

Transmitted via email

Ms. Nicole Sanabria and Ms. Christina Hebert

Materials Management Division
Department of Environment, Great Lakes, and Energy
PO Box 30473
Lansing, MI 48909-7973

Mr. Robert Ellis

Department of Public Works Manager
Genesee Township
7244 N. Genesee Road
Genesee, MI 48423

Ms. Melissa Glasgow

Genesee County Water and Waste Services
Anthony Ragnone Treatment Plant
9290 Farrand Road
Montrose, MI, 48457

August 30, 2024

RE: **Stanley Road Sanitary Sewer Update**

RACER Trust – Coldwater Road Facility
FILE: 15388/1940107203/Corres

Ramboll
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Ann Arbor, MI 48105
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Dear **Ms. Sanabria, Ms. Hebert, Mr. Ellis, & Ms. Glasgow**:

Ramboll Americas Engineering Solutions, Inc. (Ramboll), on behalf of the Revitalizing Auto Communities Environmental Response Trust (RACER Trust) is providing this letter to summarize the per- and polyfluoroalkyl substances (PFAS) sanitary sewer sample results collected from the Genesee Township sanitary sewer along the north side of Stanley Road and north of the RACER Trust Coldwater Road Facility (Site) located in Flint, Michigan.

The samples were collected on June 27, 2024, at sample locations SAN-2, SAN-8, SAN-9, SAN-21, and manhole 11-07C016. See **Figure 1** for sample and repair locations. As noted below, repairs to the sewer were completed in September 2020.

Sanitary sewer sampling was performed in accordance with the methods specified in EGLE’s Wastewater PFAS Sampling Guidance.

Analytical Results

The sewer samples were analyzed for PFAS by method ASTM D7979-19 (no preservative). The analytical results for the recent sewer samples and historical samples are summarized in **Table 1**, and the analytical laboratory reports are included in **Appendix A**. The sample locations discussed below are presented upgradient to downgradient.

- SAN-09, which is upgradient of the PFAS-impacted shallow groundwater zone, had a detection of 5.2 nanograms per liter (ng/l) for perfluorooctane sulfonic acid (PFOS) on June 27, 2024, which is near the low end of the range of previously detected concentrations and is similar to the previous result of 5.1 ng/l (12/19/2023) for PFOS.
- SAN-2 had a detection of 24 ng/l for PFOS on June 27, 2024, which is near the middle of the range of previously detected concentrations and is an increase compared to the previous result of 19 ng/l (12/19/2023) for PFOS.
- 11-07C016 had a detection of 20 ng/l for PFOS on June 27, 2024, which is near the low end of the range of previously detected concentrations and is similar to the previous result of 19 ng/l (12/19/2023) for PFOS.
- SAN-08 had a detection of 9.4 ng/l for PFOS on June 27, 2024, which is near the low end of the range of previously detected concentrations and is a decrease compared to the previous result of 23 ng/l (12/19/2023) for PFOS.
- SAN-21, which is downgradient of the PFAS-impacted shallow groundwater zone, had a detection of 9.9 ng/l for PFOS on June 27, 2024, which is near the low end of the range of previously detected concentrations and is a decrease compared to the previous result of 13 ng/l (12/19/2023) for PFOS.

The observed flow rates during sampling were consistent with flow rates observed during previous post-repair (repairs completed, September 2020) sampling events and continue to be much lower than before sewer line repairs were completed. PFOS concentrations appear to be variable at a given sampling location but are within a concentration range that is lower than before repairs were implemented.

Based on these results and to continue to allow for evaluation of concentration variability and trends, we propose to collect another round of samples in December 2024 from the upstream sample location SAN-09, SAN-2, 11-07C016, SAN-08, and downstream sample location SAN-21. An update similar to this one will be provided within approximately four weeks of receipt of the analytical results from the laboratory.



Please contact me at 313-333-0211 or clifford.yantz@ramboll.com or Brendan Mullen at bmullen@racertrust.org or 201-247-4890, if you have any questions.

Very truly yours,

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

Clifford S. Yantz

Project Manager

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ENCLOSURES:

Table 1 – Sanitary Sewer Analytical Results – Stanley Road

Figure 1 – Stanley Road Sanitary Sewer/Manhole Point Repairs and Sample Locations

Appendix A – Laboratory Analytical Reports

cc: Mr. Daniel K Eashoo - Genesee Township Supervisor (via email)
Mr. Thad Domick – GCDCWWS (via email)
Mr. Kevin DePottey – GCDCWWS (via email)
Mr. Brent Pittenger – GCDCWWS (via email)
Ms. Carla Davidson – EGLE (via email)
Mr. Brian Zuber – EGLE (via email)
Mr. Brendan Mullen – RACER Trust (via email)
Mr. David Favero – RACER Trust (via email)
Mr. Kevin Schneider – Ramboll (via email)

TABLES



TABLE 1
RACER Trust - Coldwater Road
Per-and Polyfluoroalkyl Substances Sampling Results
Sanitary Sewer Samples - Stanley Road

Coldwater Rd - Sanitary Sewer Samples - Stanley Road

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	II-07C016 (Sanitary Sewer)	SAN-1 (Sanitary Sewer)	SAN-1 (Sanitary Sewer)	SAN-1 (Sanitary Sewer)
Sample Date:		5/20/2021	8/25/2021	12/9/2021	3/31/2022	9/7/2022	12/13/2022	4/6/2023	6/27/2023	12/19/2023	6/27/2024	11/5/2019	3/17/2020	12/18/2020
Perfluorobutanoic Acid (PFBA)	--	<10	<10	<9.8 X	<21 X	<11	<10	<10	<9.6	<29 X	<9.8	<20	<21	<10
Perfluoropentanoic Acid (PFPeA)	--	1.1 J	1.9 J	2.2 J	<4.1	<4.3	<4.1	1.5 J	<3.8	<3.9	<3.9	<9.9	<11	<4.1
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorohexanoic Acid (PFHxA)	--	<2.0	<2.0	2.0	<2.1	<2.2	<2.0	1.3 J	1.5 J	<1.9	<2.0	<9.9	<11	<2.1
Perfluorobutane Sulfonic Acid (PFBS)	670,000	2.0 J	<2.0	2.4	2.8	2.0 J	1.6 J	6.6	4.0	2.0	2.0	<9.9	<11	1.7 J
Perfluoroheptanoic Acid (PFHpA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	1.2 J	<1.9	<3.8	<2.0	<9.9	<11	<2.1
Perfluoropentane Sulfonic Acid (PFPeS)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	1.0 J	<1.9	<1.9	<2.0	<9.9	<11	<2.1
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<4.1	<4.1	<3.9	<4.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorooctanoic Acid (PFOA)	170	<2.0	1.8 J	2.3	<2.1	3.1	1.8 J	<2.0	3.2	1.3 J	1.7 J	<9.9	<11	<2.1
Perfluorohexane Sulfonic Acid (PFHxS)	210	2.9	3.2	3.6	<2.1	4.7	4.0	2.5	2.2	2.6	2.0	<9.9	<11	2.3
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	2.2	2.2	2.9	<2.1	3.7	3.0	2.1	2.2	2.1	2.0	<9.9	<11	1.7 J
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorononanoic Acid (PFNA)	30	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	1.0 J	<1.9	<1.9	<2.0	<9.9	<11	<2.1
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.0	<4.1	<3.9	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	0.86 J	<9.9	<11	<2.1
Perfluorodecanoic Acid (PFDA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	--	<4.1	<4.1	<3.9	<4.1	<4.3	<4.1	<4.0	<3.8	<3.8	<3.9	<9.9	<11	<4.1
Perfluorooctane Sulfonic Acid (PFOS)	12	24	27	19	19	43	31	27	27	19	20	55	59	24
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	7.0	9.4	5.8	3.2	13	8.6	12	8.2	6.0	4.9	18	18	6.9
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	17	18	14	15	30	22	13	19	13	13	36	42	16
Perfluoroundecanoic Acid (PFUnDA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorononane Sulfonic Acid (PFNS)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorododecanoic Acid (PFDoDA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorotridecanoic Acid (PFTrDA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorooctane Sulfonamide (FOSA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Perfluorotetradecanoic Acid (PFTeDA)	--	<4.1	<4.1	<3.9	<4.1	<4.3	<4.1	<4.0	<3.8	<3.8	<3.9	<9.9	<11	<4.1
11-chloroicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF30NS)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.0	<2.0	<2.0	<2.1	<2.2	<2.0	<2.0	<1.9	<1.9	<2.0	<9.9	<11	<2.1
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<10	<10	<9.8	<4.1	<11	<10	<2.0	<1.9	<9.6	<9.8	<9.9	<11	<2.1
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--	--	--	--	<3.8	<9.6	<9.8	--	--	--
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--	--	--	--	<3.8	<9.6	<9.8	--	--	--
3-Perfluoropropyl propanoic acid (FPrPA (3:3 FTCA))	--	--	--	--	--	--	--	--	<3.8	<9.6	<9.8	--	--	--
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--	--	--	--	<1.9	0.60 J	<2.0	--	--	--
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--	--	--	--	140	65	86	--	--	--
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--	--	--	--	<1.9	<2.0	<2.0	--	--	--
Total Per-and Polyfluoroalkyl Substances	--	30.0	33.9	31.5	21.8	52.8	38.4	42.1	177.9	90.5	112.6	55.0	59.0	28.0

- 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) EGLE Part 201 Groundwater Generic Cleanup Criteria and Screening Levels, October 12, 2023.
 - 7) Concentration above the groundwater surface water interface (GSI) criteria are highlighted in yellow.
 - 8) B - Compound also found in associated method blank.
 - 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) Light gray header is most recent sampling event result.
 - 13) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.



