

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. Kevin Forbes

Administrative Superintendent
Beecher Metropolitan District
G-1057 Louis Avenue
Flint, MI, 48505

Mr. Robert Ellis

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

July 29, 2025

RE: **West of Site Sanitary Sewer Update**

RACER Trust – Coldwater Road Facility
FILE: 15388/1940113233/Corres

Ramboll
2090 Commonwealth Blvd.
Ann Arbor, MI 48105
USA

T 734-761-4000
F 734-761-2050
<https://ramboll.com>

Dear **Ms. Sanabria, Ms. Hebert, Mr. Forbes, & Mr. Ellis:**

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) sample results collected from the Beecher Metropolitan District sanitary sewers west of the RACER Trust Coldwater Road Facility (Site) located in Flint, Michigan.

The samples were collected on June 26, 2025, at sample locations SAN-06, SAN-12, and SAN-14. See **Figure 1** for sample locations.

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 for the most recent sampling event are included in **Appendix A**.

- SAN-06 had a detection of 35 nanograms per liter (ng/l) for perfluorooctane sulfonic acid (PFOS) on June 26, 2025, which is on the upper middle end of the range of previously detected concentrations and is a slight increase compared to the previous result of 28 ng/l (12/19/2024) for PFOS.
- SAN-12 had a detection of 57 ng/l for PFOS on June 26, 2025, which is on the upper middle of the range of previously detected concentrations and is an increase compared to the previous result of 18 ng/l (12/19/2024) for PFOS.
- SAN-14 had a detection of 30 ng/l for PFOS on June 26, 2025, which is near the middle of the range of previously detected concentrations and is an increase compared to the previous result of 11 ng/l (12/19/2024) for PFOS.

The observed flow rates were similar to the reduced flow rates noted during previous post-lining sampling events (lining completed in February 2022). Although PFOS concentrations vary at a given sampling location, they remain within a range that is lower than the concentrations observed before repairs were implemented.

Based on these results and to allow for continued evaluation of concentration variability and trends, we propose to collect another round of samples in December 2025 from these same sample locations SAN-06, SAN-12, and SAN-14. 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

M 313.333.0211

Clifford.yantz@ramboll.com

ENCLOSURES:

Table 1 – Sanitary Sewer Analytical Results – West of Site

Figure 1 – Sanitary Sewer/Manhole Sample Locations

Attachment A – Laboratory Analytical Reports

cc: Mr. Daniel K Eashoo - Genesee Township Supervisor (via email)
Ms. Tiffany Minder – City of Flint (via email)
Ms. Anne Tavalire – 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)
EGLE MMD-HWS Electronic Mailbox

TABLES



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

Coldwater Rd - Sanitary Sewer Samples West of Site

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-3 (Sanitary Sewer)	SAN-3 (Sanitary Sewer)	SAN-3 (Sanitary Sewer)	SAN-3 (Sanitary Sewer)	SAN-4 (Sanitary Sewer)	SAN-5 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)
		11/5/2019	6/25/2020	12/18/2020	3/11/2021	11/5/2019	11/5/2019	3/17/2020	6/25/2020
Perfluorobutanoic Acid (PFBA)	--	<19	25 U	<9.8	<10	<20	<20	<21	13 U
Perfluoropentanoic Acid (PFPeA)	--	<9.7	5.0	<10	1.2 J	1.8 J	<10	<10	1.3 J
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0 I
Perfluorohexanoic Acid (PFHxA)	--	<9.7	5.4	1.6 J	1.8 J	<10	<10	<10	<2.0
Perfluorobutane Sulfonic Acid (PFBS)	670,000	<9.7	9.3	8.6	8.3	<10	<10	<10	3.1
Perfluoroheptanoic Acid (PFHpA)	--	<9.7	3.1	<2.0	<2.0	<10	<10	<10	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	--	<9.7	11	10	9.4	<10	<10	<10	<2.0
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0 I
Perfluorooctanoic Acid (PFOA)	170	<9.7	9.8	3.3	3.5	<10	<10	<10	<2.0
Perfluorohexane Sulfonic Acid (PFHxS)	210	40	63	52	42	<10	20	<10	11
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	33	55	46	35	<10	16	<10	9.0
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<9.7	7.9	6.5	6.5	<10	<10	<10	<2.0
Perfluorononanoic Acid (PFNA)	30	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<9.7	9.9	9.4	4.4	<10	<10	<10	<2.0
Perfluorodecanoic Acid (PFDA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<9.7	<4.1	<3.9	<4.1	<10	<10	<10	<3.9 I
Perfluorooctane Sulfonic Acid (PFOS)	12	110	230	210	96	61	170	14	21
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	21	55	38	17	17	69	<10	5.7
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	85	170	170	79	33	100	<10	16
Perfluoroundecanoic Acid (PFUnDA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
Perfluorononane Sulfonic Acid (PFNS)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
Perfluorododecanoic Acid (PFDoDA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0 I
Perfluorodecane Sulfonic Acid (PFDS)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
Perfluorotridecanoic Acid (PFTrDA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0 I
Perfluorooctane Sulfonamide (FOSA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
Perfluorotetradecanoic Acid (PFTeDA)	--	<9.7	<4.1	<3.9	<4.1	<10	<10	<10	<3.9
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF30NS)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<9.7	<2.0	<2.0	<2.0	<10	<10	<10	<2.0
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--	--	--	--	--
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--	--	--	--	--
3-Perfluoropropyl propanoic acid (FPpPA (3:3 FTCA))	--	--	--	--	--	--	--	--	--
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--	--	--	--	--
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--	--	--	--	--
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--	--	--	--	--
Total Per-and Polyfluoroalkyl Substances	--	150.0	371.5	296.1	167.2	61.0	190.0	14.0	49.4

