFTTrDA		97.1	70.0	130.0
FOSA		97.1	70.0	130.0
PFTeDA		82.5	70.0	130.0
11CL-PF3OUdS		97.1	70.0	130.0
9CL-PF3ONS		81.6	70.0	130.0
ADONA		92.2	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF251010W1 (continued)

Surrogates: Yes, QC Types: BLK/LCS/LCSD/MS/DUP

Matrix Spike (MS) (continued)

Lab Sample ID: AK251010W1.7983701M, Parent Sample ID: S79837.01

Run in Batch: AK251010W1, Run Date: 10/10/2025 14:27, Prep Date: 10/10/2025, Matrix: WW, Dilution: 2.06

Analyte	Flags	% Rec	LCL	UCL
HFPO-DA		95.1	70.0	130.0

Duplicate (DUP)

Lab Sample ID: AK251010W1.7982301D, Parent Sample ID: S79823.01

Run in Batch: AK251010W1, Run Date: 10/10/2025 15:07, Prep Date: 10/10/2025, Matrix: WW, Dilution: 2.1

Analyte	Flags	RPD	RPD CL
PFBA		NC	30.0
PFPeA		NC	30.0
4:2 FTSA		NC	30.0
PFHxA		NC	30.0
PFBS		NC	30.0
PFHpA		NC	30.0
PFPeS		NC	30.0
6:2 FTSA		NC	30.0
PFOA		NC	30.0
PFHxS		NC	30.0
PFHxS-LN		NC	30.0
PFHxS-BR		NC	30.0
PFNA		NC	30.0
8:2 FTSA		NC	30.0
PFHpS		NC	30.0
PFDA		NC	30.0
N-MeFOSAA		NC	30.0
EtFOSAA		NC	30.0
PFOS		NC	30.0
PFOS-LN		NC	30.0
PFOS-BR		NC	30.0
PFUnDA		NC	30.0
PFNS		NC	30.0
PFDODA		NC	30.0
PFDS		NC	30.0
PFTTrDA		NC	30.0
FOSA		NC	30.0
PFTeDA		NC	30.0
11CL-PF3OUdS		NC	30.0
9CL-PF3ONS		NC	30.0
ADONA		NC	30.0
HFPO-DA		NC	30.0