TABLE 1
RACER Trust - Coldwater Road
Per- and Polyfluoroalkyl Substances Sampling Results
Sanitary Sewer Samples - Stanley Road

Coldwater Rd - Sanitary Sewer Samples - Stanley Road

Perfluorinated Compound	Well/Sample ID:	EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-DUP-033122 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)	SAN-2 (Sanitary Sewer)
			11/5/2019	5/20/2021	8/25/2021	12/9/2021	3/31/2022	3/31/2022	9/7/2022	12/13/2022	4/6/2023	6/27/2023	12/19/2023	6/27/2024
Perfluorobutanoic Acid (PFBA)	--	--	<20	<10	<10	13	<21 X	<20 X	<11	<10	<9.7	<10	<31 X	5.4 J
Perfluoropentanoic Acid (PFPeA)	--	--	<9.9	<4.2	4.3	1.5 J	<4.2	<4.0	<4.2	1.2 J	1.3 J	<4.1	1.2 J	1.5 J
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0 I	<2.0
Perfluorohexanoic Acid (PFHxA)	--	--	<9.9	<2.1	7.4	<1.9	<2.1	<2.0	<2.1	1.5 J	1.2 J	<2.1	<2.0	<2.0
Perfluorobutane Sulfonic Acid (PFBS)	670,000	--	<9.9	1.8 J	1.9 J	2.4	3.1	3.9	2.2	1.6 J	7.1	2.0 J	2.3	2.7
Perfluoroheptanoic Acid (PFHpA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	1.1 J	<2.1	<3.9	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	1.0 J	<2.1	<2.0	<2.0
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	--	<9.9	<4.2	<4.1	<3.8	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorooctanoic Acid (PFOA)	170	--	<9.9	<2.1	3.2	2.3	<2.1	<2.0	2.5	1.8 J	<1.9	2.4	1.0 J	2.9
Perfluorohexane Sulfonic Acid (PFHxS)	210	--	<9.9	2.8	4.0	4.1	3.5	3.4	4.0	3.3	2.1	1.9 J	1.7 J	3.0
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	--	<9.9	1.7 J	3.1	2.5	<2.1	<2.0	3.0	2.5	1.7 J	1.9 J	1.3 J	2.0
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorononanoic Acid (PFNA)	30	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	--	<9.9	<2.1	<4.1	<3.8	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorodecanoic Acid (PFDA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	--	<9.9	<4.2	<4.1	<3.8	<4.2	<4.0	<4.2	<4.0	<3.9	<4.1	<3.9	<3.9
Perfluorooctane Sulfonic Acid (PFOS)	12	--	37	22	31	20	24	24	43	29	9.8	17	17	24
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	--	11	6.0	10	7.1	5.2	5.1	14	7.7	2.8	6.4	5.1	6.4
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	--	23	16	21	13	19	20	29	20	7.2	11	11	17
Perfluoroundecanoic Acid (PFUnDA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorononane Sulfonic Acid (PFNS)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorododecanoic Acid (PFDoDA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorodecane Sulfonic Acid (PFDS)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorotridecanoic Acid (PFTTrDA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorooctane Sulfonamide (FOSA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Perfluorotetradecanoic Acid (PFTTeDA)	--	--	<9.9	<4.2	<4.1	<3.8	<4.2	<4.0	2.1 J	<4.0	<3.9	<4.1	<4.0	<3.9
11-chloroicosafuoro-3-oxaundecane-1-sulfonic acid (11CI-PF30UdS)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9CI-PF30NS)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
4,8-dioxo-3H-perfluorononanoic acid (ADONA)	--	--	<9.9	<2.1	<2.0	<1.9	<2.1	<2.0	<2.1	<2.0	<1.9	<2.1	<2.0	<2.0
Hexafluoropropylene oxide dimer (HFPO-DA)	--	--	<9.9	<10	<10	<9.6	<4.2	<4.0	<11	<10	<1.9	<2.1	<9.8	<9.8
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--	--	--	--	--	--	--	<4.1	<9.8	<9.8
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--	--	--	--	--	--	--	<4.1	<9.8	<9.8
3-Perfluoropropyl propanoic acid (FPpPA (3:3 FTCA))	--	--	--	--	--	--	--	--	--	--	--	<4.1	<9.8	<9.8
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--	--	--	--	--	--	--	<2.1	0.63 J	<2.0
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--	--	--	--	--	--	--	90	52	100
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--	--	--	--	--	--	--	<2.1	<2.0	<2.0
Total Per- and Polyfluoroalkyl Substances	--	--	37.0	26.6	51.8	43.3	30.6	31.3	53.8	38.4	23.6	113.3	75.8	139.5

- Notes
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 - 6) EGLE Part 201 Groundwater Generic Cleanup Criteria and Screening Levels, October 12, 2023.
 - 7) Concentration above the groundwater surface water interface (GSI) criteria are highlighted in yellow.
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 - 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) Light gray header is most recent sampling event result.
 - 13) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.

TABLE 1
RACER Trust - Coldwater Road
Per-and Polyfluoroalkyl Substances Sampling Results
Sanitary Sewer Samples - Stanley Road

Coldwater Rd - Sanitary Sewer Samples - Stanley Road

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)	SAN-08 (Sanitary Sewer)
		3/18/2020	9/22/2020	12/18/2020	5/20/2021	8/25/2021	12/9/2021	3/31/2022	9/7/2022	12/13/2022	4/6/2023	6/27/2023	12/19/2023	6/27/2024
Perfluorobutanoic Acid (PFBA)	--	<20	<9.9	<9.9	<10	<10	<10 X	<21 X	<10	<10	<10	<9.8	<24 X	<10
Perfluoropentanoic Acid (PFPeA)	--	<10	<3.9	<4.0	<4.0	1.3 J	<4.1	<4.1	<4.0	<4.0	2.0 J	1.4 J	<4.0	<4.1
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexanoic Acid (PFHxA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	1.7 J	2.0 J	<2.0	<2.0	<2.0
Perfluorobutane Sulfonic Acid (PFBS)	670,000	<10	<2.0	1.7 J	1.6 J	1.8 J	2.2	4.3	1.4 J	2.4	6.5	3.2	2.3	1.9 J
Perfluorohexanoic Acid (PFHxA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	1.3 J	<2.0	<4.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<10	<2.0	<2.0	<4.0	<4.0	<4.1	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctanoic Acid (PFOA)	170	<10	<2.0	<2.0	<2.0	2.3	2.2	<2.1	2.6	2.3	2.2	1.9 J	1.2 J	1.6 J
Perfluorohexane Sulfonic Acid (PFHxS)	210	<10	2.8	2.4	2.3	2.0	3.1	<2.1	3.3	3.5	3.4	1.9 J	2.6	1.0 J
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	<10	2.0	1.6 J	1.6 J	<2.0	2.5	<2.1	2.7	2.7	2.8	1.9 J	2.0	1.0 J
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorononanoic Acid (PFNA)	30	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<10	<2.0	<2.0	<2.0	<4.0	<4.1	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid (PFHxS)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorodecanoic Acid (PFDA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<10	<3.9	<4.0	<4.0	<4.0	<4.1	<4.1	<4.0	<4.0	<4.0	<3.9	<4.0	<4.1
Perfluorooctane Sulfonic Acid (PFOS)	12	42	17	14	16	16	25	9.2	24	25	7.6	25	23	9.4
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	12	5.0	3.6	4.1	5.3	8.7	2.5	6.0	6.4	2.0	7.3	8.8	2.1
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	30	10	9.5	12	11	17	6.3	17	18	6.0	17	15	6.4
Perfluoroundecanoic Acid (PFUnDA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorononane Sulfonic Acid (PFNS)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecanoic Acid (PFDoDA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorodecane Sulfonic Acid (PFDS)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorotridecanoic Acid (PFTrDA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctane Sulfonamide (FOSA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorotetradecanoic Acid (PFTeDA)	--	<10	<3.9	<4.0	<4.0	<4.0	<4.1	<4.1	<4.0	<4.0	<4.0	<3.9	<4.0	<4.1
11-chloroicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF30NS)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<10	<2.0	<2.0	<10	<10	<10	<4.1	<10	<10	<2.0	<2.0	<10	<10
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--	--	--	--	--	--	--	<3.9	<10	<10
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--	--	--	--	--	--	--	<3.9	<10	<10
3-Perfluoropropyl propanoic acid (FPPrPA (3:3 FTCA))	--	--	--	--	--	--	--	--	--	--	--	<3.9	<10	<10
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--	--	--	--	--	--	--	<2.0	<2.0	<2.0
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--	--	--	--	--	--	--	110	59	27
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--	--	--	--	--	--	--	<2.0	<2.0	<2.0
Total Per-and Polyfluoroalkyl Substances	--	42.0	19.8	18.1	19.9	23.4	32.5	13.5	31.3	34.9	25.0	143.4	88.1	40.9