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) The detection of PFBA in Field Blank-062520 was caused from the centrifuge tubes leaching out PFBA during the extraction process. The 5X Rule was applied to PFBA detections. If the sample value(s) is less than 5 times the blank concentration (5X Rule), then positive results are qualified "U,"undetected.
- 9) 1 - Biased high -- matrix interference.
- 10) B - Compound also found in associated method blank.
- 11) I - Matrix interference with internal standard.
- 12) J - Estimated value less than reporting limit, but greater than MDL.
- 13) X - Elevated reporting limit due to matrix interference.
- 14) Light gray header is most recent sampling event result.
- 15) 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 - West of Site

Coldwater Rd - Sanitary Sewer Samples West of Site

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)
		12/18/2020	3/11/2021	3/31/2022	9/7/2022	12/13/2022	4/6/2023	6/27/2023	12/19/2023
Perfluorobutanoic Acid (PFBA)	--	<10	<11	<10	<10	<9.6	2.8 J	<11 x	<9.9
Perfluoropentanoic Acid (PFPeA)	--	<4.0	1.9 J	3.2 J	<4.0	<3.8	3.1 J	1.2 J	1.5 J
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<2.0 I	<2.1	<2.1	<2.0 I	<1.9	<2.0	<1.9 I	<2.0
Perfluorohexanoic Acid (PFHxA)	--	<2.0	1.9 J	3.1	3.4	2.1	3.2	2.2	1.6 J
Perfluorobutane Sulfonic Acid (PFBS)	670,000	3.7	4.5	11	<2.0	<1.9	5.8	<1.9	5.2
Perfluoroheptanoic Acid (PFHpA)	--	<2.0	<2.1	<2.1	<2.0	<1.9	1.9 J	<1.9	1.3 J
Perfluoropentane Sulfonic Acid (PFPeS)	--	<2.0	2.3	6.7	<2.0	<1.9	3.3	<1.9	2.8
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<2.0 I	<2.1	<2.1	<2.0 I	<1.9	<2.0	<1.9 I	<2.0
Perfluorooctanoic Acid (PFOA)	170	<2.0	<2.1	2.7	<2.0	<1.9	3.0	<1.9	1.8 J
Perfluorohexane Sulfonic Acid (PFHxS)	210	6.3	10	18	5.6	<1.9	10	1.7 J	8.4
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	5.0	8.1	14	2.5	<1.9	8.2	1.7 J	6.8
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<2.0	<2.1	3.7	2.7	<1.9	2.6	<1.9	1.2 J
Perfluorononanoic Acid (PFNA)	30	<2.0	<2.1	<2.1	<2.0	<1.9	1.1 J	<1.9	<2.0
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.0 I	<2.1	<2.1	<2.0 I	<1.9	<2.0	<1.9	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<2.0	<2.1	<2.1	<2.0	<1.9	1.4 J	<1.9	0.97 J
Perfluorodecanoic Acid (PFDA)	--	<2.0	<2.1	<2.1	<2.0	<1.9	0.76 J	<1.9	<2.0
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.0	<2.1	<2.1	<2.0	<1.9	2.7	<1.9	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<4.0 I	<4.2	<4.1	<4.0	<3.8	<4.0	<3.9 I	<3.9
Perfluorooctane Sulfonic Acid (PFOS)	12	26	34	38	13	4.5	32	11	21
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	5.0	5.7	5.7	3.6	2.0	7.0	3.1	4.3
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	19	27	31	9.1	2.4	25	8.0	17
Perfluoroundecanoic Acid (PFUnDA)	--	<2.0	<2.1	<2.1	<2.0	<1.9	<2.0	<1.9	<2.0
Perfluorononane Sulfonic Acid (PFNS)	--	<2.0	<2.1	<2.1	<2.0	<1.9	<2.0	<1.9	<2.0
Perfluorododecanoic Acid (PFDoDA)	--	<2.0	<2.1	<2.1	<2.0	<1.9	1.2 J	<1.9	<2.0
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.0	<2.1	<2.1	<2.0	<1.9	<2.0	<1.9	<2.0
Perfluorotridecanoic Acid (PFTrDA)	--	<2.0	<2.1	<2.1	<2.0	<1.9	<2.0	<1.9	<2.0
Perfluorooctane Sulfonamide (FOSA)	--	<2.0 I	<2.1	<2.1	<2.0	<1.9	<2.0	<1.9	<2.0
Perfluorotetradecanoic Acid (PFTeDA)	--	<4.0	<4.2	<4.1	<4.0	<3.8	<4.0	<3.9	<3.9
11-chloroeicosafiuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<2.0	<2.1	<2.1	<2.0	<1.9	<2.0	<1.9	<2.0
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)	--	<2.0	<2.1	<2.1	<2.0	<1.9	<2.0	<1.9	<2.0
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.0	<2.1	<2.1	<2.0	<1.9	<2.0	<1.9	<2.0
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<2.0	<2.1	<4.1	<10	<9.6	<2.0	<1.9	<9.9
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--	--	--	<3.9	<9.9
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--	--	--	5.0	<9.9
3-Perfluoropropyl propanoic acid (FPpPA (3:3 FTCA))	--	--	--	--	--	--	--	<3.9	<9.9
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--	--	--	<1.9	<2.0
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--	--	--	64	120
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--	--	--	<1.9	<2.0
Total Per-and Polyfluoroalkyl Substances	--	36.0	54.6	82.7	22.0	6.6	72.3	85.1	164.6

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) The detection of PFBA in Field Blank-062520 was caused from the centrifuge tubes leaching out PFBA during the extraction process. The 5X Rule was applied to PFBA detections. If the sample value(s) is less than 5 times the blank concentration (5X Rule), then positive results are qualified "U,"undetected.
- 9) 1 - Biased high -- matrix interference
- 10) B - Compound also found in associated method blank.
- 11) I - Matrix interference with internal standard.
- 12) J - Estimated value less than reporting limit, but greater than MDL.
- 13) X - Elevated reporting limit due to matrix interference.
- 14) Light gray header is most recent sampling event result.
- 15) 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 - West of Site

