

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– January 2024 through March 2024***

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

FILE: 1088190/1940107203/Docs

Dear **Ms. Minder:**

In accordance with requirements of the above referenced discharge permit, we are providing you with the following discharge information for the period January 1, 2024 to March 31, 2024 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 and will continue to do so as long as the pretreatment system is in operation.

April 16, 2024

- 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 February 06, 2024.
- Analytical Reports provided by Merit Laboratories, Inc. for samples from the on-Site, PFAS pretreatment system collected on February 25, 2024, and February 27, 2024, 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.

Breakthrough samples were collected from GAC vessels on February 25, 2024 and February 27, 2024 during the accumulation tank discharge. The influent sample had a detection of 2,700 ng/L for perfluorooctane sulfonic acid (PFOS).



PFOS was detected at a concentration of 2.5 ng/l from the primary GAC vessel sample collected at the start of the discharge on February 25, 2024. In the samples collected just before discharge was discontinued, PFOS was not detected above the reporting limit in the primary, secondary, tertiary (third), and quaternary (fourth) GAC vessels.

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: January 1, 2024 through March 31, 2024

Average Volume of Daily Discharge (during reporting period): 2,123 gallons
(Three 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 Scott Yantz, as agent for RACER Trust*

Date Signed by Authorized Representative: 4/16/24

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
First Quarter - 2024 - 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	2.0	7.6	<2	7.12	0.02	5.7
Test Method	4500-NH3 G	10360	1664A	4500-H+ B	4500-PE	2540 D
Test Date	2/15/2024	2/7/2024	2/12/2024	2/6/2024	2/13/2024	2/7/2024
Sample Date	2/6/2024	2/6/2024	2/6/2024	2/6/2024	2/6/2024	2/6/2024
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
First Quarter - 2024 - 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	0.007	0.029	0.289	<0.0002	0.098	0.038	<0.002
Test Method	E200.8	200.8	200.8	245.1	200.8	200.8	1677
Test Date	2/8/2024	2/8/2024	2/8/2024	2/12/2024	2/8/2024	2/8/2024	2/8/2024
Sample Date	2/6/2024	2/6/2024	2/6/2024	2/6/2024	2/6/2024	2/6/2024	2/6/2024
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
First Quarter 2024
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)	
2/25/2024	801,997	--	--	1:00 pm (02/25/2024)	--	2.85	7.3	45.1	8.72
2/27/2024	--	808,366	6,369	--	2:14 am (02/27/2024)	2.85	10.8	51.4	7.32

Total Discharge Volume: 6,369
Average Discharge Volume (3 Days): 2,123

NOTES : Accumulation tank discharged continuously from 1:00 p.m. on February 25, 2024 to 2:14 a.m. on February 27, 2024 (37 hours, 14 minutes).



TABLE 3
RACER Trust - Coldwater Road
Pre-and Polyfluoroalkyl Substances (PFAS) Sampling Results - April 2024

Coldwater Road - PFAS Pretreatment System Samples

Perfluorinated Compound	Well/Sample ID: Beecher Metropolitan District Sewer Use Permit Discharge Pollutant Limitations and Monitoring Requirements	01-PRCC-24-INF (Influent Sample)	01-PRCC-24-PRIM (Primary GAC Vessel Sample)	01-PRCC-24-PRIM-141 (Primary GAC Vessel Sample after 141 Bed Volumes)	01-PRCC-24-MID-1-141 (Secondary GAC Vessel Sample after 141 Bed Volumes)	01-PRCC-24-MID-2-141 (Tertiary GAC Vessel Sample after 141 Bed Volumes)	01-PRCC-24-EFF-141 (Effluent Sample after 141 Bed Volumes)
		Sample Date: 2/25/2024	2/25/2024	2/27/2024	2/27/2024	2/27/2024	2/27/2024
Perfluorobutanoic Acid (PFBA)	--	<120 X	<10	<9.5	<10	<9.8	<9.3
Perfluoropentanoic Acid (PFPeA)	--	<4.0	<4.1	<3.8	<4.1	<3.9	<3.7
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorohexanoic Acid (PFHxA)	400,000	25	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorobutane Sulfonic Acid (PFBS)	420	25	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluoroheptanoic Acid (PFHpA)	--	9.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluoropentane Sulfonic Acid (PFPeS)	--	48	<2.1	<1.9	<2.0	<2.0	<1.9
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorooctanoic Acid (PFOA)	8	33	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorohexane Sulfonic Acid (PFHxS)	51	150	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	130	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	25	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorononanoic Acid (PFNA)	6	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluoroheptane Sulfonic Acid (PFHpS)	--	41	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorodecanoic Acid (PFDA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<4.0	<4.1	<3.8	<4.1	<3.9	<3.7
Perfluorooctane Sulfonic Acid (PFOS)	16	2,700	2.5	<1.9	<2.0	<2.0	<1.9
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	1,700	2.1	<1.9	<2.0	<2.0	<1.9
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	1,100	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluoroundecanoic Acid (PFUnDA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorononane Sulfonic Acid (PFNS)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorododecanoic Acid (PFDoDA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorotridecanoic Acid (PFTrDA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorooctane Sulfonamide (FOSA)	--	2.1	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorotetradecanoic Acid (PFTeDA)	--	<4.0	<4.1	<3.8	<4.1	<3.9	<3.7
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.0	<2.1	<1.9	<2.0	<2.0	<1.9
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<10	<10	<9.5	<10	<9.8	<9.3
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	<10	<10	<9.5	<10	<9.8	<9.3
3-Perfluoroheptyl propanoic acid (FPePA (5:3 FTCA))	--	<10	<10	<9.5	<10	<9.8	<9.3
3-Perfluoroheptyl propanoic acid (FPrPA (3:3 FTCA))	--	<10	<10	<9.5	<10	<9.8	<9.3
Perfluorobutanesulfonamide (PFBSA)	--	0.97 J	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	5,000	<2.1	<1.9	<2.0	<2.0	<1.9
Perfluorohexanesulfonamide (PFHxSA)	--	0.61 J	<2.1	<1.9	<2.0	<2.0	<1.9
Total Per-and Polyfluoroalkyl Substances	--	8,034.7	2.5	0.0	0.0	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) X - Elevated reporting limit due to matrix interference.
- 12) 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: S58432.01(01)
Generated on 02/23/2024

Report to

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

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

Additional Contacts: Kevin Schneider

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

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): S58432.01
Project: RACER Coldwater Road
Collected Date(s): 02/06/2024
Submitted Date/Time: 02/06/2024 12:45
Sampled by: Kevin Schneider
P.O. #: 1940006516 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



Analytical Laboratory 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
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
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 2015
SM2550B	Standard Method 2550 B 2011
SM4500-H+ B	Standard Method 4500 H + B 2011
SM4500-NH3 G	Standard Method 4500 NH3 G 2017
SM4500-PE	Standard Method 4500 P E 2011 / 4500 P B(5) 2011
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
S58432.01	01-PRCC-24	Wastewater	02/06/24 10:15



Analytical Laboratory Report

Lab Sample ID: S58432.01

Sample Tag: 01-PRCC-24

Collected Date/Time: 02/06/2024 10:15

Matrix: Wastewater

COC Reference: 159203

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Plastic	None	Yes	3.9	IR
1	125mL Plastic	HNO3	Yes	3.9	IR
1	500mL Plastic	None	Yes	3.9	IR
1	125mL Amber	PbCO3/NaOH	Yes	3.9	IR
1	32oz Glass	HCL	Yes	3.9	IR
1	250mL Plastic	H2SO4	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Mercury Digestion	Completed	E245.1	02/12/24 10:59	CTV	
TBOD5 - Set*	Completed	SM5210B/HACH1036	02/07/24 13:00	SSM	
Metal Digestion	Completed	SW3015A	02/08/24 10:00	CCM	

Inorganics

Method: E1664A, Run Date: 02/12/24 17:00, Analyst: JW

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

Method: SM2540D, Run Date: 02/07/24 22:24, Analyst: MDG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Suspended Solids	5.7	3		mg/L	1		

Method: SM2550B, Run Date: 02/06/24 10:15, Analyst: KS

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Field Temperature*	45	1		oF	1		

Method: SM4500-H+ B, Run Date: 02/06/24 10:15, Analyst: KS

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Field pH*	7.12	0.01		STD Units	1		

Method: SM4500-NH3 G, Run Date: 02/15/24 19:02, Analyst: MJC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Ammonia-N (Undistilled)*	2.0	0.1		mg/L	5	7664-41-7	

Method: SM4500-PE, Run Date: 02/13/24 14:31, Analyst: MJC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Phosphorus	0.02	0.01	0.009	mg/L	1	7723-14-0	

Method: SM5210B/HACH1036, Run Date: 02/12/24 13:30, Analyst: SSM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
TBOD5*	7.6	3		mg/L	3		

Metals

Method: E200.8, Run Date: 02/08/24 12:35, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	0.007	0.002		mg/L	5	7440-38-2	



Analytical Laboratory Report

Lab Sample ID: S58432.01 (continued)

Sample Tag: 01-PRCC-24

Method: E200.8, Run Date: 02/08/24 12:35, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chromium	0.029	0.005		mg/L	5	7440-47-3	
Copper	0.289	0.005		mg/L	5	7440-50-8	
Nickel	0.098	0.005		mg/L	5	7440-02-0	
Zinc	0.038	0.005		mg/L	5	7440-66-6	

Method: E245.1, Run Date: 02/12/24 14:41, 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: 02/08/24 14:22, Analyst: JDP

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Available Cyanide	Not detected	0.002	0.0015	mg/L	1	57-12-5	

Merit Laboratories Login Checklist

Lab Set ID:S58432

Client:RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Submitted:02/06/2024 12:45 Login User: MMC

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. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Samples are received at 4C +/- 2C Thermometer # IR 3.9 |
| 02. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Received on ice/ cooling process begun |
| 03. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples shipped |
| 04. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples left in 24 hr. drop box |
| 05. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Are there custody seals/tape or is the drop box locked |

Chain of Custody

- | | | |
|-----|--|--|
| 06. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | COC adequately filled out |
| 07. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | COC signed and relinquished to the lab |
| 08. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Sample tag on bottles match COC |
| 09. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Subcontracting needed? Subcontracted to: |

Preservation

- | | | |
|-----|--|---|
| 10. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Do sample have correct chemical preservation |
| 11. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Completed pH checks on preserved samples? (no VOAs) |
| 12. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Did any samples need to be preserved in the lab? |

Bottle Conditions

- | | | |
|-----|--|---|
| 13. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | All bottles intact |
| 14. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Appropriate analytical bottles are used |
| 15. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Merit bottles used |
| 16. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Sufficient sample volume received |
| 17. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples require laboratory filtration |
| 18. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Samples submitted within holding time |
| 19. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Do water VOC or TOX bottles contain headspace |

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: S58432 Submitted: 02/06/2024 12:45

Client: RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Initial Preservation Check: 02/06/2024 13:43 MMC

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
S58432.01	125mL Amber PbCO3/NaOH	>12			
S58432.01	125mL Plastic HNO3	<2			
S58432.01	250mL Plastic H2SO4	<2			
S58432.01	32oz Glass HCL	<2			