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) EGLE Part 201 Groundwater Generic Cleanup Criteria and Screening Levels, October 12, 2023.
7) Concentration above the groundwater surface water interface (GSI) criteria are highlighted in yellow.
8) B - Compound also found in associated method blank.
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) Light gray header is most recent sampling event result.
13) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.



TABLE 1
RACER Trust - Coldwater Road
Per-and Polyfluoroalkyl Substances Sampling Results
Sanitary Sewer Samples - Stanley Road

Coldwater Rd - Sanitary Sewer Samples - Stanley Road

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)	SAN-09 (Sanitary Sewer)
Sample Date:		3/18/2020	5/20/2021	8/25/2021	12/9/2021	3/31/2022	9/7/2022	12/13/2022	4/6/2023	6/27/2023	12/19/2023	6/27/2024	
Perfluorobutanoic Acid (PFBA)	--	<19	<9.7	<10	<9.8	<9.9	<9.9	<9.9	<9.6	<9.6	<10	7.1 J	
Perfluoropentanoic Acid (PFPeA)	--	<9.7	1.6 J	1.4 J	<3.9	<3.9	<3.9	<4.0	1.00 J	<3.8	<4.1	<4.0	
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<9.7	<1.9	<2.1 I	<2.0 I	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
Perfluorohexanoic Acid (PFHxA)	--	<9.7	2.6	<2.1	<2.0	<2.0	<2.0	<2.0	1.6 J	<1.9	<2.0	<2.0	
Perfluorobutane Sulfonic Acid (PFBS)	670,000	<9.7	<1.9	<2.1	2.1	8.0	<2.0	<2.0	1.2	2.6	2.3	4.5	
Perfluoroheptanoic Acid (PFHpA)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	1.2 J	<1.9	<4.1	<2.0	
Perfluoropentane Sulfonic Acid (PFPeS)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<9.7	<3.9	<4.2 I	<3.9 I	<2.0	<2.0	<2.0	<1.9	2.3	<2.0	<2.0	
Perfluorooctanoic Acid (PFOA)	170	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	2.9	0.85 J	1.3 J	
Perfluorohexane Sulfonic Acid (PFHxS)	210	<9.7	3.0	<2.1	<2.0	2.2	2.2	1.3	1.7 J	1.7 J	<2.0	1.1 J	
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	<9.7	<1.9	<2.1	<2.0	<2.0	1.7 J	1.7 J	<1.9	1.7 J	<2.0	1.1 J	
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
Perfluorononanoic Acid (PFNA)	30	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<9.7	<1.9	<2.1	<3.9	<2.0	<2.0 I	<2.0	<2.0	2.0	<2.0	<2.0	
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
Perfluorodecanoic Acid (PFDA)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<9.7	<3.9	<4.2	<3.9 I	<3.9	2.0 J	<4.0	<3.8	<3.8	<4.1	<4.0	
Perfluorooctane Sulfonic Acid (PFOS)	12	<9.7	15	17	5.4	6.0	3.4	10	3.0	1.3	5.1	5.2	
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	<1.9	<2.1	<2.1	<2.0	<2.0	<2.0	4.8	<1.9	5.5	1.3 J	<2.0	
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	<9.7	13	15	4.6	5.0	2.6	5.2	2.3	7.6	3.6	3.3	
Perfluoroundecanoic Acid (PFUnDA)	--	<1.9	<2.1	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
Perfluorononane Sulfonic Acid (PFNS)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
Perfluorododecanoic Acid (PFDoDA)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
Perfluorodecane Sulfonic Acid (PFDS)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
Perfluorotridecanoic Acid (PFTriDA)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.0	
Perfluorooctane Sulfonamide (FOSA)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.0	
Perfluorotetradecanoic Acid (PFTeDA)	--	<9.7	<3.9	<4.2	<3.9	<3.9	<3.9	<4.0	<3.8	<3.8	<4.1	<4.0	
11-chlorooicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF30NS)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
4,8-dioxo-3H-perfluorononanoic acid (ADONA)	--	<9.7	<1.9	<2.1	<2.0	<2.0	<2.0	<2.0	<1.9	<1.9	<2.0	<2.0	
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<9.7	<9.7	<10	<9.8	<3.9	<9.9	<9.9	<1.9	<1.9	<10	<9.9	
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--	--	--	--	--	--	<3.8	<10	
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--	--	--	--	--	--	<3.8	<10	
3-Perfluoropropyl propanoic acid (FPPA (3:3 FTCA))	--	--	--	--	--	--	--	--	--	--	<3.8	<10	
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--	--	--	--	--	--	<1.9	<2.0	
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--	--	--	--	--	--	33	18	
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--	--	--	--	--	--	<1.9	<2.0	
Total Per-and Polyfluoroalkyl Substances	--	0.0	22.2	18.4	7.5	14.0	7.6	12.2	20.1	57.5	26.3	42.2	

Notes

- 1) Detections in **bold**.
- 2) Concentrations in na/L.
- 3) < = Not detected at specified reporting limit.
- 4) -- = Not analyzed/No criteria.
- 5) Dup = Duplicate sample.
- 6) EGLE Part 201 Groundwater Generic Cleanup Criteria and Screening Levels, October 12, 2023.
- 7) Concentration above the groundwater surface water interface (GSI) criteria are highlighted in yellow.
- 8) B - Compound also found in associated method blank.
- 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) Light gray header is most recent sampling event result.
- 13) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.

TABLE 1
RACER Trust - Coldwater Road
Per-and Polyfluoroalkyl Substances Sampling Results
Sanitary Sewer Samples - Stanley Road