Coldwater Rd - Sanitary Sewer Samples West of Site

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-06 (Sanitary Sewer)	SAN-07 (Sanitary Sewer)	SAN-10 (Sanitary Sewer)	SAN-10 (Sanitary Sewer)	SAN-10 (Sanitary Sewer)	SAN-DUP-121820 (SAN-10) Sanitary Sewer
		6/27/2024	12/19/2024	6/26/2025	3/18/2020	3/18/2020	6/25/2020	12/18/2020	12/18/2020
Perfluorobutanoic Acid (PFBA)	--	8.0 J	<10	5.3 J	<21	<20	10 U	<9.9	<10
Perfluoropentanoic Acid (PFPeA)	--	5.8	<4.1	4.4	<11	<10	<3.9	<4.0	<4.1
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<2.0	<2.0	<2.0	<11	<10	<2.0 I	<2.0 I	<2.0 I
Perfluorohexanoic Acid (PFHxA)	--	5.9	2.3	3.3	<11	<10	<2.0	<2.0	<2.0
Perfluorobutane Sulfonic Acid (PFBS)	670,000	6.7	2.7	7.2	<11	<10	5.2	5.0	4.0
Perfluoroheptanoic Acid (PFHpA)	--	1.3 J	1.6 J	1.2 J	<11	<10	<2.0	<2.0	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	--	2.5	<2.0	2.7	<11	<10	<2.0	2.2	2.1
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<2.0	3.2 I	<2.0	<11	<10	<2.0 I	<2.0	<2.0
Perfluorooctanoic Acid (PFOA)	170	5.3	4.7	3.7	<11	<10	<2.0	<2.0	<2.0
Perfluorohexane Sulfonic Acid (PFHxS)	210	13	8	12	<11	<10	9.5	9.4	9.1
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	9.0	5.2	7.6	<11	<10	7.7	7.7	7.2
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	2.8	<2.0	3.7	<11	<10	<2.0	<2.0	<2.0
Perfluorononanoic Acid (PFNA)	30	<2.0	2.1	<2.0	<11	<10	<2.0	<2.0	<2.0
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.0	86.0 I	<2.0	<11	<10	<2.0 I	<2.0 I	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	--	2.6	1.6 J	<2.0	<11	<10	<2.0	<2.0	<2.0
Perfluorodecanoic Acid (PFDA)	--	<2.0	3.3	0.72 J	<11	<10	<2.0	<2.0	<2.0
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.0	<2.0	<2.0 I	<11	<10	<2.0 I	<2.0	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<3.9	<4.1	<4.0 I	<11	<10	<3.9 I	<4.0 I	<4.0 I
Perfluorooctane Sulfonic Acid (PFOS)	12	39	28	35	<11	29	26	31	33
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	10	7.0	9.2	<11	<10	6.2	4.7	4.9
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	28	20	17	<11	24	19	25	26
Perfluoroundecanoic Acid (PFUnDA)	--	<2.0	<2.0	<2.0	<11	<10	<2.0	<2.0	<2.0
Perfluorononane Sulfonic Acid (PFNS)	--	<2.0	<2.0	<2.0	<11	<10	<2.0	<2.0	<2.0
Perfluorododecanoic Acid (PFDoDA)	--	<2.0	1.1 J	<2.0	<11	<10	<2.0 I	<2.0	<2.0
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.0	<2.0	<2.0	<11	<10	<2.0	<2.0	<2.0
Perfluorotridecanoic Acid (PFTrDA)	--	<2.0	<2.0	<2.0	<11	<10	<2.0 I	<2.0	<2.0
Perfluorooctane Sulfonamide (FOSA)	--	<2.0	<2.0	<2.0	<11	<10	<2.0 I	<2.0 I	<2.0
Perfluorotetradecanoic Acid (PFTeDA)	--	<3.9	<4.1	<4.0	<11	<10	<3.9	<4.0	<4.1
11-chlorooicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<2.0	<2.0	<2.0	<11	<10	<2.0	<2.0	<2.0
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF30NS)	--	<2.0	<2.0	<2.0	<11	<10	<2.0	<2.0	<2.0
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.0	<2.0	<2.0	<11	<10	<2.0	<2.0	<2.0
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<9.9	<10	<10	<11	<10	<2.0	<2.0	<2.0
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	<9.9	<10	<10	--	--	--	--	--
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	<9.9	<10	<10	--	--	--	--	--
3-Perfluoropropyl propanoic acid (FPrPA (3:3 FTCA))	--	<9.9	<10	<10	--	--	--	--	--
Perfluorobutanesulfonamide (PFBSA)	--	<2.0	<2.0	<2.0	--	--	--	--	--
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	190	140	150	--	--	--	--	--
Perfluorohexanesulfonamide (PFHxSA)	--	<2.0	<2.0	<2.0	--	--	--	--	--
Total Per-and Polyfluoroalkyl Substances	--	280.1	284.4	225.5	0.0	29.0	50.7	47.6	48.2

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) The detection of PFBA in Field Blank-062520 was caused from the centrifuge tubes leaching out PFBA during the extraction process. The 5X Rule was applied to PFBA detections. If the sample value(s) is less than 5 times the blank concentration (5X Rule), then positive results are qualified "U,"undetected.
- 9) I - Biased high -- matrix interference
- 10) B - Compound also found in associated method blank.
- 11) I - Matrix interference with internal standard.
- 12) J - Estimated value less than reporting limit, but greater than MDL.
- 13) X - Elevated reporting limit due to matrix interference.
- 14) Light gray header is most recent sampling event result.
- 15) 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 - West of Site