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 159203

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Clifford Yantz / Kevin Schneider
 COMPANY Ramboll
 ADDRESS 2090 Commonwealth Blvd
 CITY Ann Arbor STATE MI ZIP CODE 48105
 PHONE NO. _____ CELL NO. 313-333-0211 P.O. NO. 1940006516 Task 001
 E-MAIL ADDRESS Kevin.Schneider@Ramboll.com QUOTE NO. _____
Clifford.Yantz@Ramboll.com

CONTACT NAME SAME
 COMPANY _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP CODE _____
 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 K-5LL
 TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER _____
 DELIVERABLES REQUIRED STD 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. <small>FOR LAB USE ONLY</small>	COLLECTION		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives										Total Metals	Available Cyanide	BOD/TSS	Ammonia - Nitrogen	Total Phosphorus	FOG (Hex-Ext)	Certifications	Project Locations	Special Instructions
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER												
58432.01	2/6/24	1015	01-PRCC-24	ww	6	0	1	1	1	1	1	1	1	1	X	X	X	X	X	X	<input type="checkbox"/> OHIO VAP <input type="checkbox"/> Drinking Water <input type="checkbox"/> DoD <input type="checkbox"/> NPDES <input type="checkbox"/> Detroit <input type="checkbox"/> New York <input type="checkbox"/> Other _____	<input type="checkbox"/> Detroit <input type="checkbox"/> New York <input type="checkbox"/> Other _____	Metals ARE: As, Cr, Cu, Hg, Ni, Zn Analysis per city of Flint including QC Report Field Temp: 7.3 ^{oC} Field PH: 7.12	

RELINQUISHED BY: [Signature] Sampler DATE 2/6/24 TIME 10:50
 RECEIVED BY: [Signature] DATE 2/6/24 TIME 10:55
 RELINQUISHED BY: [Signature] DATE 2/6/24 TIME 10:45
 RECEIVED BY: [Signature] DATE 2/6/24 TIME 12:45

RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____
 NOTES: TEMP. ON ARRIVAL 3.9

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



Quality Control Report

Report ID: QC-S58432-01
Generated on 02/26/2024

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): S58432.01
Project: RACER Coldwater Road
Submitted Date/Time: 02/06/2024 12:45
Sampled by: Kevin Schneider
P.O. #: 1940006516 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: S58432.01

Sample Tag: 01-PRCC-24

Collected Date/Time: 02/06/2024 10:15

Matrix: Wastewater

COC Reference: 159203

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Inorganics						
Ammonia-N (Undistilled)	SM4500-NH3 G	02/15/24 19:02	AMN240215B	AMN240215B	No	BLK/LCS/MS/DUP
Oil & Grease n-Hexane Extract.	E1664A	02/12/24 17:00	OGHEX240212W1	OGHEX240212W1	No	BLK/LCS
TBOD5	SM5210B/HACH10382	02/12/24 13:30	BOD240207A	BOD240207A	No	BLK/LCS/DUP
Total Phosphorus	SM4500-PE	02/13/24 14:31	PHS240213QC	PHS240213QC	No	BLK/LCS/MS/DUP
Total Suspended Solids	SM2540D	02/07/24 22:24	TSS240207A	TSS240207A	No	BLK/LCS/DUP
Metals						
Arsenic	E200.8	02/08/24 12:35	MT4-24-0208A	MTD-020824-1	No	BLK/LCS/MS/MSD
Chromium	E200.8	02/08/24 12:35	MT4-24-0208A	MTD-020824-1	No	BLK/LCS/MS/MSD
Copper	E200.8	02/08/24 12:35	MT4-24-0208A	MTD-020824-1	No	BLK/LCS/MS/MSD
Mercury	E245.1	02/12/24 14:41	HG-24-0212A	HGD-021224-1	No	BLK/LCS/MS/MSD
Nickel	E200.8	02/08/24 12:35	MT4-24-0208A	MTD-020824-1	No	BLK/LCS/MS/MSD
Zinc	E200.8	02/08/24 12:35	MT4-24-0208A	MTD-020824-1	No	BLK/LCS/MS/MSD
Other / Misc.						
Available Cyanide	OIA-1677	02/08/24 14:22	ACN240208-W1	ACN240208-W1	No	BLK/LCS/MS/MSD/DU

QC Report - Prep Batch Summary

Inorganics, Prep Batch ID: AMN240215B

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S58432.01	Ammonia-N (Undistilled)	SM4500-NH3 G	02/15/24 19:02	AMN240215B

Inorganics, Prep Batch ID: BOD240207A

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S58432.01	TBOD5	SM5210B/HACH10302	02/12/24 13:30	BOD240207A

Inorganics, Prep Batch ID: OGHEX240212W1

Surrogates: No, QC Types: BLK/LCS

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S58432.01	Oil & Grease n-Hexane Extract.	E1664A	02/12/24 17:00	OGHEX240212W1

Inorganics, Prep Batch ID: PHS240213QC

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S58432.01	Total Phosphorus	SM4500-PE	02/13/24 14:31	PHS240213QC

Inorganics, Prep Batch ID: TSS240207A

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S58432.01	Total Suspended Solids	SM2540D	02/07/24 22:24	TSS240207A

Metals, Prep Batch ID: HGD-021224-1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S58432.01	Mercury	E245.1	02/12/24 14:41	HG-24-0212A

Metals, Prep Batch ID: MTD-020824-1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S58432.01	Arsenic	E200.8	02/08/24 12:35	MT4-24-0208A
S58432.01	Chromium	E200.8	02/08/24 12:35	MT4-24-0208A
S58432.01	Copper	E200.8	02/08/24 12:35	MT4-24-0208A
S58432.01	Nickel	E200.8	02/08/24 12:35	MT4-24-0208A
S58432.01	Zinc	E200.8	02/08/24 12:35	MT4-24-0208A

Other / Misc., Prep Batch ID: ACN240208-W1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S58432.01	Available Cyanide	OIA-1677	02/08/24 14:22	ACN240208-W1

QC Report - Batch QC Results

Inorganics, Prep Batch ID: AMN240215B

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

Blank (BLK)

Lab Sample ID: AMN240215B.LRB1

Run in Batch: AMN240215B, Run Date: 02/15/2024 16:54, Prep Date: 02/15/2024, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: AMN240215B.LCS1

Run in Batch: AMN240215B, Run Date: 02/15/2024 16:58, Prep Date: 02/15/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Ammonia-N (Undistilled)		102.0	90	110

Matrix Spike (MS)

Lab Sample ID: AMN240215B.MS1, Parent Sample ID: S58530.01

Run in Batch: AMN240215B, Run Date: 02/15/2024 17:16, Prep Date: 02/15/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Ammonia-N (Undistilled)		108.0	80	120

Duplicate (DUP)

Lab Sample ID: AMN240215B.DP1, Parent Sample ID: S58718.01

Run in Batch: AMN240215B, Run Date: 02/15/2024 18:04, Prep Date: 02/15/2024, Matrix: Liquid, Dilution: 50

Analyte	Flags	RPD	RPD CL
Ammonia-N (Undistilled)		9.0	20

QC Report - Batch QC Results

Inorganics, Prep Batch ID: BOD240207A

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

Blank (BLK)

Lab Sample ID: BOD240207A.LRB1

Run in Batch: BOD240207A, Run Date: 02/12/2024 13:30, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
TBOD5		ND	3	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: BOD240207A.LCS1

Run in Batch: BOD240207A, Run Date: 02/12/2024 13:30, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 30

Analyte	Flags	% Rec	LCL	UCL
TBOD5		112.6	51	166

Duplicate (DUP)

Lab Sample ID: BOD240207A.DP1, Parent Sample ID: S57846.01

Run in Batch: BOD240207A, Run Date: 02/12/2024 13:30, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 15

Analyte	Flags	RPD	RPD CL
TBOD5		6.1	20

QC Report - Batch QC Results

Inorganics, Prep Batch ID: OGHEX240212W1

Surrogates: No, QC Types: BLK/LCS

Blank (BLK)

Lab Sample ID: OGHEX240212W1.LRB1

Run in Batch: OGHEX240212W1, Run Date: 02/12/2024 09:00, Prep Date: 02/12/2024, 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: OGHEX240212W1.LCS1

Run in Batch: OGHEX240212W1, Run Date: 02/12/2024 09:00, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: OGHEX240212W1.LCS2

Run in Batch: OGHEX240212W1, Run Date: 02/12/2024 09:00, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

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

QC Report - Batch QC Results

Inorganics, Prep Batch ID: PHS240213QC

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

Blank (BLK)

Lab Sample ID: PHS240213QC.LRB1

Run in Batch: PHS240213QC, Run Date: 02/13/2024 13:38, Prep Date: 02/13/2024, Matrix: Liquid, Dilution: 1

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

Blank (BLK)

Lab Sample ID: PHS240213QC.LRB2

Run in Batch: PHS240213QC, Run Date: 02/13/2024 13:45, Prep Date: 02/13/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Total Phosphorus		ND	0.02	mg/L

Laboratory Control Sample (LCS)

Lab Sample ID: PHS240213QC.LCS1

Run in Batch: PHS240213QC, Run Date: 02/13/2024 13:50, Prep Date: 02/13/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		98	90	110

Matrix Spike (MS)

Lab Sample ID: PHS240213QC.MS1, Parent Sample ID: S58562.01

Run in Batch: PHS240213QC, Run Date: 02/13/2024 14:46, Prep Date: 02/13/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Total Phosphorus		92	80	120

Duplicate (DUP)

Lab Sample ID: PHS240213QC.DP1, Parent Sample ID: S58300.01

Run in Batch: PHS240213QC, Run Date: 02/13/2024 14:41, Prep Date: 02/13/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Total Phosphorus		7.5	20

QC Report - Batch QC Results

Inorganics, Prep Batch ID: TSS240207A

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

Blank (BLK)

Lab Sample ID: TSS240207A.LRB1

Run in Batch: TSS240207A, Run Date: 02/07/2024 22:24, Prep Date: 02/07/2024, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: TSS240207A.LCS1

Run in Batch: TSS240207A, Run Date: 02/07/2024 22:24, Prep Date: 02/07/2024, Matrix: Liquid, Dilution: 10

Analyte	Flags	% Rec	LCL	UCL
Total Suspended Solids		98.1	78.3	114

Duplicate (DUP)

Lab Sample ID: TSS240207A.DP1, Parent Sample ID: S58325.01

Run in Batch: TSS240207A, Run Date: 02/07/2024 22:24, Prep Date: 02/07/2024, Matrix: Liquid, Dilution: 10

Analyte	Flags	RPD	RPD CL
Total Suspended Solids		NC	10

QC Report - Batch QC Results

Metals, Prep Batch ID: HGD-021224-1

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

Blank (BLK)

Lab Sample ID: HG-24-0212A.015.LRB

Run in Batch: HG-24-0212A, Run Date: 02/12/2024 13:47, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Mercury		ND	0.05	ug/L

Laboratory Control Sample (LCS)

Lab Sample ID: HG-24-0212A.014.LCS

Run in Batch: HG-24-0212A, Run Date: 02/12/2024 13:44, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		111	85	115

Matrix Spike (MS)

Lab Sample ID: HG-24-0212A.017.MS, Parent Sample ID: S58344.01

Run in Batch: HG-24-0212A, Run Date: 02/12/2024 13:54, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		109	80	120

Matrix Spike (MS)

Lab Sample ID: HG-24-0212A.040.MS, Parent Sample ID: S58527.06

Run in Batch: HG-24-0212A, Run Date: 02/12/2024 15:10, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Mercury		108	80	120