Coldwater Rd - Sanitary Sewer Samples - Stanley Road

Perfluorinated Compound	Well/Sample ID:	EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-21 (Sanitary Sewer)	SAN-21 (Sanitary Sewer)	SAN-21 (Sanitary Sewer)	SAN-21 (Sanitary Sewer)
	Sample Date:		6/25/2020	12/18/2020	12/19/2023	6/27/2024
Perfluorobutanoic Acid (PFBA)	--	--	13 U	<10.0	<15 X	<16 X
Perfluoropentanoic Acid (PFPeA)	--	--	<4.0	<4.0	1.2 J	<4.1
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	--	<2.0	<2.0	<1.9	<2.0
Perfluorohexanoic Acid (PFHxA)	--	--	<2.0	<2.0	<1.9	<2.0
Perfluorobutane Sulfonic Acid (PFBS)	670,000	<2.0	2.4	2.9	2.4	2.4
Perfluoroheptanoic Acid (PFHpA)	--	<2.0	<2.0	<2.0	<3.9	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	--	<2.0	<2.0	<2.0	<1.9	<2.0
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<2.0	<2.0	<2.0	<1.9	<2.0
Perfluorooctanoic Acid (PFOA)	170	<2.0	<2.0	0.77 J	1.8 J	1.8 J
Perfluorohexane Sulfonic Acid (PFHxS)	210	2.0	2.0	1.2 J	1.2 J	<2.0
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	<2.0	<2.0	1.2 J	<2.0	<2.0
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Perfluorononanoic Acid (PFNA)	30	<2.0	<2.0	<1.9	<2.0	<2.0
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.0	<2.0	<1.9	<2.0 I	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Perfluorodecanoic Acid (PFDA)	--	<2.0	<2.0	<1.9	<2.0	<2.0
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.0	<2.0	<1.9	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<4.0	<4.0	<3.9 I	<4.1	<4.1
Perfluorooctane Sulfonic Acid (PFOS)	12	33	34	13	9.9	9.9
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	9.8	9.9	3.5	1.7 J	1.7 J
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	22	24	9.6	6.3	6.3
Perfluoroundecanoic Acid (PFUnDA)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Perfluorononane Sulfonic Acid (PFNS)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Perfluorododecanoic Acid (PFDoDA)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Perfluorotridecanoic Acid (PFTrDA)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Perfluorooctane Sulfonamide (FOSA)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Perfluorotetradecanoic Acid (PFTeDA)	--	<4.0	<4.0	<3.9	<4.1	<4.1
11-chlorooicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<2.0	<2.0	<1.9	<2.0	<2.0
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF30NS)	--	<2.0	<2.0	<1.9	<2.0	<2.0
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.0	<2.0	<1.9	<2.0	<2.0
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<2.0	<2.0	<1.9	<10	<10
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	<9.7	<10	<10
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	<9.7	<10	<10
3-Perfluoropropyl propanoic acid (FPrPA (3:3 FTCA))	--	--	--	<9.7	<10	<10
Perfluorobutanesulfonamide (PFBSA)	--	--	--	0.66 J	<2.0	<2.0
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	35	18	18
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	<1.9	<2.0	<2.0
Total Per-and Polyfluoroalkyl Substances	--	--	48.0	38.4	54.7	32.1








Notes

- 1) Detections in **bold**.
- 2) Concentrations in na/L.
- 3) < = Not detected at specified reporting limit.
- 4) -- = Not analyzed/No criteria.
- 5) Dup = Duplicate sample.
- 6) EGLE Part 201 Groundwater Generic Cleanup Criteria and Screening Levels, October 12, 2023.
- 7) Concentration above the groundwater surface water interface (GSI) criteria are highlighted in yellow.
- 8) B - Compound also found in associated method blank.
- 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) Light gray header is most recent sampling event result.
- 13) OA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.

FIGURES

I:\Racer-Trust\1088190\GIS\Coldwater_Road\MXD\Sewer_Lining\Stanley_Road_Figures\1 - Stanley Road Sanitary Sewer Manhole Point Repairs.mxd
PROJECT: 1940100783 | DATED: 1/7/2022 | DESIGNER: MONETANT



-  SANITARY SEWER MANHOLE - LINED
-  SANITARY SEWER MANHOLE
-  DRIPPER/WEEPER REPAIRED
-  GUSHER REPAIRED
-  RUNNER REPAIRED
-  PROPERTY BOUNDARY
-  SANITARY SEWER

Note
Repairs were completed in September 2020.



STANLEY ROAD SANITARY SEWER / MANHOLE POINT REPAIRS AND SAMPLE LOCATIONS

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

FIGURE 01

RAMBOLL AMERICAS ENGINEERING
SOLUTIONS, INC.



Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



APPENDIX A
LABORATORY ANALYTICAL REPORTS



Analytical Laboratory Report

Report ID: S63620.01(01)
Generated on 07/23/2024

Report to

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

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

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)

Additional Contacts: Kevin Schneider, Nicole Pitkorchemny

Report Summary

Lab Sample ID(s): S63620.01-S63620.05
Project: RACER Coldwater Road
Collected Date(s): 06/27/2024
Submitted Date/Time: 06/27/2024 14:05
Sampled by: Kevin Schneider
P.O. #: 1940008845 TASK 37

Table of Contents

- Cover Page (Page 1)
- General Report Notes (Page 2)
- Report Narrative (Page 2)
- Laboratory Accreditations (Page 3)
- Qualifier Descriptions (Page 3)
- Glossary of Abbreviations (Page 3)
- Method Summary (Page 4)
- Parameter Summary (Page 5)
- Sample Summary (Page 6)

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
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

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



Analytical Laboratory Report

Method Summary

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



Analytical Laboratory Report

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 (5 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S63620.01	SAN-21-06272024	Liquid	06/27/24 10:30
S63620.02	SAN-08-06272024	Liquid	06/27/24 10:52
S63620.03	11-07C016-06272024	Liquid	06/27/24 11:08
S63620.04	SAN-2-06272024	Liquid	06/27/24 11:20
S63620.05	SAN-09-06272024	Liquid	06/27/24 11:32



Analytical Laboratory Report

Lab Sample ID: S63620.01

Sample Tag: SAN-21-06272024

Collected Date/Time: 06/27/2024 10:30

Matrix: Liquid

COC Reference: 153316

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.37/6.44/10	ASTMD7979-19M	06/28/24 12:00	CED	
Initial wt. (g) / Final wt. (g) / Volume (ml) (Rep)	2.82/6.44/13	ASTMD7979-19M	07/01/24 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/02/24 11:46, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	Not detected	16	2.0	ng/L	2.04	375-22-4	X
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*	2.4	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*	1.8	2.0	0.82	ng/L	2.04	335-67-1	J
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	I
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*	9.9	2.0	0.82	ng/L	2.04	1763-23-1	
PFOS-LN*	1.7	2.0	0.82	ng/L	2.04	1763-23-1-LN	J
PFOS-BR*	6.3	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	

X-Elevated reporting limit due to matrix interference

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

I-Matrix interference with internal standard



Analytical Laboratory Report

Lab Sample ID: S63620.01 (continued)

Sample Tag: SAN-21-06272024

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/02/24 11:46, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
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	
PFECHS*	18	2.0	0.82	ng/L	2.04	67584-42-3	
PFHxSA*	Not detected	2.0	0.61	ng/L	2.04	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S63620.02

Sample Tag: SAN-08-06272024

Collected Date/Time: 06/27/2024 10:52

Matrix: Liquid

COC Reference: 153316

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.58/6.43/10	ASTMD7979-19M	06/28/24 12:00	CED	
Initial wt. (g) / Final wt. (g) / Volume (ml) (Rep#)	1.86/6.46/11	ASTMD7979-19M	07/01/24 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/01/24 20:44, 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*	1.9	2.0	0.61	ng/L	2.04	375-73-5	J
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*	1.6	2.0	0.82	ng/L	2.04	335-67-1	J
PFHxS*	1.0	2.0	1.0	ng/L	2.04	355-46-4	J
PFHxS-LN*	1.0	2.0	1.0	ng/L	2.04	355-46-4-LN	J
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*	9.4	2.0	0.82	ng/L	2.04	1763-23-1	
PFOS-LN*	2.1	2.0	0.82	ng/L	2.04	1763-23-1-LN	
PFOS-BR*	6.4	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	

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



Analytical Laboratory Report

Lab Sample ID: S63620.02 (continued)

Sample Tag: SAN-08-06272024

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/01/24 20:44, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBSA*	Not detected	2.0	0.61	ng/L	2.04	30334-69-1	
PFECHS*	27	2.0	0.82	ng/L	2.04	67584-42-3	
PFHxSA*	Not detected	2.0	0.61	ng/L	2.04	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S63620.03

Sample Tag: 11-07C016-06272024

Collected Date/Time: 06/27/2024 11:08

Matrix: Liquid

COC Reference: 153316

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.17/6.46/11	ASTMD7979-19M	06/28/24 12:00	CED	
Initial wt. (g) / Final wt. (g) / Volume (ml) (Rep)	2.10/6.45/11	ASTMD7979-19M	07/01/24 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/02/24 12:06, 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*	2.0	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*	1.7	2.0	0.78	ng/L	1.95	335-67-1	J
PFHxS*	2.0	2.0	0.98	ng/L	1.95	355-46-4	
PFHxS-LN*	2.0	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*	0.86	2.0	0.78	ng/L	1.95	375-92-8	J
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*	20	2.0	0.78	ng/L	1.95	1763-23-1	
PFOS-LN*	4.9	2.0	0.78	ng/L	1.95	1763-23-1-LN	
PFOS-BR*	13	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	

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



Analytical Laboratory Report

Lab Sample ID: S63620.03 (continued)