Coldwater Rd - Sanitary Sewer Samples West of Site

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-10 (Sanitary Sewer)	SAN-DUP-031121 (SAN-10) Sanitary Sewer	SAN-11 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)
		3/11/2021	3/11/2021	3/18/2020	3/18/2020	6/25/2020	12/18/2020	3/11/2021	3/31/2022
Perfluorobutanoic Acid (PFBA)	--	<11	<10	<19	<20	15 U	<9.8	<10	<10
Perfluoropentanoic Acid (PFPeA)	--	2.2 J	1.8 J	<9.7	<10	<4.1	<3.9	7.3	7.1
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<2.1	<2.0	<9.7	<10	<2.0 I	<2.0	<2.0	<2.1
Perfluorohexanoic Acid (PFHxA)	--	1.6 J	1.7 J	<9.7	<10	<2.0	<2.0	5.6	6.0
Perfluorobutane Sulfonic Acid (PFBS)	670,000	6.2	6.9	9.9	<10	<2.0	2.3	5.6	8.4
Perfluoroheptanoic Acid (PFHpA)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	1.9 J	2.0 J
Perfluoropentane Sulfonic Acid (PFPeS)	--	4.1	5.0	<9.7	<10	<2.0	<2.0	<2.0	5.0
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<2.1	<2.0	<9.7	<10	<2.0 I	<2.0	<2.0	<2.1
Perfluorooctanoic Acid (PFOA)	170	<2.1	<2.0	<9.7	<10	<2.0	<2.0	5.0	7.0
Perfluorohexane Sulfonic Acid (PFHxS)	210	13	15	25	16	2.1	3.8	5.6	22
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	11	11	21	12	<2.0	2.8	3.6	18
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	2.4	3.2	<9.7	<10	<2.0	<2.0	<2.0	3.5
Perfluorononanoic Acid (PFNA)	30	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<2.1	2.3	<9.7	<10	<2.0	<2.0	<2.0	4.8
Perfluorodecanoic Acid (PFDA)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<4.3	<4.1	<9.7	<10	<4.1 I	<3.9	<4.1	<4.1
Perfluorooctane Sulfonic Acid (PFOS)	12	43	45	160	110	55	55	48	120
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	7.2	8.2	62	48	32	33	24	50
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	34	36	100	66	21	21	22	69
Perfluoroundecanoic Acid (PFUnDA)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
Perfluorononane Sulfonic Acid (PFNS)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
Perfluorododecanoic Acid (PFDoDA)	--	<2.1	<2.0	<9.7	<10	<2.0 I	<2.0	<2.0	<2.1
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
Perfluorotridecanoic Acid (PFTTrDA)	--	<2.1	<2.0	<9.7	<10	<2.0 I	<2.0	<2.0	<2.1
Perfluorooctane Sulfonamide (FOSA)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
Perfluorotetradecanoic Acid (PFTeDA)	--	<4.3	<4.1	<9.7	<10	<4.1	<3.9	<4.1	<4.1
11-chlorooicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<2.1
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<2.1	<2.0	<9.7	<10	<2.0	<2.0	<2.0	<4.1
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--	--	--	--	--
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--	--	--	--	--
3-Perfluoropropyl propanoic acid (FPrPA (3:3 FTCA))	--	--	--	--	--	--	--	--	--
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--	--	--	--	--
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--	--	--	--	--
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--	--	--	--	--
Total Per-and Polyfluoroalkyl Substances	--	70.1	77.7	194.9	126.0	72.1	61.1	79.0	182.3

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) The detection of PFBA in Field Blank-062520 was caused from the centrifuge tubes leaching out PFBA during the extraction process. The 5X Rule was applied to PFBA detections. If the sample value(s) is less than 5 times the blank concentration (5X Rule), then positive results are qualified "U,"undetected.
- 9) I - Biased high -- matrix interference
- 10) B - Compound also found in associated method blank.
- 11) I - Matrix interference with internal standard.
- 12) J - Estimated value less than reporting limit, but greater than MDL.
- 13) X - Elevated reporting limit due to matrix interference.
- 14) Light gray header is most recent sampling event result.
- 15) 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 - West of Site

Coldwater Rd - Sanitary Sewer Samples West of Site

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)	SAN-12 (Sanitary Sewer)
		9/7/2022	12/13/2022	4/6/2023	6/27/2023	12/19/2023	6/27/2024	12/19/2024	6/26/2025
Perfluorobutanoic Acid (PFBA)	--	<10	<9.8	2.6 J	<10	6.7 J	6.9 J	<10	4.8 J
Perfluoropentanoic Acid (PFPeA)	--	<4.1	14	4.1	<4.1	9.9	18	2.7 J	20
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<2.0	<2.0	<2.0	<2.0 I	<2.0	<1.9	<2.0	<2.1
Perfluorohexanoic Acid (PFHxA)	--	1.6 J	12	4.1	2.3	4.5	17	2.3	19
Perfluorobutane Sulfonic Acid (PFBS)	670,000	<2.0	2.0	5.4	2.0	7.5	4.9	<2.0 X	4.2
Perfluoroheptanoic Acid (PFHpA)	--	<2.0	<2.0	2.4	<2.0	2.0	1.5 J	0.85 J	1.3 J
Perfluoropentane Sulfonic Acid (PFPeS)	--	<2.0	<2.0	2.2	<2.0	2.0 J	<1.9	<2.0	<2.1
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<2.0	<2.0	<2.0	2.2 I	<2.0	<1.9	<2.0	<2.1
Perfluorooctanoic Acid (PFOA)	170	<2.0	2.6	4.3	<2.0	4.3	4.9	0.89 J	2.9
Perfluorohexane Sulfonic Acid (PFHxS)	210	<2.0	2.3	15	3.4	7.6	7.2	1.9 J	8.2
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	<2.0	1.7 J	12	3.4	5.9	5.2	1.3 J	6.8
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<2.0	<2.0	3.2	<2.0	1.4 J	1.3 J	<2.0	1.3 J
Perfluorononanoic Acid (PFNA)	30	<2.0	<2.0	0.89 J	<2.0	<1.9	<1.9	<2.0	<2.1
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.0 I	<2.0	<2.0	<2.0 I	<2.0	<1.9	<2.0	<2.1
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<2.0	<2.0	1.3 J	<2.0	1.2 J	1.1 J	<2.0	1.8 J
Perfluorodecanoic Acid (PFDA)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<4.1	<3.9	<3.9	<4.1	<4.0	<3.9	<4.1	<4.1
Perfluorooctane Sulfonic Acid (PFOS)	12	19	18	31	36 1	33	52	18	57
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	12	7.2	12	5.8	13	23	8.6	25
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	4.8	10	19	29 1	20	26	8.0	32
Perfluoroundecanoic Acid (PFUnDA)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
Perfluorononane Sulfonic Acid (PFNS)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
Perfluorododecanoic Acid (PFDoDA)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
Perfluorotridecanoic Acid (PFTrDA)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
Perfluorooctane Sulfonamide (FOSA)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
Perfluorotetradecanoic Acid (PFTeDA)	--	<4.1	<3.9	<3.9	<4.1	<4.0	<3.9	<4.1	<4.1
11-chloroeicosafiuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.1
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<10	<9.8	<2.0	<2.0	<10	<9.7	<10	<10
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	<4.1	<10	<9.7	<10	<10
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	<4.1	<10	<9.7	<10	<10
3-Perfluoropropyl propanoic acid (FPpPA (3:3 FTCA))	--	--	--	--	<4.1	<10	<9.7	<10	<10
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	<2.0	0.75 J	<1.9	<2.0	<2.1
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	18	85	88	19	170
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	<2.0	<2.0	<1.9	<2.0	<2.1
Total Per-and Polyfluoroalkyl Substances	--	20.6	50.9	73.3	61.9	164.5	201.5	45.6	289.2