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-24-0212A.018.MSD, Parent Sample ID: HG-24-0212A.017.MS

Run in Batch: HG-24-0212A, Run Date: 02/12/2024 13:57, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		114	80	120	5	20

Matrix Spike Duplicate (MSD)

Lab Sample ID: HG-24-0212A.041.MSD, Parent Sample ID: HG-24-0212A.040.MS

Run in Batch: HG-24-0212A, Run Date: 02/12/2024 15:14, Prep Date: 02/12/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Mercury		108	80	120	0	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-020824-1

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

Blank (BLK)

Lab Sample ID: MT4-24-0208A.020.LRB

Run in Batch: MT4-24-0208A, Run Date: 02/08/2024 11:17, Prep Date: 02/08/2024, 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: MT4-24-0208A.019.LCS

Run in Batch: MT4-24-0208A, Run Date: 02/08/2024 11:12, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Arsenic		103	85	115
Chromium		101	85	115
Copper		102	85	115
Nickel		103	85	115
Zinc		103	85	115

Matrix Spike (MS)

Lab Sample ID: MT4-24-0208A.045.MS, Parent Sample ID: S58478.01

Run in Batch: MT4-24-0208A, Run Date: 02/08/2024 12:10, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		102	75	125
Chromium		98	75	125
Copper		95	75	125
Nickel		96	75	125
Zinc		86	75	125

Matrix Spike (MS)

Lab Sample ID: MT4-24-0208A.066.MS, Parent Sample ID: S58505.02

Run in Batch: MT4-24-0208A, Run Date: 02/08/2024 12:53, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL
Arsenic		104	75	125
Chromium		100	75	125
Copper		94	75	125
Nickel		97	75	125
Zinc		105	75	125

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-24-0208A.046.MSD, Parent Sample ID: MT4-24-0208A.045.MS

Run in Batch: MT4-24-0208A, Run Date: 02/08/2024 12:11, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		104	75	125	2	20
Chromium		102	75	125	3	20
Copper		97	75	125	2	20
Nickel		98	75	125	1	20
Zinc		94	75	125	2	20

QC Report - Batch QC Results

Metals, Prep Batch ID: MTD-020824-1 (continued)

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

Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-24-0208A.067.MSD, Parent Sample ID: MT4-24-0208A.066.MS

Run in Batch: MT4-24-0208A, Run Date: 02/08/2024 12:54, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 5

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		106	75	125	2	20
Chromium		104	75	125	4	20
Copper		94	75	125	0	20
Nickel		98	75	125	0	20
Zinc		107	75	125	0	20

QC Report - Batch QC Results

Other / Misc., Prep Batch ID: ACN240208-W1

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

Blank (BLK)

Lab Sample ID: ACN240208-W1.LRB1

Run in Batch: ACN240208-W1, Run Date: 02/08/2024 13:56, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 1

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

Blank (BLK)

Lab Sample ID: ACN240208-W1.LRB2

Run in Batch: ACN240208-W1, Run Date: 02/08/2024 14:44, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 1

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

Laboratory Control Sample (LCS)

Lab Sample ID: ACN240208-W1.LCS1

Run in Batch: ACN240208-W1, Run Date: 02/08/2024 14:00, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Available Cyanide		96	88	109

Matrix Spike (MS)

Lab Sample ID: ACN240208-W1.MS1, Parent Sample ID: S58469.01

Run in Batch: ACN240208-W1, Run Date: 02/08/2024 14:14, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Available Cyanide		92	82	130

Matrix Spike Duplicate (MSD)

Lab Sample ID: ACN240208-W1.MSD1, Parent Sample ID: ACN240208-W1.MS1

Run in Batch: ACN240208-W1, Run Date: 02/08/2024 14:16, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Available Cyanide		100	82	130	8	15

Duplicate (DUP)

Lab Sample ID: ACN240208-W1.DP1, Parent Sample ID: S58469.01

Run in Batch: ACN240208-W1, Run Date: 02/08/2024 14:10, Prep Date: 02/08/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	RPD	RPD CL
Available Cyanide		<1	15



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 www.meritlabs.com

C.O.C. PAGE # 1 OF 1 159203

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Clifford Yantz / Kevin Schneider
 COMPANY Ramboll
 ADDRESS 2090 Commonwealth Blvd
 CITY Ann Arbor STATE MI ZIP CODE 48105
 PHONE NO. _____ CELL NO. 313-333-0211 P.O. NO. 1940006516 Task 001
 E-MAIL ADDRESS Kevin.Schneider@Ramboll.com QUOTE NO. _____
Clifford.Yantz@Ramboll.com

CONTACT NAME SAME
 COMPANY _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP CODE _____
 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 K-5LL
 TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER _____
 DELIVERABLES REQUIRED STD 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. <small>FOR LAB USE ONLY</small>	COLLECTION		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives										Total Metals	Available Cyanide	BOD/TSS	Ammonia - Nitrogen	Total Phosphorus	FOG (Hex-Ext)	Certifications	Project Locations	Special Instructions
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER												
58432.01	2/6/24	1015	01-PRCC-24	ww	6	0	1	1	1	1	1	1	1	1	X	X	X	X	X	X	<input type="checkbox"/> OHIO VAP <input type="checkbox"/> Drinking Water <input type="checkbox"/> DoD <input type="checkbox"/> NPDES Project Locations <input type="checkbox"/> Detroit <input type="checkbox"/> New York <input type="checkbox"/> Other _____ Special Instructions <u>Metals ARE:</u> <u>As, Cr, Cu, Hg, Ni, Zn</u> <u>Analysis per city of Flint including QC Report</u> <u>Field Temp: 7.3^{oC}</u> <u>Field PH: 7.12</u>			

RELINQUISHED BY: [Signature] Sampler DATE 2/6/24 TIME 10:50
 RECEIVED BY: [Signature] DATE 2/6/24 TIME 10:55
 RELINQUISHED BY: [Signature] DATE 2/6/24 TIME 10:45
 RECEIVED BY: [Signature] DATE 2/6/24 TIME 12:45

RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____
 NOTES: TEMP. ON ARRIVAL 3.9

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



Analytical Laboratory Report

Report ID: S59157.01(01)
Generated on 03/18/2024

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): S59157.01-S59157.07
Project: RACER Coldwater Road
Collected Date(s): 02/25/2024 - 02/27/2024
Submitted Date/Time: 02/27/2024 14:45
Sampled by: Kevin Schneider
P.O. #: 1940006516 TASK 37

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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



Analytical Laboratory 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
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
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-chloroeicosafuoro-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	67584-42-3
PFHxSA	Perfluorohexanesulfonamide	41997-13-1



Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S59157.01	01-PRCC-24-INF	Wastewater	02/25/24 13:00
S59157.02	01-PRCC-24-PRIM	Wastewater	02/25/24 13:10
S59157.03	01-PRCC-24-EFF-141	Wastewater	02/27/24 10:08
S59157.04	01-PRCC-24-MID-2-141	Wastewater	02/27/24 10:10
S59157.05	01-PRCC-24-MID-1-141	Wastewater	02/27/24 10:12
S59157.06	01-PRCC-24-PRIM-141	Wastewater	02/27/24 10:14
S59157.07	Field Blank-022724	Water	02/27/24 10:04



Analytical Laboratory Report

Lab Sample ID: S59157.01

Sample Tag: 01-PRCC-24-INF

Collected Date/Time: 02/25/2024 13:00

Matrix: Wastewater

COC Reference: 165772

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.01/6.57/11	ASTMD7979-19M	02/29/24 12:00	SRP	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 03/01/24 11:41, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	120	2.0	ng/L	2.02	375-22-4	X
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*	25	2.0	1.2	ng/L	2.02	307-24-4	
PFBS*	25	2.0	0.61	ng/L	2.02	375-73-5	
PFHpA*	9.0	2.0	0.81	ng/L	2.02	375-85-9	
PFPeS*	48	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*	33	2.0	0.81	ng/L	2.02	335-67-1	
PFHxS*	150	2.0	1.0	ng/L	2.02	355-46-4	
PFHxS-LN*	130	2.0	1.0	ng/L	2.02	355-46-4-LN	
PFHxS-BR*	25	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*	41	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*	2,700	2.0	0.81	ng/L	2.02	1763-23-1	
PFOS-LN*	1,700	2.0	0.81	ng/L	2.02	1763-23-1-LN	
PFOS-BR*	1,100	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	
PFTTrDA*	Not detected	2.0	0.81	ng/L	2.02	72629-94-8	
FOSA*	2.1	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	
PFBSA*	0.97	2.0	0.61	ng/L	2.02	30334-69-1	J

X-Elevated reporting limit due to matrix interference

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



Analytical Laboratory Report

Lab Sample ID: S59157.01 (continued)

Sample Tag: 01-PRCC-24-INF

34 PFAs, Method: ASTMD7979-19M, Run Date: 03/01/24 11:41, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFECHS*	5,000	2.0	0.81	ng/L	2.02	67584-42-3	
PFHxSA*	0.61	2.0	0.61	ng/L	2.02	41997-13-1	J

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



Analytical Laboratory Report

Lab Sample ID: S59157.02

Sample Tag: 01-PRCC-24-PRIM

Collected Date/Time: 02/25/2024 13:10

Matrix: Wastewater

COC Reference: 165772

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.92/6.55/11	ASTMD7979-19M	02/29/24 12:00	SRP	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 21:36, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	2.1	ng/L	2.05	375-22-4	
PFPeA*	Not detected	4.1	1.2	ng/L	2.05	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.05	757124-72-4	
PFHxA*	Not detected	2.1	1.2	ng/L	2.05	307-24-4	
PFBS*	Not detected	2.1	0.62	ng/L	2.05	375-73-5	
PFHpA*	Not detected	2.1	0.82	ng/L	2.05	375-85-9	
PFPeS*	Not detected	2.1	1.8	ng/L	2.05	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.0	ng/L	2.05	27619-97-2	
PFOA*	Not detected	2.1	0.82	ng/L	2.05	335-67-1	
PFHxS*	Not detected	2.1	1.0	ng/L	2.05	355-46-4	
PFHxS-LN*	Not detected	2.1	1.0	ng/L	2.05	355-46-4-LN	
PFHxS-BR*	Not detected	2.1	1.0	ng/L	2.05	355-46-4-BR	
PFNA*	Not detected	2.1	1.0	ng/L	2.05	375-95-1	
8:2 FTSA*	Not detected	2.1	1.2	ng/L	2.05	39108-34-4	
PFHpS*	Not detected	2.1	0.82	ng/L	2.05	375-92-8	
PFDA*	Not detected	2.1	1.2	ng/L	2.05	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.0	ng/L	2.05	2355-31-9	
EtFOSAA*	Not detected	4.1	1.0	ng/L	2.05	2991-50-6	
PFOS*	2.5	2.1	0.82	ng/L	2.05	1763-23-1	
PFOS-LN*	2.1	2.1	0.82	ng/L	2.05	1763-23-1-LN	
PFOS-BR*	Not detected	2.1	0.82	ng/L	2.05	1763-23-1-BR	
PFUnDA*	Not detected	2.1	0.82	ng/L	2.05	2058-94-8	
PFNS*	Not detected	2.1	1.0	ng/L	2.05	68259-12-1	
PFDODA*	Not detected	2.1	0.62	ng/L	2.05	307-55-1	
PFDS*	Not detected	2.1	1.0	ng/L	2.05	335-77-3	
PFTTrDA*	Not detected	2.1	0.82	ng/L	2.05	72629-94-8	
FOSA*	Not detected	2.1	0.82	ng/L	2.05	754-91-6	
PFTeDA*	Not detected	4.1	0.62	ng/L	2.05	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.0	ng/L	2.05	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.0	ng/L	2.05	756426-58-1	
ADONA*	Not detected	2.1	0.62	ng/L	2.05	919005-14-4	
HFPO-DA*	Not detected	10	2.1	ng/L	2.05	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10	8.2	ng/L	2.05	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10	4.1	ng/L	2.05	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10	4.1	ng/L	2.05	356-02-5	
PFBSA*	Not detected	2.1	0.62	ng/L	2.05	30334-69-1	
PFCHS*	Not detected	2.1	0.82	ng/L	2.05	67584-42-3	