Sample Tag: 11-07C016-06272024

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/02/24 12:06, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBSA*	Not detected	2.0	0.59	ng/L	1.95	30334-69-1	
PFECHS*	86	2.0	0.78	ng/L	1.95	67584-42-3	
PFHxSA*	Not detected	2.0	0.59	ng/L	1.95	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S63620.04

Sample Tag: SAN-2-06272024

Collected Date/Time: 06/27/2024 11:20

Matrix: Liquid

COC Reference: 153316

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.17/6.40/11	ASTMD7979-19M	06/28/24 12:00	CED	
Initial wt. (g) / Final wt. (g) / Volume (ml) (Rep)	2.11/6.48/11	ASTMD7979-19M	07/01/24 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/01/24 21:24, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	5.4	9.8	2.0	ng/L	1.95	375-22-4	J
PFPeA*	1.5	3.9	1.2	ng/L	1.95	2706-90-3	J
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*	2.7	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*	2.9	2.0	0.78	ng/L	1.95	335-67-1	
PFHxS*	3.0	2.0	0.98	ng/L	1.95	355-46-4	
PFHxS-LN*	2.0	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*	24	2.0	0.78	ng/L	1.95	1763-23-1	
PFOS-LN*	6.4	2.0	0.78	ng/L	1.95	1763-23-1-LN	
PFOS-BR*	17	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	

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



Analytical Laboratory Report

Lab Sample ID: S63620.04 (continued)

Sample Tag: SAN-2-06272024

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/01/24 21:24, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBSA*	Not detected	2.0	0.59	ng/L	1.95	30334-69-1	
PFECHS*	100	2.0	0.78	ng/L	1.95	67584-42-3	
PFHxSA*	Not detected	2.0	0.59	ng/L	1.95	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S63620.05

Sample Tag: SAN-09-06272024

Collected Date/Time: 06/27/2024 11:32

Matrix: Liquid

COC Reference: 153316

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	4.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.75/6.45/10	ASTMD7979-19M	06/28/24 12:00	CED	
Initial wt. (g) / Final wt. (g) / Volume (ml) (Rep#)	1.48/6.44/10	ASTMD7979-19M	07/01/24 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/01/24 21:44, Analyst: KCV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	7.1	9.9	2.0	ng/L	1.98	375-22-4	J
PFPeA*	Not detected	4.0	1.2	ng/L	1.98	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.20	ng/L	1.98	757124-72-4	
PFHxA*	Not detected	2.0	1.2	ng/L	1.98	307-24-4	
PFBS*	4.5	2.0	0.59	ng/L	1.98	375-73-5	
PFHpA*	Not detected	2.0	0.79	ng/L	1.98	375-85-9	
PFPeS*	Not detected	2.0	1.8	ng/L	1.98	2706-91-4	
6:2 FTSA*	Not detected	2.0	0.99	ng/L	1.98	27619-97-2	
PFOA*	1.3	2.0	0.79	ng/L	1.98	335-67-1	J
PFHxS*	1.1	2.0	0.99	ng/L	1.98	355-46-4	J
PFHxS-LN*	1.1	2.0	0.99	ng/L	1.98	355-46-4-LN	J
PFHxS-BR*	Not detected	2.0	0.99	ng/L	1.98	355-46-4-BR	
PFNA*	Not detected	2.0	0.99	ng/L	1.98	375-95-1	
8:2 FTSA*	Not detected	2.0	1.2	ng/L	1.98	39108-34-4	
PFHpS*	Not detected	2.0	0.79	ng/L	1.98	375-92-8	
PFDA*	Not detected	2.0	1.2	ng/L	1.98	335-76-2	
N-MeFOSAA*	Not detected	2.0	0.99	ng/L	1.98	2355-31-9	
EtFOSAA*	Not detected	4.0	0.99	ng/L	1.98	2991-50-6	
PFOS*	5.2	2.0	0.79	ng/L	1.98	1763-23-1	
PFOS-LN*	Not detected	2.0	0.79	ng/L	1.98	1763-23-1-LN	
PFOS-BR*	3.3	2.0	0.79	ng/L	1.98	1763-23-1-BR	
PFUnDA*	Not detected	2.0	0.79	ng/L	1.98	2058-94-8	
PFNS*	Not detected	2.0	0.99	ng/L	1.98	68259-12-1	
PFDODA*	Not detected	2.0	0.59	ng/L	1.98	307-55-1	
PFDS*	Not detected	2.0	0.99	ng/L	1.98	335-77-3	
PFTTrDA*	Not detected	2.0	0.79	ng/L	1.98	72629-94-8	
FOSA*	Not detected	2.0	0.79	ng/L	1.98	754-91-6	
PFTeDA*	Not detected	4.0	0.59	ng/L	1.98	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	0.99	ng/L	1.98	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	0.99	ng/L	1.98	756426-58-1	
ADONA*	Not detected	2.0	0.59	ng/L	1.98	919005-14-4	
HFPO-DA*	Not detected	9.9	2.0	ng/L	1.98	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	9.9	7.9	ng/L	1.98	812-70-4	
FPePA (5:3 FTCA)*	Not detected	9.9	4.0	ng/L	1.98	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	9.9	4.0	ng/L	1.98	356-02-5	

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



Analytical Laboratory Report

Lab Sample ID: S63620.05 (continued)

Sample Tag: SAN-09-06272024

34 PFAs, Method: ASTMD7979-19M, Run Date: 07/01/24 21:44, Analyst: KCV (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBSA*	Not detected	2.0	0.59	ng/L	1.98	30334-69-1	
PFECHS*	23	2.0	0.79	ng/L	1.98	67584-42-3	
PFHxSA*	Not detected	2.0	0.59	ng/L	1.98	41997-13-1	

Merit Laboratories Login Checklist

Lab Set ID:S63620

Client:RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Submitted:06/27/2024 14:05 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 4.0 |
| 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, TOX, DO or Alkalinity bottles contain |

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

Client Review By: _____ Date: _____



Quality Control Report

Report ID: QC-S63620-01
Generated on 07/23/2024

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): S63620.01-S63620.05
Project: RACER Coldwater Road
Submitted Date/Time: 06/27/2024 14:05
Sampled by: Kevin Schneider
P.O. #: 1940008845 TASK 37

QC Report Sections

- Cover Page (Page 1)
- Analysis Summary (Pages 2-6)
- Prep Batch Summary (Page 7)
- Internal Standards per Lab Sample (Pages 8-12)
- Internal Standards per QC Sample (Pages 13-17)
- Batch QC Results (Pages 18-22)

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: S63620.01

Sample Tag: SAN-21-06272024

Collected Date/Time: 06/27/2024 10:30

Matrix: Liquid

COC Reference: 153316

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	07/02/24 11:46	AK240701	PF240701W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S63620.02

Sample Tag: SAN-08-06272024

Collected Date/Time: 06/27/2024 10:52

Matrix: Liquid

COC Reference: 153316

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	07/01/24 20:44	AK240701RE	PF240701W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S63620.03

Sample Tag: 11-07C016-06272024

Collected Date/Time: 06/27/2024 11:08

Matrix: Liquid

COC Reference: 153316

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	07/02/24 12:06	AK240701	PF240701W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S63620.04

Sample Tag: SAN-2-06272024

Collected Date/Time: 06/27/2024 11:20

Matrix: Liquid

COC Reference: 153316

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	07/01/24 21:24	AK240701RE	PF240701W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Analysis Summary

Lab Sample ID: S63620.05

Sample Tag: SAN-09-06272024

Collected Date/Time: 06/27/2024 11:32

Matrix: Liquid

COC Reference: 153316

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
Organics - Volatiles						
34 PFAs	ASTMD7979-19M	07/01/24 21:44	AK240701RE	PF240701W1	Yes	BLK/LCS/LCSD/MS/DU

QC Report - Prep Batch Summary

Organics - Volatiles, Prep Batch ID: PF240701W1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S63620.01	34 PFAs	ASTMD7979-19M	07/02/24 11:46	AK240701
S63620.02	34 PFAs	ASTMD7979-19M	07/01/24 20:44	AK240701RE
S63620.03	34 PFAs	ASTMD7979-19M	07/02/24 12:06	AK240701
S63620.04	34 PFAs	ASTMD7979-19M	07/01/24 21:24	AK240701RE
S63620.05	34 PFAs	ASTMD7979-19M	07/01/24 21:44	AK240701RE

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S63620.01

Sample Tag: SAN-21-06272024

Collected Date/Time: 06/27/2024 10:30

Matrix: Liquid

COC Reference: 153316

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240701, Run Date: 07/02/2024 11:46, Matrix: WW, Dilution: 2.04