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) The detection of PFBA in Field Blank-062520 was caused from the centrifuge tubes leaching out PFBA during the extraction process. The 5X Rule was applied to PFBA detections. If the sample value(s) is less than 5 times the blank concentration (5X Rule), then positive results are qualified "U,"undetected.
- 9) 1 - Biased high -- matrix interference
- 10) B - Compound also found in associated method blank.
- 11) I - Matrix interference with internal standard.
- 12) J - Estimated value less than reporting limit, but greater than MDL.
- 13) X - Elevated reporting limit due to matrix interference.
- 14) Light gray header is most recent sampling event result.
- 15) 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 - West of Site

Coldwater Rd - Sanitary Sewer Samples West of Site

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-13 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)
		3/19/2020	3/19/2020	6/25/2020	12/18/2020	3/11/2021	3/31/2022	9/7/2022	12/13/2022
Perfluorobutanoic Acid (PFBA)	--	<100	<100	12 U	<10.0	<11	<11	<11	<9.9
Perfluoropentanoic Acid (PFPeA)	--	<10	<10	2.1 J	3.6 J	11	3.2 J	<4.3	<3.9
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<10	<10	<2.0	<2.0 I	<2.1	<2.1	<2.1	<2.0
Perfluorohexanoic Acid (PFHxA)	--	<10	<10	1.8 J	3.8	8.0	2.8	2.5	1.5 J
Perfluorobutane Sulfonic Acid (PFBS)	670,000	<10	<10	2.5	11	10.0	7.6	2.5	3.0
Perfluoroheptanoic Acid (PFHpA)	--	<10	<10	1.6 J	2.8	5.5	1.6 J	<2.1	<2.0
Perfluoropentane Sulfonic Acid (PFPeS)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<10	<10	<2.0	<2.0 I	<2.1	<2.1	<2.1	<2.0
Perfluorooctanoic Acid (PFOA)	170	<10	<10	4.4	9.4	12	4.7	3.2	<2.0
Perfluorohexane Sulfonic Acid (PFHxS)	210	19	<10	2.9	6.2	4.6	3.0	3.3	4.0
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	16	<10	2.0	4.3	3.4	2.1	2.4	2.6
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Perfluorononanoic Acid (PFNA)	30	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1 I	<2.0
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Perfluorodecanoic Acid (PFDA)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<10	<10	<4.0	<4.0 I	<4.2	<4.2	<4.3	<3.9
Perfluorooctane Sulfonic Acid (PFOS)	12	150	29	23	52	40	15	14	6.3
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	75	<10	9	21	17	3.7	6.6	2.4
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	75	20	13	30	23	11	8.1	3.8
Perfluoroundecanoic Acid (PFUnDA)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Perfluorononane Sulfonic Acid (PFNS)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Perfluorododecanoic Acid (PFDoDA)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Perfluorodecane Sulfonic Acid (PFDS)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Perfluorotridecanoic Acid (PFTrDA)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Perfluorooctane Sulfonamide (FOSA)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Perfluorotetradecanoic Acid (PFTeDA)	--	<10	<10	<4.0	<4.0	<4.2	<4.2	<4.3	<3.9
11-chloroeicosafiuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<10	<10	<2.0	<2.0	<2.1	<2.1	<2.1	<2.0
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<10	<10	<2.0	<2.0	<2.1	<4.2	<11	<9.9
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--	--	--	--	--
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--	--	--	--	--
3-Perfluoropropyl propanoic acid (FPpPA (3:3 FTCA))	--	--	--	--	--	--	--	--	--
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--	--	--	--	--
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--	--	--	--	--
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--	--	--	--	--
Total Per-and Polyfluoroalkyl Substances	--	169.0	29.0	50.3	88.8	91.1	37.9	25.5	14.8

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) The detection of PFBA in Field Blank-062520 was caused from the centrifuge tubes leaching out PFBA during the extraction process. The 5X Rule was applied to PFBA detections. If the sample value(s) is less than 5 times the blank concentration (5X Rule), then positive results are qualified "U,"undetected.
- 9) 1 - Biased high -- matrix interference
- 10) B - Compound also found in associated method blank.
- 11) I - Matrix interference with internal standard.
- 12) J - Estimated value less than reporting limit, but greater than MDL.
- 13) X - Elevated reporting limit due to matrix interference.
- 14) Light gray header is most recent sampling event result.
- 15) 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 - West of Site