Analytical Laboratory Report

Lab Sample ID: S59157.02 (continued)

Sample Tag: 01-PRCC-24-PRIM

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 21:36, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFHxSA*	Not detected	2.1	0.62	ng/L	2.05	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S59157.03

Sample Tag: 01-PRCC-24-EFF-141

Collected Date/Time: 02/27/2024 10:08

Matrix: Wastewater

COC Reference: 165772

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.51/6.56/11	ASTMD7979-19M	02/29/24 12:00	SRP	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 21:56, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.3	1.9	ng/L	1.85	375-22-4	
PFPeA*	Not detected	3.7	1.1	ng/L	1.85	2706-90-3	
4:2 FTSA*	Not detected	1.9	0.19	ng/L	1.85	757124-72-4	
PFHxA*	Not detected	1.9	1.1	ng/L	1.85	307-24-4	
PFBS*	Not detected	1.9	0.56	ng/L	1.85	375-73-5	
PFHpA*	Not detected	1.9	0.74	ng/L	1.85	375-85-9	
PFPeS*	Not detected	1.9	1.7	ng/L	1.85	2706-91-4	
6:2 FTSA*	Not detected	1.9	0.93	ng/L	1.85	27619-97-2	
PFOA*	Not detected	1.9	0.74	ng/L	1.85	335-67-1	
PFHxS*	Not detected	1.9	0.93	ng/L	1.85	355-46-4	
PFHxS-LN*	Not detected	1.9	0.93	ng/L	1.85	355-46-4-LN	
PFHxS-BR*	Not detected	1.9	0.93	ng/L	1.85	355-46-4-BR	
PFNA*	Not detected	1.9	0.93	ng/L	1.85	375-95-1	
8:2 FTSA*	Not detected	1.9	1.1	ng/L	1.85	39108-34-4	
PFHpS*	Not detected	1.9	0.74	ng/L	1.85	375-92-8	
PFDA*	Not detected	1.9	1.1	ng/L	1.85	335-76-2	
N-MeFOSAA*	Not detected	1.9	0.93	ng/L	1.85	2355-31-9	
EtFOSAA*	Not detected	3.7	0.93	ng/L	1.85	2991-50-6	
PFOS*	Not detected	1.9	0.74	ng/L	1.85	1763-23-1	
PFOS-LN*	Not detected	1.9	0.74	ng/L	1.85	1763-23-1-LN	
PFOS-BR*	Not detected	1.9	0.74	ng/L	1.85	1763-23-1-BR	
PFUnDA*	Not detected	1.9	0.74	ng/L	1.85	2058-94-8	
PFNS*	Not detected	1.9	0.93	ng/L	1.85	68259-12-1	
PFDODA*	Not detected	1.9	0.56	ng/L	1.85	307-55-1	
PFDS*	Not detected	1.9	0.93	ng/L	1.85	335-77-3	
PFTTrDA*	Not detected	1.9	0.74	ng/L	1.85	72629-94-8	
FOSA*	Not detected	1.9	0.74	ng/L	1.85	754-91-6	
PFTeDA*	Not detected	3.7	0.56	ng/L	1.85	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9	0.93	ng/L	1.85	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9	0.93	ng/L	1.85	756426-58-1	
ADONA*	Not detected	1.9	0.56	ng/L	1.85	919005-14-4	
HFPO-DA*	Not detected	9.3	1.9	ng/L	1.85	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	9.3	7.4	ng/L	1.85	812-70-4	
FPePA (5:3 FTCA)*	Not detected	9.3	3.7	ng/L	1.85	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	9.3	3.7	ng/L	1.85	356-02-5	
PFBSA*	Not detected	1.9	0.56	ng/L	1.85	30334-69-1	
PFECHS*	Not detected	1.9	0.74	ng/L	1.85	67584-42-3	



Analytical Laboratory Report

Lab Sample ID: S59157.03 (continued)

Sample Tag: 01-PRCC-24-EFF-141

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 21:56, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFHxSA*	Not detected	1.9	0.56	ng/L	1.85	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S59157.04

Sample Tag: 01-PRCC-24-MID-2-141

Collected Date/Time: 02/27/2024 10:10

Matrix: Wastewater

COC Reference: 165772

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.67/6.55/10	ASTMD7979-19M	02/29/24 12:00	SRP	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 22:16, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.8	2.0	ng/L	1.95	375-22-4	
PFPeA*	Not detected	3.9	1.2	ng/L	1.95	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.20	ng/L	1.95	757124-72-4	
PFHxA*	Not detected	2.0	1.2	ng/L	1.95	307-24-4	
PFBS*	Not detected	2.0	0.59	ng/L	1.95	375-73-5	
PFHpA*	Not detected	2.0	0.78	ng/L	1.95	375-85-9	
PFPeS*	Not detected	2.0	1.8	ng/L	1.95	2706-91-4	
6:2 FTSA*	Not detected	2.0	0.98	ng/L	1.95	27619-97-2	
PFOA*	Not detected	2.0	0.78	ng/L	1.95	335-67-1	
PFHxS*	Not detected	2.0	0.98	ng/L	1.95	355-46-4	
PFHxS-LN*	Not detected	2.0	0.98	ng/L	1.95	355-46-4-LN	
PFHxS-BR*	Not detected	2.0	0.98	ng/L	1.95	355-46-4-BR	
PFNA*	Not detected	2.0	0.98	ng/L	1.95	375-95-1	
8:2 FTSA*	Not detected	2.0	1.2	ng/L	1.95	39108-34-4	
PFHpS*	Not detected	2.0	0.78	ng/L	1.95	375-92-8	
PFDA*	Not detected	2.0	1.2	ng/L	1.95	335-76-2	
N-MeFOSAA*	Not detected	2.0	0.98	ng/L	1.95	2355-31-9	
EtFOSAA*	Not detected	3.9	0.98	ng/L	1.95	2991-50-6	
PFOS*	Not detected	2.0	0.78	ng/L	1.95	1763-23-1	
PFOS-LN*	Not detected	2.0	0.78	ng/L	1.95	1763-23-1-LN	
PFOS-BR*	Not detected	2.0	0.78	ng/L	1.95	1763-23-1-BR	
PFUnDA*	Not detected	2.0	0.78	ng/L	1.95	2058-94-8	
PFNS*	Not detected	2.0	0.98	ng/L	1.95	68259-12-1	
PFDODA*	Not detected	2.0	0.59	ng/L	1.95	307-55-1	
PFDS*	Not detected	2.0	0.98	ng/L	1.95	335-77-3	
PFTTrDA*	Not detected	2.0	0.78	ng/L	1.95	72629-94-8	
FOSA*	Not detected	2.0	0.78	ng/L	1.95	754-91-6	
PFTeDA*	Not detected	3.9	0.59	ng/L	1.95	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	0.98	ng/L	1.95	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	0.98	ng/L	1.95	756426-58-1	
ADONA*	Not detected	2.0	0.59	ng/L	1.95	919005-14-4	
HFPO-DA*	Not detected	9.8	2.0	ng/L	1.95	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	9.8	7.8	ng/L	1.95	812-70-4	
FPePA (5:3 FTCA)*	Not detected	9.8	3.9	ng/L	1.95	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	9.8	3.9	ng/L	1.95	356-02-5	
PFBSA*	Not detected	2.0	0.59	ng/L	1.95	30334-69-1	
PFCHS*	Not detected	2.0	0.78	ng/L	1.95	67584-42-3	



Analytical Laboratory Report

Lab Sample ID: S59157.04 (continued)

Sample Tag: 01-PRCC-24-MID-2-141

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 22:16, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFHxSA*	Not detected	2.0	0.59	ng/L	1.95	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S59157.05

Sample Tag: 01-PRCC-24-MID-1-141

Collected Date/Time: 02/27/2024 10:12

Matrix: Wastewater

COC Reference: 165772

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.43/6.53/10	ASTMD7979-19M	02/29/24 12:00	SRP	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 22:36, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	10	2.0	ng/L	2.04	375-22-4	
PFPeA*	Not detected	4.1	1.2	ng/L	2.04	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.20	ng/L	2.04	757124-72-4	
PFHxA*	Not detected	2.0	1.2	ng/L	2.04	307-24-4	
PFBS*	Not detected	2.0	0.61	ng/L	2.04	375-73-5	
PFHpA*	Not detected	2.0	0.82	ng/L	2.04	375-85-9	
PFPeS*	Not detected	2.0	1.8	ng/L	2.04	2706-91-4	
6:2 FTSA*	Not detected	2.0	1.0	ng/L	2.04	27619-97-2	
PFOA*	Not detected	2.0	0.82	ng/L	2.04	335-67-1	
PFHxS*	Not detected	2.0	1.0	ng/L	2.04	355-46-4	
PFHxS-LN*	Not detected	2.0	1.0	ng/L	2.04	355-46-4-LN	
PFHxS-BR*	Not detected	2.0	1.0	ng/L	2.04	355-46-4-BR	
PFNA*	Not detected	2.0	1.0	ng/L	2.04	375-95-1	
8:2 FTSA*	Not detected	2.0	1.2	ng/L	2.04	39108-34-4	
PFHpS*	Not detected	2.0	0.82	ng/L	2.04	375-92-8	
PFDA*	Not detected	2.0	1.2	ng/L	2.04	335-76-2	
N-MeFOSAA*	Not detected	2.0	1.0	ng/L	2.04	2355-31-9	
EtFOSAA*	Not detected	4.1	1.0	ng/L	2.04	2991-50-6	
PFOS*	Not detected	2.0	0.82	ng/L	2.04	1763-23-1	
PFOS-LN*	Not detected	2.0	0.82	ng/L	2.04	1763-23-1-LN	
PFOS-BR*	Not detected	2.0	0.82	ng/L	2.04	1763-23-1-BR	
PFUnDA*	Not detected	2.0	0.82	ng/L	2.04	2058-94-8	
PFNS*	Not detected	2.0	1.0	ng/L	2.04	68259-12-1	
PFDODA*	Not detected	2.0	0.61	ng/L	2.04	307-55-1	
PFDS*	Not detected	2.0	1.0	ng/L	2.04	335-77-3	
PFTTrDA*	Not detected	2.0	0.82	ng/L	2.04	72629-94-8	
FOSA*	Not detected	2.0	0.82	ng/L	2.04	754-91-6	
PFTeDA*	Not detected	4.1	0.61	ng/L	2.04	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	1.0	ng/L	2.04	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	1.0	ng/L	2.04	756426-58-1	
ADONA*	Not detected	2.0	0.61	ng/L	2.04	919005-14-4	
HFPO-DA*	Not detected	10	2.0	ng/L	2.04	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10	8.2	ng/L	2.04	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10	4.1	ng/L	2.04	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10	4.1	ng/L	2.04	356-02-5	
PFBSA*	Not detected	2.0	0.61	ng/L	2.04	30334-69-1	
PFCHS*	Not detected	2.0	0.82	ng/L	2.04	67584-42-3	