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		132.3	50.0	150.0
M2-6:2FTSA		111.6	50.0	150.0
M2-8:2FTSA	*	162.7	50.0	150.0
M2PFTeDA		108.5	12.0	218.0
M3PFBS		91.9	50.0	150.0
M3PFHxS		88.3	50.0	150.0
M4PFHpA		93.2	50.0	150.0
M5PFHxA		93.5	50.0	150.0
M5PFPeA		98.6	50.0	150.0
M6PFDA		101.7	50.0	150.0
M7PFUnDA		90.3	50.0	150.0
M8FOSA		105.0	50.0	150.0
M8PFOA		85.4	50.0	150.0
M8PFOS		93.1	50.0	150.0
M9-PFNA		89.6	50.0	150.0
MPFBA		100.0	50.0	150.0
MPFDoDA		99.1	50.0	150.0
d3N-MeFOSAA		109.4	50.0	150.0
d5EtFOSAA		141.3	50.0	150.0
MHFPO-DA		90.9	50.0	150.0
d-N-EtFOSA-M		91.3	50.0	150.0
d-N-MeFOSA-M		96.4	50.0	150.0
d7-N-MeFOSE-M		79.7	50.0	150.0
d9-N-EtFOSE-M		104.7	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S63620.02

Sample Tag: SAN-08-06272024

Collected Date/Time: 06/27/2024 10:52

Matrix: Liquid

COC Reference: 153316

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240701RE, Run Date: 07/01/2024 20:44, Matrix: WW, Dilution: 2.04

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		149.0	50.0	150.0
M2-6:2FTSA		145.5	50.0	150.0
M2-8:2FTSA		144.1	50.0	150.0
M2PFTeDA		114.3	12.0	218.0
M3PFBS		130.1	50.0	150.0
M3PFHxS		119.7	50.0	150.0
M4PFHpA		118.6	50.0	150.0
M5PFHxA		118.6	50.0	150.0
M5PFPeA		117.0	50.0	150.0
M6PFDA		112.7	50.0	150.0
M7PFUnDA		131.7	50.0	150.0
M8FOSA		122.3	50.0	150.0
M8PFOA		103.8	50.0	150.0
M8PFOS		126.9	50.0	150.0
M9-PFNA		133.0	50.0	150.0
MPFBA		136.3	50.0	150.0
MPFDoDA		137.3	50.0	150.0
d3N-MeFOSAA		122.3	50.0	150.0
d5EtFOSAA		140.0	50.0	150.0
MHFPO-DA		114.6	50.0	150.0
d-N-EtFOSA-M		118.6	50.0	150.0
d-N-MeFOSA-M		113.7	50.0	150.0
d7-N-MeFOSE-M		110.9	50.0	150.0
d9-N-EtFOSE-M		108.9	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S63620.03

Sample Tag: 11-07C016-06272024

Collected Date/Time: 06/27/2024 11:08

Matrix: Liquid

COC Reference: 153316

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240701, Run Date: 07/02/2024 12:06, Matrix: WW, Dilution: 1.95

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		111.9	50.0	150.0
M2-6:2FTSA		90.9	50.0	150.0
M2-8:2FTSA		82.3	50.0	150.0
M2PFTeDA		77.4	12.0	218.0
M3PFBS		93.6	50.0	150.0
M3PFHxS		84.3	50.0	150.0
M4PFHpA		93.5	50.0	150.0
M5PFHxA		82.8	50.0	150.0
M5PFPeA		92.1	50.0	150.0
M6PFDA		90.4	50.0	150.0
M7PFUnDA		88.8	50.0	150.0
M8FOSA		83.5	50.0	150.0
M8PFOA		86.9	50.0	150.0
M8PFOS		95.5	50.0	150.0
M9-PFNA		85.6	50.0	150.0
MPFBA		101.2	50.0	150.0
MPFDoDA		87.1	50.0	150.0
d3N-MeFOSAA		93.6	50.0	150.0
d5EtFOSAA		87.4	50.0	150.0
MHFPO-DA		77.8	50.0	150.0
d-N-EtFOSA-M		83.2	50.0	150.0
d-N-MeFOSA-M		80.2	50.0	150.0
d7-N-MeFOSE-M		93.2	50.0	150.0
d9-N-EtFOSE-M		90.1	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: **S63620.04**

Sample Tag: SAN-2-06272024

Collected Date/Time: 06/27/2024 11:20

Matrix: Liquid

COC Reference: 153316

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240701RE, Run Date: 07/01/2024 21:24, Matrix: WW, Dilution: 1.95

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		109.4	50.0	150.0
M2-6:2FTSA		121.3	50.0	150.0
M2-8:2FTSA		112.6	50.0	150.0
M2PFTeDA		99.0	12.0	218.0
M3PFBS		113.2	50.0	150.0
M3PFHxS		114.1	50.0	150.0
M4PFHpA		102.6	50.0	150.0
M5PFHxA		108.8	50.0	150.0
M5PFPeA		108.5	50.0	150.0
M6PFDA		94.5	50.0	150.0
M7PFUnDA		111.1	50.0	150.0
M8FOSA		118.2	50.0	150.0
M8PFOA		101.7	50.0	150.0
M8PFOS		104.7	50.0	150.0
M9-PFNA		139.1	50.0	150.0
MPFBA		127.2	50.0	150.0
MPFDoDA		127.3	50.0	150.0
d3N-MeFOSAA		101.8	50.0	150.0
d5EtFOSAA		116.1	50.0	150.0
MHFPO-DA		106.3	50.0	150.0
d-N-EtFOSA-M		114.8	50.0	150.0
d-N-MeFOSA-M		113.0	50.0	150.0
d7-N-MeFOSE-M		98.8	50.0	150.0
d9-N-EtFOSE-M		97.2	50.0	150.0

QC Report - Internal Standards per Lab Sample

Lab Sample ID: S63620.05

Sample Tag: SAN-09-06272024

Collected Date/Time: 06/27/2024 11:32

Matrix: Liquid

COC Reference: 153316

Organics - Volatiles, Analysis: 34 PFAs

Run in Batch: AK240701RE, Run Date: 07/01/2024 21:44, Matrix: WW, Dilution: 1.98

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		127.7	50.0	150.0
M2-6:2FTSA		132.8	50.0	150.0
M2-8:2FTSA		111.3	50.0	150.0
M2PFTeDA		80.7	12.0	218.0
M3PFBS		119.6	50.0	150.0
M3PFHxS		117.9	50.0	150.0
M4PFHpA		111.4	50.0	150.0
M5PFHxA		109.4	50.0	150.0
M5PFPeA		111.8	50.0	150.0
M6PFDA		95.9	50.0	150.0
M7PFUnDA		107.6	50.0	150.0
M8FOSA		112.0	50.0	150.0
M8PFOA		101.1	50.0	150.0
M8PFOS		102.2	50.0	150.0
M9-PFNA		120.5	50.0	150.0
MPFBA		122.3	50.0	150.0
MPFDoDA		110.9	50.0	150.0
d3N-MeFOSAA		110.9	50.0	150.0
d5EtFOSAA		124.6	50.0	150.0
MHFPO-DA		100.1	50.0	150.0
d-N-EtFOSA-M		108.1	50.0	150.0
d-N-MeFOSA-M		103.3	50.0	150.0
d7-N-MeFOSE-M		90.2	50.0	150.0
d9-N-EtFOSE-M		94.8	50.0	150.0

QC Report - Internal Standards per QC Sample

Organics - Volatiles, Prep Batch ID: PF240701W1

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

Blank (BLK)

Lab Sample ID: AK240701RE.BLK240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 18:03, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		105.3	50.0	150.0
M2-6:2FTSA		110.2	50.0	150.0
M2-8:2FTSA		106.5	50.0	150.0
M2PFTeDA		86.7	12.0	218.0
M3PFBS		115.4	50.0	150.0
M3PFHxS		118.7	50.0	150.0
M4PFHpA		119.1	50.0	150.0
M5PFHxA		115.4	50.0	150.0
M5PFPeA		112.3	50.0	150.0
M6PFDA		97.6	50.0	150.0
M7PFUnDA		104.5	50.0	150.0
M8FOSA		118.3	50.0	150.0
M8PFOA		109.2	50.0	150.0
M8PFOS		106.2	50.0	150.0
M9-PFNA		128.9	50.0	150.0
MPFBA		119.5	50.0	150.0
MPFDoDA		122.9	50.0	150.0
d3N-MeFOSAA		110.1	50.0	150.0
d5EtFOSAA		112.8	50.0	150.0
MHFPO-DA		112.0	50.0	150.0
d-N-EtFOSA-M		117.4	50.0	150.0
d-N-MeFOSA-M		105.8	50.0	150.0
d7-N-MeFOSE-M		106.7	50.0	150.0
d9-N-EtFOSE-M		98.2	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample (LCS)