Coldwater Rd - Sanitary Sewer Samples West of Site

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-14 (Sanitary Sewer)	SAN-15 (Sanitary Sewer)	SAN-16 (Sanitary Sewer)
		Sample Date: 4/6/2023	6/27/2023	12/19/2023	6/27/2024	12/19/2024	6/26/2025	3/19/2020	3/19/2020
Perfluorobutanoic Acid (PFBA)	--	4.1 J	<10.0	<10	<11	<12 X	2.3 J	<98	<100
Perfluoropentanoic Acid (PFPeA)	--	5.9	<4.0	<4.1	2.2 J	<4.1	2.1 J	<9.8	<10
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<2.0	<2.0 I	<2.0	<2.1	<2.1 I	<2.1	<9.8	<10
Perfluorohexanoic Acid (PFHxA)	--	7.4	<2.0	2.5	5.3	<2.1	1.8 J	<9.8	<10
Perfluorobutane Sulfonic Acid (PFBS)	670,000	5.9	<2.0	6.8	4.2	2.2	3.2	<9.8	12
Perfluoroheptanoic Acid (PFHpA)	--	4.3	<2.0	2.2	<2.1	1.2 J	1.0 J	<9.8	<10
Perfluoropentane Sulfonic Acid (PFPeS)	--	1.5 J	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<2.0	<2.0	<2.0	<2.1	<2.1 I	<2.1	<9.8	<10
Perfluorooctanoic Acid (PFOA)	170	12	<2.0	5.0	4.9	1.2 J	2.7	<9.8	<10
Perfluorohexane Sulfonic Acid (PFHxS)	210	4.3	<2.0	3.1	2.1 J	2.0 J	1.8 J	<9.8	<10
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	3.5	<2.0	3.1	2.1 J	2.0 J	1.8 J	<9.8	<10
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	1.3 J	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Perfluorononanoic Acid (PFNA)	30	1.3 J	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Perfluorodecanoic Acid (PFDA)	--	0.65 J	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<2.0	<2.0 I	<2.0	<2.1	<2.1	<2.1	<9.8	<10
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<4.0	<4.0	<4.1	<4.2	<4.1	<4.2	<9.8	<10
Perfluorooctane Sulfonic Acid (PFOS)	12	28	8.4	17	21	11	30	35	13
Perfluorooctane Sulfonic Acid (PFOS-LN)	--	9.9	3.4	6.3	8.1	5.0	16	12	<10
Perfluorooctane Sulfonic Acid (PFOS-BR)	--	18	5.0	11	11	5.5	13	20	<10
Perfluoroundecanoic Acid (PFUnDA)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Perfluorononane Sulfonic Acid (PFNS)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Perfluorododecanoic Acid (PFDoDA)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Perfluorodecane Sulfonic Acid (PFDS)	--	<2.0	<2.0	1.1 J	<2.1	<2.1	<2.1	<9.8	<10
Perfluorotridecanoic Acid (PFTrDA)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Perfluorooctane Sulfonamide (FOSA)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Perfluorotetradecanoic Acid (PFTeDA)	--	<4.0	<4.0	<4.1	<4.2	<4.1	<4.2	<9.8	<10
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF30NS)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<2.0	<2.0	<2.0	<2.1	<2.1	<2.1	<9.8	<10
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<2.0	<2.0	<10	<11	<10	<11	<9.8	<10
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	<4.0	<10	<11	<10	<11	--	--
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	<4.0	<10	<11	<10	<11	--	--
3-Perfluoropropyl propanoic acid (FPrPA (3:3 FTCA))	--	--	<4.0	<10	<11	<10	<11	--	--
Perfluorobutanesulfonamide (PFBSA)	--	--	<2.0	0.77 J	<2.1	<2.1	<2.1	--	--
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	8.9	18	8.2	9.8	15.0	--	--
Perfluorohexanesulfonamide (PFHxSA)	--	--	<2.0	<2.0	<2.1	<2.1	<2.1	--	--
Total Per-and Polyfluoroalkyl Substances	--	75.4	17.3	56.5	47.9	27.4	59.9	35.0	25.0

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) The detection of PFBA in Field Blank-062520 was caused from the centrifuge tubes leaching out PFBA during the extraction process. The 5X Rule was applied to PFBA detections. If the sample value(s) is less than 5 times the blank concentration (5X Rule), then positive results are qualified "U,"undetected.
- 9) 1 - Biased high -- matrix interference
- 10) B - Compound also found in associated method blank.
- 11) I - Matrix interference with internal standard.
- 12) J - Estimated value less than reporting limit, but greater than MDL.
- 13) X - Elevated reporting limit due to matrix interference.
- 14) Light gray header is most recent sampling event result.
- 15) 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 - West of Site