Analytical Laboratory Report

Lab Sample ID: S59157.05 (continued)

Sample Tag: 01-PRCC-24-MID-1-141

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 22:36, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFHxSA*	Not detected	2.0	0.61	ng/L	2.04	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S59157.06

Sample Tag: 01-PRCC-24-PRIM-141

Collected Date/Time: 02/27/2024 10:14

Matrix: Wastewater

COC Reference: 165772

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.35/6.55/11	ASTMD7979-19M	02/29/24 12:00	SRP	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 22:56, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	9.5	1.9	ng/L	1.9	375-22-4	
PFPeA*	Not detected	3.8	1.1	ng/L	1.9	2706-90-3	
4:2 FTSA*	Not detected	1.9	0.19	ng/L	1.9	757124-72-4	
PFHxA*	Not detected	1.9	1.1	ng/L	1.9	307-24-4	
PFBS*	Not detected	1.9	0.57	ng/L	1.9	375-73-5	
PFHpA*	Not detected	1.9	0.76	ng/L	1.9	375-85-9	
PFPeS*	Not detected	1.9	1.7	ng/L	1.9	2706-91-4	
6:2 FTSA*	Not detected	1.9	0.95	ng/L	1.9	27619-97-2	
PFOA*	Not detected	1.9	0.76	ng/L	1.9	335-67-1	
PFHxS*	Not detected	1.9	0.95	ng/L	1.9	355-46-4	
PFHxS-LN*	Not detected	1.9	0.95	ng/L	1.9	355-46-4-LN	
PFHxS-BR*	Not detected	1.9	0.95	ng/L	1.9	355-46-4-BR	
PFNA*	Not detected	1.9	0.95	ng/L	1.9	375-95-1	
8:2 FTSA*	Not detected	1.9	1.1	ng/L	1.9	39108-34-4	
PFHpS*	Not detected	1.9	0.76	ng/L	1.9	375-92-8	
PFDA*	Not detected	1.9	1.1	ng/L	1.9	335-76-2	
N-MeFOSAA*	Not detected	1.9	0.95	ng/L	1.9	2355-31-9	
EtFOSAA*	Not detected	3.8	0.95	ng/L	1.9	2991-50-6	
PFOS*	Not detected	1.9	0.76	ng/L	1.9	1763-23-1	
PFOS-LN*	Not detected	1.9	0.76	ng/L	1.9	1763-23-1-LN	
PFOS-BR*	Not detected	1.9	0.76	ng/L	1.9	1763-23-1-BR	
PFUnDA*	Not detected	1.9	0.76	ng/L	1.9	2058-94-8	
PFNS*	Not detected	1.9	0.95	ng/L	1.9	68259-12-1	
PFDODA*	Not detected	1.9	0.57	ng/L	1.9	307-55-1	
PFDS*	Not detected	1.9	0.95	ng/L	1.9	335-77-3	
PFTTrDA*	Not detected	1.9	0.76	ng/L	1.9	72629-94-8	
FOSA*	Not detected	1.9	0.76	ng/L	1.9	754-91-6	
PFTeDA*	Not detected	3.8	0.57	ng/L	1.9	376-06-7	
11Cl-PF3OUdS*	Not detected	1.9	0.95	ng/L	1.9	763051-92-9	
9Cl-PF3ONS*	Not detected	1.9	0.95	ng/L	1.9	756426-58-1	
ADONA*	Not detected	1.9	0.57	ng/L	1.9	919005-14-4	
HFPO-DA*	Not detected	9.5	1.9	ng/L	1.9	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	9.5	7.6	ng/L	1.9	812-70-4	
FPePA (5:3 FTCA)*	Not detected	9.5	3.8	ng/L	1.9	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	9.5	3.8	ng/L	1.9	356-02-5	
PFBSA*	Not detected	1.9	0.57	ng/L	1.9	30334-69-1	
PFCHS*	Not detected	1.9	0.76	ng/L	1.9	67584-42-3	



Analytical Laboratory Report

Lab Sample ID: S59157.06 (continued)

Sample Tag: 01-PRCC-24-PRIM-141

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 22:56, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFHxSA*	Not detected	1.9	0.57	ng/L	1.9	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S59157.07

Sample Tag: Field Blank-022724

Collected Date/Time: 02/27/2024 10:04

Matrix: Water

COC Reference: 165772

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	2.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.24/6.54/10	ASTMD7979-19M	02/29/24 12:00	SRP	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 23:16, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	11	2.1	ng/L	2.13	375-22-4	
PFPeA*	Not detected	4.3	1.3	ng/L	2.13	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.13	757124-72-4	
PFHxA*	Not detected	2.1	1.3	ng/L	2.13	307-24-4	
PFBS*	Not detected	2.1	0.64	ng/L	2.13	375-73-5	
PFHpA*	Not detected	2.1	0.85	ng/L	2.13	375-85-9	
PFPeS*	Not detected	2.1	1.9	ng/L	2.13	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.1	ng/L	2.13	27619-97-2	
PFOA*	Not detected	2.1	0.85	ng/L	2.13	335-67-1	
PFHxS*	Not detected	2.1	1.1	ng/L	2.13	355-46-4	
PFHxS-LN*	Not detected	2.1	1.1	ng/L	2.13	355-46-4-LN	
PFHxS-BR*	Not detected	2.1	1.1	ng/L	2.13	355-46-4-BR	
PFNA*	Not detected	2.1	1.1	ng/L	2.13	375-95-1	
8:2 FTSA*	Not detected	2.1	1.3	ng/L	2.13	39108-34-4	
PFHpS*	Not detected	2.1	0.85	ng/L	2.13	375-92-8	
PFDA*	Not detected	2.1	1.3	ng/L	2.13	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.1	ng/L	2.13	2355-31-9	
EtFOSAA*	Not detected	4.3	1.1	ng/L	2.13	2991-50-6	
PFOS*	Not detected	2.1	0.85	ng/L	2.13	1763-23-1	
PFOS-LN*	Not detected	2.1	0.85	ng/L	2.13	1763-23-1-LN	
PFOS-BR*	Not detected	2.1	0.85	ng/L	2.13	1763-23-1-BR	
PFUnDA*	Not detected	2.1	0.85	ng/L	2.13	2058-94-8	
PFNS*	Not detected	2.1	1.1	ng/L	2.13	68259-12-1	
PFDODA*	Not detected	2.1	0.64	ng/L	2.13	307-55-1	
PFDS*	Not detected	2.1	1.1	ng/L	2.13	335-77-3	
PFTTrDA*	Not detected	2.1	0.85	ng/L	2.13	72629-94-8	
FOSA*	Not detected	2.1	0.85	ng/L	2.13	754-91-6	
PFTeDA*	Not detected	4.3	0.64	ng/L	2.13	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.1	ng/L	2.13	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.1	ng/L	2.13	756426-58-1	
ADONA*	Not detected	2.1	0.64	ng/L	2.13	919005-14-4	
HFPO-DA*	Not detected	11	2.1	ng/L	2.13	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	11	8.5	ng/L	2.13	812-70-4	
FPePA (5:3 FTCA)*	Not detected	11	4.3	ng/L	2.13	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	11	4.3	ng/L	2.13	356-02-5	
PFBSA*	Not detected	2.1	0.64	ng/L	2.13	30334-69-1	
PFCHS*	Not detected	2.1	0.85	ng/L	2.13	67584-42-3	



Analytical Laboratory Report

Lab Sample ID: S59157.07 (continued)

Sample Tag: Field Blank-022724

34 PFAs, Method: ASTMD7979-19M, Run Date: 02/29/24 23:16, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFHxSA*	Not detected	2.1	0.64	ng/L	2.13	41997-13-1	

Merit Laboratories Login Checklist

Lab Set ID:S59157

Client:RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Submitted:02/27/2024 14:45 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. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Samples are received at 4C +/- 2C Thermometer # IR 2.5 |
| 02. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Received on ice/ cooling process begun |
| 03. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples shipped |
| 04. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples left in 24 hr. drop box |
| 05. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Are there custody seals/tape or is the drop box locked |

Chain of Custody

- | | | |
|-----|--|--|
| 06. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | COC adequately filled out |
| 07. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | COC signed and relinquished to the lab |
| 08. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Sample tag on bottles match COC |
| 09. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Subcontracting needed? Subcontracted to: |

Preservation

- | | | |
|-----|--|---|
| 10. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Do sample have correct chemical preservation |
| 11. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Completed pH checks on preserved samples? (no VOAs) |
| 12. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Did any samples need to be preserved in the lab? |

Bottle Conditions

- | | | |
|-----|--|---|
| 13. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | All bottles intact |
| 14. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Appropriate analytical bottles are used |
| 15. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Merit bottles used |
| 16. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Sufficient sample volume received |
| 17. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples require laboratory filtration |
| 18. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Samples submitted within holding time |
| 19. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Do water VOC or TOX bottles contain headspace |

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

165772

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Kevin Schneider / Clifford Yantz
 COMPANY Ramboll
 ADDRESS 2090 Commonwealth Blvd
 CITY Ann Arbor STATE MI ZIP CODE 48105
 PHONE NO. CELL NO. 313-333-0211 P.O. NO.
 E-MAIL ADDRESS Kevin.Schneider@Ramboll.com QUOTE NO.
Clifford.Yantz@Ramboll.com

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

PROJECT NO./NAME RACER Coldwater Road SAMPLER(S) - PLEASE PRINT/SIGN NAME Kevin Schneider JK SKL
 TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER
 DELIVERABLES REQUIRED STD 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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. <small>FOR LAB USE ONLY</small>	COLLECTION		SAMPLE TAG. IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PFAS (mg)	Certifications		Project Locations		Special Instructions
	DATE	TIME												<input type="checkbox"/> OHIO VAP	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> DoD	<input type="checkbox"/> NPDES	
59157.01	2/25/24	1300	01-PRCC-24-INF	ww	3	3							X					Low level Reporting with estimated values 34 PFAS LIST
.02	2/25/24	1310	01-PRCC-24-PRIM	ww	3	3							X					
.03	2/27/24	1008	01-PRCC-24-EFF-141	ww	3	3							X					
.04	2/27/24	1010	01-PRCC-24-MID-2-141	ww	3	3							X					
.05	2/27/24	1012	01-PRCC-24-MID-1-141	ww	3	3							X					
.06	2/27/24	1014	01-PRCC-24-PRIM-141	ww	3	3							X					
.07	2/27/24	1004	Field Blank-022724	QC	1	1							X					

RELINQUISHED BY: JK SKL Sampler DATE 2/27/24 TIME 10:35
 RECEIVED BY: Jay Miller DATE 2/27/24 TIME 10:35
 SIGNATURE/Organization: Jay Miller
 RELINQUISHED BY: Jay Miller DATE 2/27/24 TIME 14:45
 RECEIVED BY: M. Dilato DATE 2/27/24 TIME 14:45
 SIGNATURE/Organization: M. Dilato