Lab Sample ID: AK240701RE.LCS240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 17:23, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		105.3	50.0	150.0
M2-6:2FTSA		118.0	50.0	150.0
M2-8:2FTSA		93.5	50.0	150.0
M2PFTeDA		99.8	12.0	218.0
M3PFBS		118.4	50.0	150.0
M3PFHxS		115.7	50.0	150.0
M4PFHpA		113.9	50.0	150.0
M5PFHxA		124.9	50.0	150.0
M5PFPeA		107.7	50.0	150.0
M6PFDA		94.2	50.0	150.0
M7PFUnDA		98.7	50.0	150.0
M8FOSA		120.1	50.0	150.0
M8PFOA		106.5	50.0	150.0
M8PFOS		109.7	50.0	150.0
M9-PFNA		122.5	50.0	150.0
MPFBA		110.6	50.0	150.0
MPFDoDA		109.6	50.0	150.0
d3N-MeFOSAA		98.8	50.0	150.0
d5EtFOSAA		94.5	50.0	150.0
MHFPO-DA		109.2	50.0	150.0
d-N-EtFOSA-M		107.2	50.0	150.0
d-N-MeFOSA-M		102.7	50.0	150.0
d7-N-MeFOSE-M		99.8	50.0	150.0
d9-N-EtFOSE-M		100.5	50.0	150.0

QC Report - Internal Standards per QC Sample

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK240701RE.LCSD240701, Parent Sample ID: AK240701RE.LCS240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 17:43, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		106.3	50.0	150.0
M2-6:2FTSA		113.7	50.0	150.0
M2-8:2FTSA		108.8	50.0	150.0
M2PFTeDA		89.4	12.0	218.0
M3PFBS		116.8	50.0	150.0
M3PFHxS		114.6	50.0	150.0
M4PFHpA		111.7	50.0	150.0
M5PFHxA		107.9	50.0	150.0
M5PFPeA		104.7	50.0	150.0
M6PFDA		88.6	50.0	150.0
M7PFUnDA		100.4	50.0	150.0
M8FOSA		120.2	50.0	150.0
M8PFOA		111.5	50.0	150.0
M8PFOS		105.0	50.0	150.0
M9-PFNA		122.8	50.0	150.0
MPFBA		116.3	50.0	150.0
MPFDoDA		119.3	50.0	150.0
d3N-MeFOSAA		103.9	50.0	150.0
d5EtFOSAA		113.3	50.0	150.0
MHFPO-DA		109.7	50.0	150.0
d-N-EtFOSA-M		115.3	50.0	150.0
d-N-MeFOSA-M		115.9	50.0	150.0
d7-N-MeFOSE-M		110.1	50.0	150.0
d9-N-EtFOSE-M		100.3	50.0	150.0

QC Report - Internal Standards per QC Sample

Matrix Spike (MS)

Lab Sample ID: AK240701.6365401M, Parent Sample ID: S63654.01

Run in Batch: AK240701, Run Date: 07/01/2024 22:24, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1.91

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA	*	534.0	50.0	150.0
M2-6:2FTSA	*	561.6	50.0	150.0
M2-8:2FTSA	*	534.5	50.0	150.0
M2PFTeDA		119.8	12.0	218.0
M3PFBS		115.6	50.0	150.0
M3PFHxS		112.7	50.0	150.0
M4PFHpA		127.0	50.0	150.0
M5PFHxA		113.6	50.0	150.0
M5PFPeA		107.3	50.0	150.0
M6PFDA		114.8	50.0	150.0
M7PFUnDA		120.9	50.0	150.0
M8FOSA	*	161.2	50.0	150.0
M8PFOA		126.2	50.0	150.0
M8PFOS		118.2	50.0	150.0
M9-PFNA		110.5	50.0	150.0
MPFBA		102.3	50.0	150.0
MPFDoDA		142.0	50.0	150.0
d3N-MeFOSAA		102.9	50.0	150.0
d5EtFOSAA	*	293.4	50.0	150.0
MHFPO-DA		93.5	50.0	150.0
d-N-EtFOSA-M		120.0	50.0	150.0
d-N-MeFOSA-M		124.9	50.0	150.0
d7-N-MeFOSE-M		150.0	50.0	150.0
d9-N-EtFOSE-M		139.2	50.0	150.0

QC Report - Internal Standards per QC Sample

Duplicate (DUP)

Lab Sample ID: AK240701.6364801D, Parent Sample ID: S63648.01

Run in Batch: AK240701, Run Date: 07/02/2024 01:04, Prep Date: 07/01/2024, Matrix: WW, Dilution: 2

Internal Standard	Flags	%Rec	LCL	UCL
M2-4:2FTSA		134.4	50.0	150.0
M2-6:2FTSA	*	168.3	50.0	150.0
M2-8:2FTSA	*	183.3	50.0	150.0
M2PFTeDA		127.7	12.0	218.0
M3PFBS		137.0	50.0	150.0
M3PFHxS		126.2	50.0	150.0
M4PFHpA		111.1	50.0	150.0
M5PFHxA		126.4	50.0	150.0
M5PFPeA		119.7	50.0	150.0
M6PFDA		113.2	50.0	150.0
M7PFUnDA		121.9	50.0	150.0
M8FOSA		143.2	50.0	150.0
M8PFOA		110.4	50.0	150.0
M8PFOS		115.4	50.0	150.0
M9-PFNA		132.8	50.0	150.0
MPFBA		135.2	50.0	150.0
MPFDoDA		128.8	50.0	150.0
d3N-MeFOSAA		126.8	50.0	150.0
d5EtFOSAA	*	151.1	50.0	150.0
MHFPO-DA		105.8	50.0	150.0
d-N-EtFOSA-M		120.4	50.0	150.0
d-N-MeFOSA-M		135.3	50.0	150.0
d7-N-MeFOSE-M		125.7	50.0	150.0
d9-N-EtFOSE-M		109.6	50.0	150.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240701W1

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

Blank (BLK)

Lab Sample ID: AK240701RE.BLK240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 18:03, Prep Date: 07/01/2024, 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
PFPeA		ND	4	ng/l
PFPPrS		ND	2	ng/l
PFMBA		ND	2	ng/l
4:2 FTSA		ND	2	ng/l
NFDHA		ND	2	ng/l
PFHxA		ND	2	ng/l
PFBS		ND	2	ng/l
HFPO-DA		ND	10	ng/l
FPePA (5:3 FTCA)		ND	10	ng/l
PFEESA		ND	2	ng/l
PFHpA		ND	2	ng/l
ADONA		ND	2	ng/l
PFPeS		ND	2	ng/l
6:2 FTSA		ND	2	ng/l
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
EtFOSAA		ND	4	ng/l
PFOS-BR		ND	2	ng/l
PFOS		ND	2	ng/l
PFHxSA		ND	2	ng/l
PFOS-LN		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: PF240701W1 (continued)

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

Blank (BLK) (continued)

Lab Sample ID: AK240701RE.BLK240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 18:03, Prep Date: 07/01/2024, 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: AK240701RE.LCS240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 17:23, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBA		108.8	70.0	130.0
PFMPA		72.2	70.0	130.0
FPrPA (3:3 FTCA)		87.0	70.0	130.0
PFPeA		109.2	70.0	130.0
PFPPrS		97.6	70.0	130.0
PFMBA		76.8	70.0	130.0
4:2 FTSA		100.4	70.0	130.0
NFDHA		85.8	70.0	130.0
PFHxA		84.2	70.0	130.0
PFBS		98.4	70.0	130.0
HFPO-DA		83.8	70.0	130.0
FPePA (5:3 FTCA)		77.0	70.0	130.0
PFEESA		83.0	70.0	130.0
PFHpA		104.4	70.0	130.0
ADONA		100.0	70.0	130.0
PFPeS		97.4	70.0	130.0
6:2 FTSA		94.8	70.0	130.0
PFBSA		99.4	70.0	130.0
PFOA		91.4	70.0	130.0
PFHxS		94.4	70.0	130.0
FHpPA (7:3 FTCA)		78.8	70.0	130.0
PFNA		98.6	70.0	130.0
8:2 FTSA		84.2	70.0	130.0
PFECHS		98.2	70.0	130.0
PFHpS		104.8	70.0	130.0
N-MeFOSAA		122.2	70.0	130.0
PFDA		106.4	70.0	130.0
EtFOSAA		117.4	70.0	130.0
PFOS		114.4	70.0	130.0
PFHxSA		87.4	70.0	130.0
PFUnDA		120.8	70.0	130.0
9CL-PF3ONS		108.8	70.0	130.0
PFNS		105.8	70.0	130.0
PFDoDA		117.8	70.0	130.0
PFDS		114.8	70.0	130.0
PFTTrDA		119.8	70.0	130.0
FOSA		100.0	70.0	130.0
11CL-PF3OUdS		97.8	70.0	130.0
PFTeDA		98.4	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240701W1 (continued)