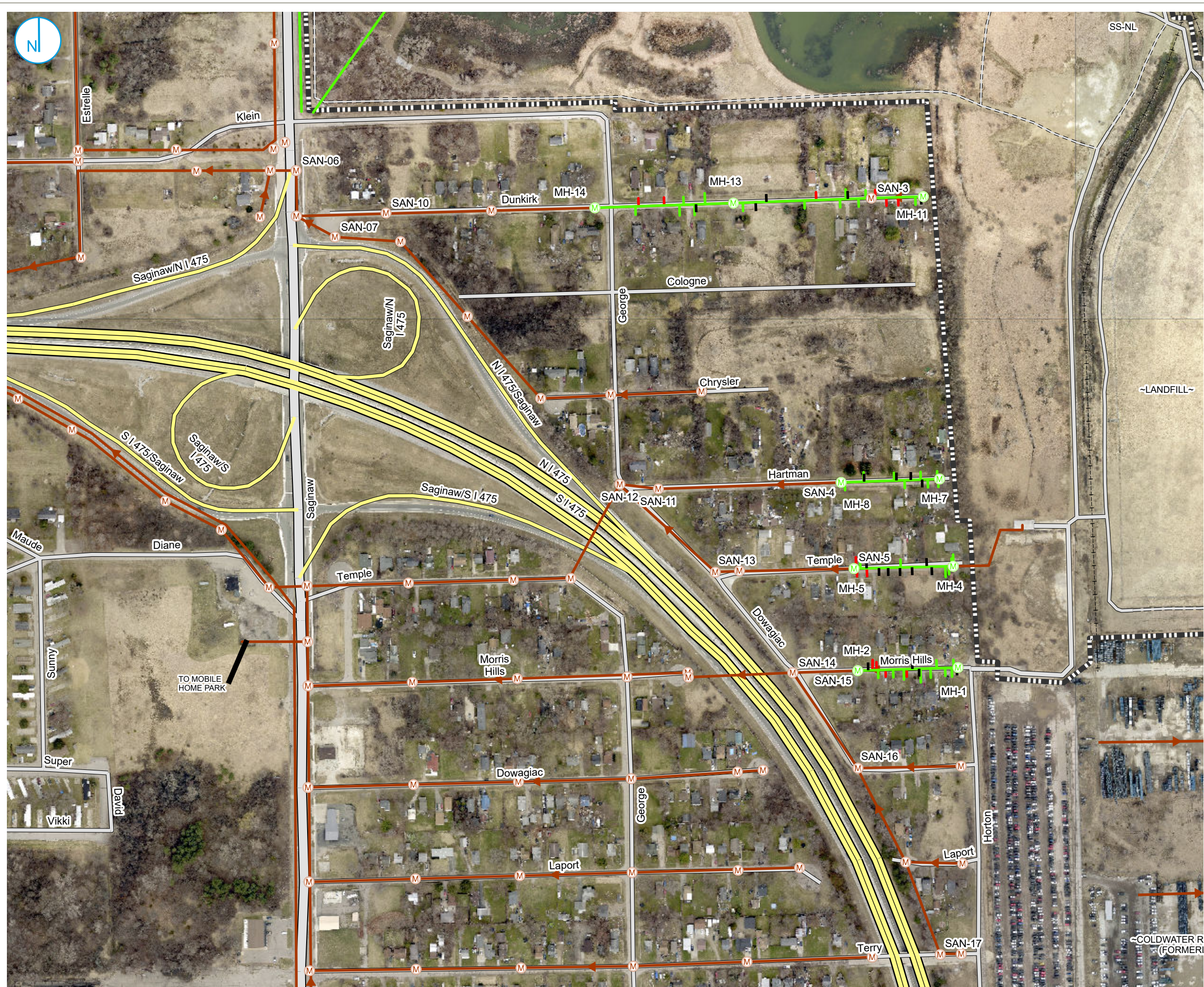
Coldwater Rd - Sanitary Sewer Samples West of Site

Perfluorinated Compound	Well/Sample ID: EGLE Part 201 Generic Cleanup Criteria and Screening Levels GSI	SAN-17 (Sanitary Sewer)	SAN-DUP-1/ SAN-17 (Sanitary Sewer)	SAN-19 (Sanitary Sewer)	SAN-20 (Sanitary Sewer)
	Sample Date:	3/19/2020	3/19/2020	3/19/2020	3/19/2020
Perfluorobutanoic Acid (PFBA)	--	<9.6	<9.9	<100	<100
Perfluoropentanoic Acid (PFPeA)	--	<9.6	<9.9	<10	<10
4:2 Fluorotelomer Sulfonic Acid (4:2 FTSA)	--	<9.6	<9.9	<10	<10
Perfluorohexanoic Acid (PFHxA)	--	<9.6	<9.9	<10	10
Perfluorobutane Sulfonic Acid (PFBS)	670,000	<9.6	<9.9	<10	<10
Perfluoroheptanoic Acid (PFHpA)	--	<9.6	<9.9	<10	<10
Perfluoropentane Sulfonic Acid (PFPeS)	--	<9.6	<9.9	<10	<10
6:2 Fluorotelomer Sulfonic Acid (6:2 FTSA)	--	<9.6	<9.9	<10	<10
Perfluorooctanoic Acid (PFOA)	170	<9.6	<9.9	<10	<10
Perfluorohexane Sulfonic Acid (PFHxS)	210	<9.6	<9.9	<10	<10
Perfluorohexane Sulfonic Acid - LN (PFHxS-LN)	--	<9.6	<9.9	<10	<10
Perfluorohexane Sulfonic Acid - BR (PFHxS-BR)	--	<9.6	<9.9	<10	<10
Perfluorononanoic Acid (PFNA)	30	<9.6	<9.9	<10	<10
8:2 Fluorotelomer Sulfonic Acid (8:2 FTSA)	--	<9.6	<9.9	<10	<10
Perfluoroheptane Sulfonic Acid (PFHpS)	--	<9.6	<9.9	<10	<10
Perfluorodecanoic Acid (PFDA)	--	<9.6	<9.9	<10	<10
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	<9.6	<9.9	<10	<10
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	<9.6	<9.9	<10	<10
Perfluorooctane Sulfonic Acid (PFOS)	12	<9.6	<9.9	<10	11
Perfluorooctane Sulfonic Acid (PFOS -LN)	--	<9.6	<9.9	<10	<10
Perfluorooctane Sulfonic Acid (PFOS -BR)	--	<9.6	<9.9	<10	<10
Perfluoroundecanoic Acid (PFUnDA)	--	<9.6	<9.9	<10	<10
Perfluorononane Sulfonic Acid (PFNS)	--	<9.6	<9.9	<10	<10
Perfluorododecanoic Acid (PFDoDA)	--	<9.6	<9.9	<10	<10
Perfluorodecane Sulfonic Acid (PFDS)	--	<9.6	<9.9	<10	<10
Perfluorotridecanoic Acid (PFTrDA)	--	<9.6	<9.9	<10	<10
Perfluorooctane Sulfonamide (FOSA)	--	<9.6	<9.9	<10	<10
Perfluorotetradecanoic Acid (PFTeDA)	--	<9.6	<9.9	<10	<10
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	--	<9.6	<9.9	<10	<10
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)	--	<9.6	<9.9	<10	<10
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	<9.6	<9.9	<10	<10
Hexafluoropropylene oxide dimer (HFPO-DA)	--	<9.6	<9.9	<10	<10
3-Perfluoroheptyl propanoic acid (FHpPA (7:3 FTCA))	--	--	--	--	--
3-Perfluoropentyl propanoic acid (FPePA (5:3 FTCA))	--	--	--	--	--
3-Perfluoropropyl propanoic acid (FPrPA (3:3 FTCA))	--	--	--	--	--
Perfluorobutanesulfonamide (PFBSA)	--	--	--	--	--
Perfluoro-4-ethylcyclohexanesulfonate (PFECHS)	--	--	--	--	--
Perfluorohexanesulfonamide (PFHxSA)	--	--	--	--	--
Total Per-and Polyfluoroalkyl Substances	--	0.0	0.0	0.0	21.0