RELINQUISHED BY: DATE TIME
 SIGNATURE/Organization
 RECEIVED BY: DATE TIME
 SIGNATURE/Organization
 SEAL NO. SEAL INTACT YES NO INITIALS NOTES: TEMP. ON ARRIVAL 2.5
 SEAL NO. SEAL INTACT YES NO INITIALS

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



Quality Control Report

Report ID: QC-S59157-01
Generated on 03/18/2024

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): S59157.01-S59157.07
Project: RACER Coldwater Road
Submitted Date/Time: 02/27/2024 14:45
Sampled by: Kevin Schneider
P.O. #: 1940006516 TASK 37

QC Report Sections

Cover Page (Page 1)
Analysis Summary (Pages 2-8)
Prep Batch Summary (Page 9)
Internal Standards per Lab Sample (Pages 10-16)
Internal Standards per QC Sample (Pages 17-21)
Batch QC Results (Pages 22-27)

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: S59157.01

Sample Tag: 01-PRCC-24-INF

Collected Date/Time: 02/25/2024 13:00

Matrix: Wastewater

COC Reference: 165772

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	03/01/24 11:41	AK240229	PF240229W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S59157.02

Sample Tag: 01-PRCC-24-PRIM

Collected Date/Time: 02/25/2024 13:10

Matrix: Wastewater

COC Reference: 165772

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	02/29/24 21:36	AK240229	PF240229W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S59157.03

Sample Tag: 01-PRCC-24-EFF-141

Collected Date/Time: 02/27/2024 10:08

Matrix: Wastewater

COC Reference: 165772

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	02/29/24 21:56	AK240229	PF240229W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S59157.04

Sample Tag: 01-PRCC-24-MID-2-141

Collected Date/Time: 02/27/2024 10:10

Matrix: Wastewater

COC Reference: 165772

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	02/29/24 22:16	AK240229	PF240229W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S59157.05

Sample Tag: 01-PRCC-24-MID-1-141

Collected Date/Time: 02/27/2024 10:12

Matrix: Wastewater

COC Reference: 165772

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	02/29/24 22:36	AK240229	PF240229W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S59157.06

Sample Tag: 01-PRCC-24-PRIM-141

Collected Date/Time: 02/27/2024 10:14

Matrix: Wastewater

COC Reference: 165772

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	02/29/24 22:56	AK240229	PF240229W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S59157.07

Sample Tag: Field Blank-022724

Collected Date/Time: 02/27/2024 10:04

Matrix: Water

COC Reference: 165772

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	02/29/24 23:16	AK240229	PF240229W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: PF240229W1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S59157.01	34 PFAs	ASTMD7979-19M	03/01/24 11:41	AK240229
S59157.02	34 PFAs	ASTMD7979-19M	02/29/24 21:36	AK240229
S59157.03	34 PFAs	ASTMD7979-19M	02/29/24 21:56	AK240229
S59157.04	34 PFAs	ASTMD7979-19M	02/29/24 22:16	AK240229
S59157.05	34 PFAs	ASTMD7979-19M	02/29/24 22:36	AK240229
S59157.06	34 PFAs	ASTMD7979-19M	02/29/24 22:56	AK240229
S59157.07	34 PFAs	ASTMD7979-19M	02/29/24 23:16	AK240229

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S59157.01

Sample Tag: 01-PRCC-24-INF

Collected Date/Time: 02/25/2024 13:00

Matrix: Wastewater

COC Reference: 165772

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240229, Run Date: 03/01/2024 11:41, Matrix: WW, Dilution: 2.02

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		141.8	50.0	150.0
M2-6:2FTSA		128.0	50.0	150.0
M2-8:2FTSA		86.5	50.0	150.0
M2PFTeDA		99.5	12.0	218.0
M3PFBS		97.6	50.0	150.0
M3PFHxS		112.3	50.0	150.0
M4PFHpA		103.8	50.0	150.0
M5PFHxA		87.6	50.0	150.0
M5PFPeA		101.2	50.0	150.0
M6PFDA		90.3	50.0	150.0
M7PFUnDA		100.7	50.0	150.0
M8FOSA		96.6	50.0	150.0
M8PFOA		87.2	50.0	150.0
M8PFOS		102.1	50.0	150.0
M9-PFNA		97.4	50.0	150.0
MPFBA		96.9	50.0	150.0
MPFDoDA		88.1	50.0	150.0
d3N-MeFOSAA		90.8	50.0	150.0
d5EtFOSAA		99.2	50.0	150.0
MHFPO-DA		103.2	50.0	150.0
d-N-EtFOSA-M		90.9	50.0	150.0
d-N-MeFOSA-M		98.4	50.0	150.0
d7-N-MeFOSE-M		109.2	50.0	150.0
d9-N-EtFOSE-M		96.1	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S59157.02

Sample Tag: 01-PRCC-24-PRIM

Collected Date/Time: 02/25/2024 13:10

Matrix: Wastewater

COC Reference: 165772

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240229, Run Date: 02/29/2024 21:36, Matrix: WW, Dilution: 2.05

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		106.3	50.0	150.0
M2-6:2FTSA		112.9	50.0	150.0
M2-8:2FTSA		111.0	50.0	150.0
M2PFTeDA		97.1	12.0	218.0
M3PFBS		106.6	50.0	150.0
M3PFHxS		130.2	50.0	150.0
M4PFHpA		114.1	50.0	150.0
M5PFHxA		99.9	50.0	150.0
M5PFPeA		106.8	50.0	150.0
M6PFDA		99.5	50.0	150.0
M7PFUnDA		113.5	50.0	150.0
M8FOSA		101.5	50.0	150.0
M8PFOA		103.4	50.0	150.0
M8PFOS		110.4	50.0	150.0
M9-PFNA		103.5	50.0	150.0
MPFBA		109.6	50.0	150.0
MPFDoDA		98.0	50.0	150.0
d3N-MeFOSAA		100.8	50.0	150.0
d5EtFOSAA		105.9	50.0	150.0
MHFPO-DA		103.9	50.0	150.0
d-N-EtFOSA-M		94.6	50.0	150.0
d-N-MeFOSA-M		104.1	50.0	150.0
d7-N-MeFOSE-M		103.8	50.0	150.0
d9-N-EtFOSE-M		98.6	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S59157.03

Sample Tag: 01-PRCC-24-EFF-141

Collected Date/Time: 02/27/2024 10:08

Matrix: Wastewater

COC Reference: 165772

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240229, Run Date: 02/29/2024 21:56, Matrix: WW, Dilution: 1.85

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		101.7	50.0	150.0
M2-6:2FTSA		112.9	50.0	150.0
M2-8:2FTSA		88.4	50.0	150.0
M2PFTeDA		81.7	12.0	218.0
M3PFBS		101.1	50.0	150.0
M3PFHxS		108.1	50.0	150.0
M4PFHpA		99.4	50.0	150.0
M5PFHxA		104.3	50.0	150.0
M5PFPeA		104.4	50.0	150.0
M6PFDA		94.3	50.0	150.0
M7PFUnDA		99.3	50.0	150.0
M8FOSA		99.3	50.0	150.0
M8PFOA		108.5	50.0	150.0
M8PFOS		108.8	50.0	150.0
M9-PFNA		101.4	50.0	150.0
MPFBA		107.0	50.0	150.0
MPFDoDA		83.6	50.0	150.0
d3N-MeFOSAA		103.4	50.0	150.0
d5EtFOSAA		89.7	50.0	150.0
MHFPO-DA		108.6	50.0	150.0
d-N-EtFOSA-M		85.5	50.0	150.0
d-N-MeFOSA-M		99.2	50.0	150.0
d7-N-MeFOSE-M		102.3	50.0	150.0
d9-N-EtFOSE-M		92.1	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S59157.04

Sample Tag: 01-PRCC-24-MID-2-141

Collected Date/Time: 02/27/2024 10:10

Matrix: Wastewater

COC Reference: 165772

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240229, Run Date: 02/29/2024 22:16, Matrix: WW, Dilution: 1.95

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		107.5	50.0	150.0
M2-6:2FTSA		95.2	50.0	150.0
M2-8:2FTSA		112.9	50.0	150.0
M2PFTeDA		124.0	12.0	218.0
M3PFBS		103.8	50.0	150.0
M3PFHxS		117.7	50.0	150.0
M4PFHpA		104.7	50.0	150.0
M5PFHxA		90.8	50.0	150.0
M5PFPeA		104.4	50.0	150.0
M6PFDA		87.1	50.0	150.0
M7PFUnDA		105.8	50.0	150.0
M8FOSA		101.5	50.0	150.0
M8PFOA		110.4	50.0	150.0
M8PFOS		109.9	50.0	150.0
M9-PFNA		108.2	50.0	150.0
MPFBA		106.2	50.0	150.0
MPFDoDA		105.1	50.0	150.0
d3N-MeFOSAA		103.0	50.0	150.0
d5EtFOSAA		92.2	50.0	150.0
MHFPO-DA		108.1	50.0	150.0
d-N-EtFOSA-M		95.2	50.0	150.0
d-N-MeFOSA-M		97.7	50.0	150.0
d7-N-MeFOSE-M		108.9	50.0	150.0
d9-N-EtFOSE-M		93.2	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S59157.05

Sample Tag: 01-PRCC-24-MID-1-141

Collected Date/Time: 02/27/2024 10:12

Matrix: Wastewater

COC Reference: 165772

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240229, Run Date: 02/29/2024 22:36, Matrix: WW, Dilution: 2.04

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		96.4	50.0	150.0
M2-6:2FTSA		109.4	50.0	150.0
M2-8:2FTSA		108.0	50.0	150.0
M2PFTeDA		102.2	12.0	218.0
M3PFBS		108.5	50.0	150.0
M3PFHxS		132.7	50.0	150.0
M4PFHpA		102.7	50.0	150.0
M5PFHxA		94.6	50.0	150.0
M5PFPeA		109.1	50.0	150.0
M6PFDA		101.4	50.0	150.0
M7PFUnDA		103.1	50.0	150.0
M8FOSA		106.9	50.0	150.0
M8PFOA		106.8	50.0	150.0
M8PFOS		114.0	50.0	150.0
M9-PFNA		113.0	50.0	150.0
MPFBA		111.6	50.0	150.0
MPFDoDA		95.6	50.0	150.0
d3N-MeFOSAA		103.9	50.0	150.0
d5EtFOSAA		103.8	50.0	150.0
MHFPO-DA		121.8	50.0	150.0
d-N-EtFOSA-M		101.9	50.0	150.0
d-N-MeFOSA-M		103.1	50.0	150.0
d7-N-MeFOSE-M		102.3	50.0	150.0
d9-N-EtFOSE-M		96.6	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S59157.06

Sample Tag: 01-PRCC-24-PRIM-141

Collected Date/Time: 02/27/2024 10:14

Matrix: Wastewater

COC Reference: 165772

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240229, Run Date: 02/29/2024 22:56, Matrix: WW, Dilution: 1.9