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

Laboratory Control Sample (LCS) (continued)

Lab Sample ID: AK240701RE.LCS240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 17:23, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFDOS		110.6	70.0	130.0
NMeFOSE		107.6	70.0	130.0
NMeFOSAM		78.0	70.0	130.0
NEtFOSE		98.0	70.0	130.0
NEtFOSAM		90.4	70.0	130.0

Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: AK240701RE.LCSD240701, Parent Sample ID: AK240701RE.LCS240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 17:43, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
PFBA		109.8	70.0	130.0	0.9	30.0
PFMPA		75.4	70.0	130.0	4.3	30.0
FPrPA (3:3 FTCA)		102.2	70.0	130.0	16.1	30.0
PFPeA		109.6	70.0	130.0	0.4	30.0
PFPPrS		99.6	70.0	130.0	2.0	30.0
PFMBA		86.2	70.0	130.0	11.5	30.0
4:2 FTSA		101.6	70.0	130.0	1.2	30.0
NFDHA		105.2	70.0	130.0	20.3	30.0
PFHxA		113.2	70.0	130.0	29.4	30.0
PFBS		101.6	70.0	130.0	3.2	30.0
HFPO-DA		74.0	70.0	130.0	12.4	30.0
FPePA (5:3 FTCA)		99.6	70.0	130.0	25.6	30.0
PFEESA		89.4	70.0	130.0	7.4	30.0
PFHpA		115.6	70.0	130.0	10.2	30.0
ADONA		95.0	70.0	130.0	5.1	30.0
PFPeS		103.2	70.0	130.0	5.8	30.0
6:2 FTSA		110.8	70.0	130.0	15.6	30.0
PFBSA		92.8	70.0	130.0	6.9	30.0
PFOA		88.2	70.0	130.0	3.6	30.0
PFHxS		104.6	70.0	130.0	10.3	30.0
FHpPA (7:3 FTCA)		88.0	70.0	130.0	11.0	30.0
PFNA		105.2	70.0	130.0	6.5	30.0
8:2 FTSA		89.8	70.0	130.0	6.4	30.0
PFECHS		96.4	70.0	130.0	1.8	30.0
PFHpS		113.8	70.0	130.0	8.2	30.0
N-MeFOSAA		117.0	70.0	130.0	4.3	30.0
PFDA		119.6	70.0	130.0	11.7	30.0
EtFOSAA		111.4	70.0	130.0	5.2	30.0
PFOS		114.2	70.0	130.0	0.2	30.0
PFHxSA		84.4	70.0	130.0	3.5	30.0
PFUnDA		128.0	70.0	130.0	5.8	30.0
9CL-PF3ONS		107.0	70.0	130.0	1.7	30.0
PFNS		110.4	70.0	130.0	4.3	30.0
PFDODA		110.8	70.0	130.0	6.1	30.0
PFDS		125.0	70.0	130.0	8.5	30.0
PFTTrDA		116.6	70.0	130.0	2.7	30.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240701W1 (continued)

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

Laboratory Control Sample Duplicate (LCSD) (continued)

Lab Sample ID: AK240701RE.LCSD240701, Parent Sample ID: AK240701RE.LCS240701

Run in Batch: AK240701RE, Run Date: 07/01/2024 17:43, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
FOSA		106.8	70.0	130.0	6.6	30.0
11CL-PF3OUdS		108.0	70.0	130.0	9.9	30.0
PFTeDA		102.4	70.0	130.0	4.0	30.0
PFDOS		114.2	70.0	130.0	3.2	30.0
NMeFOSE		102.6	70.0	130.0	4.8	30.0
NMeFOSAM		71.8	70.0	130.0	8.3	30.0
NEtFOSE		103.4	70.0	130.0	5.4	30.0
NEtFOSAM		85.4	70.0	130.0	5.7	30.0

Matrix Spike (MS)

Lab Sample ID: AK240701.6365401M, Parent Sample ID: S63654.01

Run in Batch: AK240701, Run Date: 07/01/2024 22:24, Prep Date: 07/01/2024, Matrix: WW, Dilution: 1.91

Analyte	Flags	% Rec	LCL	UCL
PFBA		98.4	70.0	130.0
PFPeA		125.7	70.0	130.0
4:2 FTSA		91.1	70.0	130.0
PFHxA		115.2	70.0	130.0
PFBS		115.2	70.0	130.0
PFHpA		100.5	70.0	130.0
PFPeS		104.7	70.0	130.0
6:2 FTSA		91.1	70.0	130.0
PFOA		81.3	70.0	130.0
PFHxS		115.2	70.0	130.0
PFNA		115.2	70.0	130.0
8:2 FTSA		81.7	70.0	130.0
PFHpS		115.2	70.0	130.0
PFDA		98.4	70.0	130.0
N-MeFOSAA	*	178.0	70.0	130.0
EtFOSAA		104.7	70.0	130.0
PFOS		104.7	70.0	130.0
PFUnDA		125.7	70.0	130.0
PFNS		100.5	70.0	130.0
PFDoDA		115.2	70.0	130.0
PFDS		115.2	70.0	130.0
PFTrDA		125.7	70.0	130.0
FOSA		104.7	70.0	130.0
PFTeDA		93.2	70.0	130.0
11CL-PF3OUdS		97.4	70.0	130.0
9CL-PF3ONS		104.7	70.0	130.0
ADONA		89.0	70.0	130.0
HFPO-DA		83.8	70.0	130.0

QC Report - Batch QC Results

Organics - Volatiles, Prep Batch ID: PF240701W1 (continued)

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

Duplicate (DUP)

Lab Sample ID: AK240701.6364801D, Parent Sample ID: S63648.01

Run in Batch: AK240701, Run Date: 07/02/2024 01:04, Prep Date: 07/01/2024, Matrix: WW, Dilution: 2

Analyte	Flags	RPD	RPD CL
PFBA		NC	30.0
PFPeA		10.5	30.0
4:2 FTSA		NC	30.0
PFHxA		16.9	30.0
PFBS		19.6	30.0
PFHpA		18.2	30.0
PFPeS		NC	30.0
6:2 FTSA		6.1	30.0
PFOA		5.8	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		4.9	30.0
PFOS-LN		8.7	30.0
PFOS-BR		11.8	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



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 153316

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. 1940008845 Tusk 37
 E-MAIL ADDRESS Kevin.Schneider@Ramboll.com QUOTE NO. _____
Clifford.Yantz@Ramboll.com

CONTACT NAME X 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
 TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER _____
 DELIVERABLES REQUIRED STD LEVEL II LEVEL III LEVEL IV EDD OTHER _____

Certifications
 OHIO VAP Drinking Water
 DoD NPDES
 Project Locations
 Detroit New York
 Other _____
 Special Instructions

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	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PFAS (2025)																		
	DATE	TIME																													
63620.01	6/27/24	1030	SAN-21-06272024	L	3	X							X																		
.02	↓	1058	SAN-08-06272024										X																		
.03	↓	1108	11-07C016-06272024										X																		
.04	↓	1120	SAN-2-06272024										X																		
.05	↓	1132	SAN-09-06272024										X																		
/																															

Low level Reporting with estimated values
 34 PFAS list

RELINQUISHED BY: [Signature] Sampler DATE 6/27/24 TIME 1041
 RECEIVED BY: [Signature] DATE 6/27/24 TIME 1214
 RELINQUISHED BY: [Signature] DATE 6/27/24 TIME 1405
 RECEIVED BY: [Signature] DATE 6/27/24 TIME 1405

RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____
 SEAL NO. SEAL INTACT YES NO INITIALS _____ NOTES: TEMP. ON ARRIVAL 4.0
 SEAL NO. SEAL INTACT YES NO INITIALS _____