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		118.8	50.0	150.0
M2-6:2FTSA		113.0	50.0	150.0
M2-8:2FTSA		103.8	50.0	150.0
M2PFTeDA		105.9	12.0	218.0
M3PFBS		109.5	50.0	150.0
M3PFHxS		128.0	50.0	150.0
M4PFHpA		101.1	50.0	150.0
M5PFHxA		103.0	50.0	150.0
M5PFPeA		111.3	50.0	150.0
M6PFDA		111.5	50.0	150.0
M7PFUnDA		101.9	50.0	150.0
M8FOSA		105.6	50.0	150.0
M8PFOA		102.4	50.0	150.0
M8PFOS		114.7	50.0	150.0
M9-PFNA		102.6	50.0	150.0
MPFBA		112.7	50.0	150.0
MPFDoDA		107.2	50.0	150.0
d3N-MeFOSAA		101.9	50.0	150.0
d5EtFOSAA		89.1	50.0	150.0
MHFPO-DA		118.9	50.0	150.0
d-N-EtFOSA-M		101.1	50.0	150.0
d-N-MeFOSA-M		108.5	50.0	150.0
d7-N-MeFOSE-M		103.4	50.0	150.0
d9-N-EtFOSE-M		101.8	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S59157.07

Sample Tag: Field Blank-022724

Collected Date/Time: 02/27/2024 10:04

Matrix: Water

COC Reference: 165772

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240229, Run Date: 02/29/2024 23:16, Matrix: WW, Dilution: 2.13

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		114.9	50.0	150.0
M2-6:2FTSA		118.0	50.0	150.0
M2-8:2FTSA		116.1	50.0	150.0
M2PFTeDA		106.0	12.0	218.0
M3PFBS		99.5	50.0	150.0
M3PFHxS		125.2	50.0	150.0
M4PFHpA		109.1	50.0	150.0
M5PFHxA		107.0	50.0	150.0
M5PFPeA		109.1	50.0	150.0
M6PFDA		110.2	50.0	150.0
M7PFUnDA		102.3	50.0	150.0
M8FOSA		106.2	50.0	150.0
M8PFOA		99.4	50.0	150.0
M8PFOS		113.3	50.0	150.0
M9-PFNA		112.9	50.0	150.0
MPFBA		113.4	50.0	150.0
MPFDoDA		102.2	50.0	150.0
d3N-MeFOSAA		106.5	50.0	150.0
d5EtFOSAA		98.0	50.0	150.0
MHFPO-DA		116.8	50.0	150.0
d-N-EtFOSA-M		99.5	50.0	150.0
d-N-MeFOSA-M		107.1	50.0	150.0
d7-N-MeFOSE-M		108.8	50.0	150.0
d9-N-EtFOSE-M		100.6	50.0	150.0

QC Report - Internal Standards per QC Sample

Organics - Volatiles, Prep Batch ID: PF240229W1

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

Blank (BLK)

Lab Sample ID: AK240229.BLK240229

Run in Batch: AK240229, Run Date: 02/29/2024 15:55, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		117.3	50.0	150.0
M2-6:2FTSA		127.0	50.0	150.0
M2-8:2FTSA		103.3	50.0	150.0
M2PFTeDA		93.1	12.0	218.0
M3PFBS		101.4	50.0	150.0
M3PFHxS		122.5	50.0	150.0
M4PFHpA		107.1	50.0	150.0
M5PFHxA		92.2	50.0	150.0
M5PFPeA		105.2	50.0	150.0
M6PFDA		102.9	50.0	150.0
M7PFUnDA		96.9	50.0	150.0
M8FOSA		103.7	50.0	150.0
M8PFOA		113.3	50.0	150.0
M8PFOS		116.5	50.0	150.0
M9-PFNA		114.7	50.0	150.0
MPFBA		107.9	50.0	150.0
MPFDoDA		97.5	50.0	150.0
d3N-MeFOSAA		112.6	50.0	150.0
d5EtFOSAA		87.5	50.0	150.0
MHFPO-DA		97.0	50.0	150.0
d-N-EtFOSA-M		91.8	50.0	150.0
d-N-MeFOSA-M		99.6	50.0	150.0
d7-N-MeFOSE-M		108.3	50.0	150.0
d9-N-EtFOSE-M		91.5	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample (LCS)

Lab Sample ID: AK240229.LCS240229

Run in Batch: AK240229, Run Date: 02/29/2024 14:54, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		117.8	50.0	150.0
M2-6:2FTSA		114.2	50.0	150.0
M2-8:2FTSA		89.9	50.0	150.0
M2PFTeDA		93.7	12.0	218.0
M3PFBS		104.6	50.0	150.0
M3PFHxS		118.8	50.0	150.0
M4PFHpA		110.6	50.0	150.0
M5PFHxA		93.4	50.0	150.0
M5PFPeA		100.6	50.0	150.0
M6PFDA		93.6	50.0	150.0
M7PFUnDA		105.8	50.0	150.0
M8FOSA		99.7	50.0	150.0
M8PFOA		108.7	50.0	150.0
M8PFOS		121.0	50.0	150.0
M9-PFNA		100.9	50.0	150.0
MPFBA		106.1	50.0	150.0
MPFDoDA		97.4	50.0	150.0
d3N-MeFOSAA		107.0	50.0	150.0
d5EtFOSAA		106.3	50.0	150.0
MHFPO-DA		105.9	50.0	150.0
d-N-EtFOSA-M		89.4	50.0	150.0
d-N-MeFOSA-M		99.3	50.0	150.0
d7-N-MeFOSE-M		101.8	50.0	150.0
d9-N-EtFOSE-M		98.9	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK240229.LCSD240229, Parent Sample ID: AK240229.LCS240229

Run in Batch: AK240229, Run Date: 02/29/2024 15:35, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		105.2	50.0	150.0
M2-6:2FTSA		93.5	50.0	150.0
M2-8:2FTSA		100.5	50.0	150.0
M2PFTeDA		83.1	12.0	218.0
M3PFBS		97.4	50.0	150.0
M3PFHxS		108.2	50.0	150.0
M4PFHpA		99.5	50.0	150.0
M5PFHxA		88.7	50.0	150.0
M5PFPeA		98.4	50.0	150.0
M6PFDA		91.2	50.0	150.0
M7PFUnDA		106.9	50.0	150.0
M8FOSA		96.5	50.0	150.0
M8PFOA		98.8	50.0	150.0
M8PFOS		102.7	50.0	150.0
M9-PFNA		93.8	50.0	150.0
MPFBA		101.1	50.0	150.0
MPFDoDA		93.8	50.0	150.0
d3N-MeFOSAA		93.6	50.0	150.0
d5EtFOSAA		90.2	50.0	150.0
MHFPO-DA		114.4	50.0	150.0
d-N-EtFOSA-M		93.4	50.0	150.0
d-N-MeFOSA-M		94.4	50.0	150.0
d7-N-MeFOSE-M		98.3	50.0	150.0
d9-N-EtFOSE-M		92.6	50.0	150.0

QC Report - Internal Standards per QC Sample

Matrix Spike (MS)

Lab Sample ID: AK240229.5906204M, Parent Sample ID: S59062.04

Run in Batch: AK240229, Run Date: 02/29/2024 19:16, Prep Date: 02/29/2024, Matrix: WW, Dilution: 2.1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		114.4	50.0	150.0
M2-6:2FTSA		114.6	50.0	150.0
M2-8:2FTSA		92.8	50.0	150.0
M2PFTeDA		93.9	12.0	218.0
M3PFBS		114.9	50.0	150.0
M3PFHxS		128.4	50.0	150.0
M4PFHpA		99.7	50.0	150.0
M5PFHxA		100.6	50.0	150.0
M5PFPeA		109.2	50.0	150.0
M6PFDA		105.4	50.0	150.0
M7PFUnDA		105.5	50.0	150.0
M8FOSA		113.5	50.0	150.0
M8PFOA		109.9	50.0	150.0
M8PFOS		112.9	50.0	150.0
M9-PFNA		105.9	50.0	150.0
MPFBA		108.4	50.0	150.0
MPFDoDA		104.6	50.0	150.0
d3N-MeFOSAA		107.3	50.0	150.0
d5EtFOSAA		102.9	50.0	150.0
MHFPO-DA		101.8	50.0	150.0
d-N-EtFOSA-M		97.6	50.0	150.0
d-N-MeFOSA-M		103.0	50.0	150.0
d7-N-MeFOSE-M		104.2	50.0	150.0
d9-N-EtFOSE-M		100.0	50.0	150.0

QC Report - Internal Standards per QC Sample

Duplicate (DUP)

Lab Sample ID: AK240229.5906205D, Parent Sample ID: S59062.05

Run in Batch: AK240229, Run Date: 02/29/2024 19:56, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1.99

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		103.4	50.0	150.0
M2-6:2FTSA		119.5	50.0	150.0
M2-8:2FTSA		102.5	50.0	150.0
M2PFTeDA		102.5	12.0	218.0
M3PFBS		103.8	50.0	150.0
M3PFHxS		113.4	50.0	150.0
M4PFHpA		110.9	50.0	150.0
M5PFHxA		105.9	50.0	150.0
M5PFPeA		108.6	50.0	150.0
M6PFDA		104.8	50.0	150.0
M7PFUnDA		95.9	50.0	150.0
M8FOSA		103.6	50.0	150.0
M8PFOA		105.1	50.0	150.0
M8PFOS		117.5	50.0	150.0
M9-PFNA		108.4	50.0	150.0
MPFBA		109.0	50.0	150.0
MPFDoDA		101.6	50.0	150.0
d3N-MeFOSAA		118.8	50.0	150.0
d5EtFOSAA		93.7	50.0	150.0
MHFPO-DA		105.9	50.0	150.0
d-N-EtFOSA-M		103.0	50.0	150.0
d-N-MeFOSA-M		105.2	50.0	150.0
d7-N-MeFOSE-M		105.3	50.0	150.0
d9-N-EtFOSE-M		96.8	50.0	150.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240229W1

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

Blank (BLK)

Lab Sample ID: AK240229.BLK240229

Run in Batch: AK240229, Run Date: 02/29/2024 15:55, Prep Date: 02/29/2024, 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
PFPPrS		ND	2	ng/l
PFPeA		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
PFPeS		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
PFBSA		ND	2	ng/l
PFOA		ND	2	ng/l
PFHxS-BR		ND	2	ng/l
PFHxS		ND	2	ng/l
PFHxS-LN		ND	2	ng/l
FHpPA (7:3 FTCA)		ND	10	ng/l
PFNA		ND	2	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
EtFOSAA		ND	4	ng/l
PFOS		ND	2	ng/l
PFOS-LN		ND	2	ng/l
PFHxSA		ND	2	ng/l
PFUnDA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFNS		ND	2	ng/l
PFDoDA		ND	2	ng/l
PFDS		ND	2	ng/l
PFTTrDA		ND	2	ng/l
FOSA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
PFTeDA		ND	4	ng/l
PFDOS		ND	6	ng/l
NMeFOSE		ND	4	ng/l
NMeFOSAM		ND	2	ng/l

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240229W1 (continued)

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

Blank (BLK) (continued)

Lab Sample ID: AK240229.BLK240229

Run in Batch: AK240229, Run Date: 02/29/2024 15:55, Prep Date: 02/29/2024, 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: AK240229.LCS240229

Run in Batch: AK240229, Run Date: 02/29/2024 14:54, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBA		99.2	70.0	130.0
PFMPA		74.4	70.0	130.0
FPrPA (3:3 FTCA)		100.8	70.0	130.0
PFPPrS		96.2	70.0	130.0
PFPeA		95.6	70.0	130.0
PFMBA		80.6	70.0	130.0
4:2 FTSA		87.8	70.0	130.0
NFDHA		76.0	70.0	130.0
PFHxA		92.6	70.0	130.0
PFBS		89.4	70.0	130.0
HFPO-DA		96.6	70.0	130.0
FPePA (5:3 FTCA)		93.8	70.0	130.0
PFEESA		83.6	70.0	130.0
PFHpA		93.0	70.0	130.0
ADONA		88.8	70.0	130.0
PFPeS		86.8	70.0	130.0
6:2 FTSA		107.0	70.0	130.0
PFBSA		95.4	70.0	130.0
PFOA		82.0	70.0	130.0
PFHxS		89.4	70.0	130.0
FHpPA (7:3 FTCA)		81.6	70.0	130.0
PFNA		105.4	70.0	130.0
8:2 FTSA		110.8	70.0	130.0
PFECHS		102.8	70.0	130.0
PFHpS		84.2	70.0	130.0
N-MeFOSAA		109.6	70.0	130.0
PFDA		105.2	70.0	130.0
EtFOSAA		85.8	70.0	130.0
PFOS		95.4	70.0	130.0
PFHxSA		87.2	70.0	130.0
PFUnDA		97.2	70.0	130.0
9CL-PF3ONS		87.8	70.0	130.0
PFNS		95.4	70.0	130.0
PFDoDA		93.2	70.0	130.0
PFDS		102.6	70.0	130.0
PFTTrDA		103.2	70.0	130.0
FOSA		94.4	70.0	130.0
11CL-PF3OUdS		101.6	70.0	130.0
PFTeDA		87.8	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240229W1 (continued)

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

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK240229.LCS240229

Run in Batch: AK240229, Run Date: 02/29/2024 14:54, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFDOS		99.6	70.0	130.0
NMeFOSE		103.4	70.0	130.0
NMeFOSAM		96.0	70.0	130.0
NEtFOSE		99.8	70.0	130.0
NEtFOSAM		104.2	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK240229.LCSD240229, Parent Sample ID: AK240229.LCS240229

Run in Batch: AK240229, Run Date: 02/29/2024 15:35, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		105.4	70.0	130.0	6.1	30.0
PFMPA		85.8	70.0	130.0	14.2	30.0
FPrPA (3:3 FTCA)		100.4	70.0	130.0	0.4	30.0
PFPPrS		96.2	70.0	130.0	0.0	30.0
PFPeA		97.6	70.0	130.0	2.1	30.0
PFMBA		97.6	70.0	130.0	19.1	30.0
4:2 FTSA		106.0	70.0	130.0	18.8	30.0
NFDHA		99.0	70.0	130.0	26.3	30.0
PFHxA		98.2	70.0	130.0	5.9	30.0
PFBS		98.6	70.0	130.0	9.8	30.0
HFPO-DA		90.8	70.0	130.0	6.2	30.0
FPePA (5:3 FTCA)		92.4	70.0	130.0	1.5	30.0
PFEESA		96.0	70.0	130.0	13.8	30.0
PFHpA		105.2	70.0	130.0	12.3	30.0
ADONA		103.6	70.0	130.0	15.4	30.0
PFPeS		97.8	70.0	130.0	11.9	30.0
6:2 FTSA		121.0	70.0	130.0	12.3	30.0
PFBSA		100.8	70.0	130.0	5.5	30.0
PFOA		90.4	70.0	130.0	9.7	30.0
PFHxS		99.4	70.0	130.0	10.6	30.0
FHpPA (7:3 FTCA)		93.4	70.0	130.0	13.5	30.0
PFNA		109.8	70.0	130.0	4.1	30.0
8:2 FTSA		95.6	70.0	130.0	14.7	30.0
PFECHS		122.8	70.0	130.0	17.7	30.0
PFHpS		105.0	70.0	130.0	22.0	30.0
N-MeFOSAA		115.2	70.0	130.0	5.0	30.0
PFDA		105.8	70.0	130.0	0.6	30.0
EtFOSAA		108.6	70.0	130.0	23.5	30.0
PFOS		111.2	70.0	130.0	15.3	30.0
PFHxSA		99.4	70.0	130.0	13.1	30.0
PFUnDA		84.6	70.0	130.0	13.9	30.0
9CL-PF3ONS		104.4	70.0	130.0	17.3	30.0
PFNS		104.4	70.0	130.0	9.0	30.0
PFDODA		99.6	70.0	130.0	6.6	30.0
PFDS		109.4	70.0	130.0	6.4	30.0
PFTTrDA		97.2	70.0	130.0	6.0	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240229W1 (continued)

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

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK240229.LCSD240229, Parent Sample ID: AK240229.LCS240229

Run in Batch: AK240229, Run Date: 02/29/2024 15:35, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
FOSA		93.8	70.0	130.0	0.6	30.0
11CL-PF3OUdS		113.8	70.0	130.0	11.3	30.0
PFTeDA		99.2	70.0	130.0	12.2	30.0
PFDOS		121.0	70.0	130.0	19.4	30.0
NMeFOSE		114.6	70.0	130.0	10.3	30.0
NMeFOSAM		106.0	70.0	130.0	9.9	30.0
NEtFOSE		101.6	70.0	130.0	1.8	30.0
NEtFOSAM		101.4	70.0	130.0	2.7	30.0

Matrix Spike (MS)

Lab Sample ID: AK240229.5906204M, Parent Sample ID: S59062.04

Run in Batch: AK240229, Run Date: 02/29/2024 19:16, Prep Date: 02/29/2024, Matrix: WW, Dilution: 2.1

Analyte	Flags	% Rec	LCL	UCL
PFBA		104.8	70.0	130.0
PFPeA		89.5	70.0	130.0
4:2 FTSA		86.7	70.0	130.0
PFHxA		80.0	70.0	130.0
PFBS		82.9	70.0	130.0
PFHpA		95.2	70.0	130.0
PFPeS		85.7	70.0	130.0
6:2 FTSA		95.2	70.0	130.0
PFOA		79.0	70.0	130.0
PFHxS		77.1	70.0	130.0
PFNA		95.2	70.0	130.0
8:2 FTSA		104.8	70.0	130.0
PFHpS		93.3	70.0	130.0
PFDA		92.4	70.0	130.0
N-MeFOSAA		104.8	70.0	130.0
EtFOSAA		95.2	70.0	130.0
PFOS		104.8	70.0	130.0
PFUnDA		104.8	70.0	130.0
PFNS		104.8	70.0	130.0
PFDoDA		87.6	70.0	130.0
PFDS		104.8	70.0	130.0
PFTrDA		92.4	70.0	130.0
FOSA		82.9	70.0	130.0
PFTeDA		88.6	70.0	130.0
11CL-PF3OUdS		104.8	70.0	130.0
9CL-PF3ONS		104.8	70.0	130.0
ADONA		83.8	70.0	130.0
HFPO-DA		114.3	70.0	130.0
FHpPA (7:3 FTCA)		86.7	70.0	130.0
FPePA (5:3 FTCA)		88.6	70.0	130.0
FPrPA (3:3 FTCA)		95.2	70.0	130.0
NFDHA		87.6	70.0	130.0
PFBSA		92.4	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240229W1 (continued)

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

Matrix Spike (MS) (continued)

Lab Sample ID: AK240229.5906204M, Parent Sample ID: S59062.04

Run in Batch: AK240229, Run Date: 02/29/2024 19:16, Prep Date: 02/29/2024, Matrix: WW, Dilution: 2.1

Analyte	Flags	% Rec	LCL	UCL
PFECHS		104.8	70.0	130.0
PFEESA		92.4	70.0	130.0
PFHxSA		85.7	70.0	130.0
PFMBA		85.7	70.0	130.0
PFMPA		82.9	70.0	130.0
PFPPrS		89.5	70.0	130.0

Duplicate (DUP)

Lab Sample ID: AK240229.5906205D, Parent Sample ID: S59062.05

Run in Batch: AK240229, Run Date: 02/29/2024 19:56, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1.99

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
FHpPA (7:3 FTCA)		NC	30.0
FPePA (5:3 FTCA)		NC	30.0
FPrPA (3:3 FTCA)		NC	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240229W1 (continued)

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

Duplicate (DUP) (continued)

Lab Sample ID: AK240229.5906205D, Parent Sample ID: S59062.05

Run in Batch: AK240229, Run Date: 02/29/2024 19:56, Prep Date: 02/29/2024, Matrix: WW, Dilution: 1.99

Analyte	Flags	RPD	RPD CL
NFDHA		NC	30.0
PFBSA		NC	30.0
PFECHS		NC	30.0
PFEESA		NC	30.0
PFHxSA		NC	30.0
PFMBA		NC	30.0
PFMPA		NC	30.0
PFPrS		NC	30.0



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REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

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 ADDRESS 2090 Commonwealth Blvd
 CITY Ann Arbor STATE MI ZIP CODE 48105
 PHONE NO. CELL NO. 313-333-0211 P.O. NO.
 E-MAIL ADDRESS Kevin.Schneider@Ramboll.com QUOTE NO.
Clifford.Yantz@Ramboll.com

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

PROJECT NO./NAME RACER Coldwater Road SAMPLER(S) - PLEASE PRINT/SIGN NAME Kevin Schneider JK SKL
 TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER
 DELIVERABLES REQUIRED STD 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

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. <small>FOR LAB USE ONLY</small>	COLLECTION		SAMPLE TAG. IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PFAS (mg)	Certifications		Project Locations		Special Instructions
	DATE	TIME												<input type="checkbox"/> OHIO VAP	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Detroit	<input type="checkbox"/> New York	
59157.01	2/25/24	1300	01-PRCC-24-INF	ww	3	3							X		<input type="checkbox"/>	<input type="checkbox"/>		Low level Reporting with estimated values 34 PFAS LIST
.02	2/25/24	1310	01-PRCC-24-PRIM	ww	3	3							X		<input type="checkbox"/>	<input type="checkbox"/>		
.03	2/27/24	1008	01-PRCC-24-EFF-141	ww	3	3							X		<input type="checkbox"/>	<input type="checkbox"/>		
.04	2/27/24	1010	01-PRCC-24-MID-2-141	ww	3	3							X		<input type="checkbox"/>	<input type="checkbox"/>		
.05	2/27/24	1012	01-PRCC-24-MID-1-141	ww	3	3							X		<input type="checkbox"/>	<input type="checkbox"/>		
.06	2/27/24	1014	01-PRCC-24-PRIM-141	ww	3	3							X		<input type="checkbox"/>	<input type="checkbox"/>		
.07	2/27/24	1004	Field Blank-022724	QC	1	1							X		<input type="checkbox"/>	<input type="checkbox"/>		

RELINQUISHED BY: JK SKL Sampler DATE 2/27/24 TIME 10:35
 RECEIVED BY: Jay Miller DATE 2/27/24 TIME 10:35
 SIGNATURE/ORGANIZATION
 RELINQUISHED BY: Jay Miller DATE 2/27/24 TIME 14:45
 RECEIVED BY: M. Dilato DATE 2/27/24 TIME 14:45
 SIGNATURE/ORGANIZATION

RELINQUISHED BY: DATE TIME
 SIGNATURE/ORGANIZATION
 RECEIVED BY: DATE TIME
 SIGNATURE/ORGANIZATION
 SEAL NO. SEAL INTACT YES NO INITIALS NOTES: TEMP. ON ARRIVAL 2.5
 SEAL NO. SEAL INTACT YES NO INITIALS

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