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) The detection of PFBA in Field Blank-062520 was caused from the centrifuge tubes leaching out PFBA during the extraction process. The SX Rule was applied to PFBA detections. If the sample value(s) is less than 5 times the blank concentration (SX Rule), then positive results are qualified "U,"undetected.
- 9) I - Biased high -- matrix interference.
- 10) B - Compound also found in associated method blank.
- 11) I - Matrix interference with internal standard.
- 12) J - Estimated value less than reporting limit, but greater than MDL.
- 13) X - Elevated reporting limit due to matrix interference.
- 14) Light gray header is most recent sampling event result.
- 15) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.

FIGURES



- M SANITARY SEWER MANHOLE
- M SANITARY SEWER MANHOLE LINED (FEBRUARY 2022)
- NOT LINED
- CIPP LINED
- CAPPED LATERAL

Note
Lining was completed in February 2022.



**SANITARY SEWER / MANHOLE
SAMPLE LOCATIONS**

RACER TRUST
COLDWATER ROAD
FLINT, MICHIGAN

FIGURE 01

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY





**ATTACHMENT A
LABORATORY ANALYTICAL REPORTS**



Analytical Laboratory Report

Report ID: S76097.01(01)
Generated on 07/11/2025

Report to

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

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

Additional Contacts: Kevin Schneider, Nicole Pitkorchemny

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): S76097.01-S76097.03
Project: RACER Coldwater Rd
Collected Date(s): 06/26/2025
Submitted Date/Time: 06/26/2025 15:20
Sampled by: Kevin Schneider
P.O. #: 1940011180 TASK37

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)

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	80988-54-1
PFHxSA	Perfluorohexanesulfonamide	41997-13-1



Analytical Laboratory Report

Sample Summary (3 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S76097.01	SAN-06-20250626	Liquid	06/26/25 11:40
S76097.02	SAN-12-20250626	Liquid	06/26/25 11:50
S76097.03	SAN-14-20250626	Liquid	06/26/25 12:00



Analytical Laboratory Report

Lab Sample ID: S76097.01

Sample Tag: SAN-06-20250626

Collected Date/Time: 06/26/2025 11:40

Matrix: Liquid

COC Reference: 043446

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	5.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.98/6.48/11	ASTMD7979-19M	06/30/25 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 06/30/25 18:26, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	5.3	10	1.6	ng/L	2	375-22-4	J
PFPeA*	4.4	4.0	0.80	ng/L	2	2706-90-3	
4:2 FTSA*	Not detected	2.0	0.80	ng/L	2	757124-72-4	
PFHxA*	3.3	2.0	0.40	ng/L	2	307-24-4	
PFBS*	7.2	2.0	0.80	ng/L	2	375-73-5	
PFHpA*	1.2	2.0	1.0	ng/L	2	375-85-9	J
PFPeS*	2.7	2.0	0.80	ng/L	2	2706-91-4	
6:2 FTSA*	Not detected	2.0	1.2	ng/L	2	27619-97-2	
PFOA*	3.7	2.0	1.6	ng/L	2	335-67-1	
PFHxS*	12	2.0	1.2	ng/L	2	355-46-4	
PFHxS-LN*	7.6	2.0	1.2	ng/L	2	355-46-4-LN	
PFHxS-BR*	3.7	2.0	1.2	ng/L	2	355-46-4-BR	
PFNA*	Not detected	2.0	0.80	ng/L	2	375-95-1	
8:2 FTSA*	Not detected	2.0	1.0	ng/L	2	39108-34-4	
PFHpS*	Not detected	2.0	1.2	ng/L	2	375-92-8	
PFDA*	0.72	2.0	0.60	ng/L	2	335-76-2	J
N-MeFOSAA*	Not detected	2.0	1.4	ng/L	2	2355-31-9	I
EtFOSAA*	Not detected	4.0	2.0	ng/L	2	2991-50-6	I
PFOS*	35	2.0	1.2	ng/L	2	1763-23-1	
PFOS-LN*	9.2	2.0	1.2	ng/L	2	1763-23-1-LN	
PFOS-BR*	17	2.0	1.2	ng/L	2	1763-23-1-BR	
PFUnDA*	Not detected	2.0	1.0	ng/L	2	2058-94-8	
PFNS*	Not detected	2.0	1.0	ng/L	2	68259-12-1	
PFDODA*	Not detected	2.0	0.60	ng/L	2	307-55-1	
PFDS*	Not detected	2.0	1.2	ng/L	2	335-77-3	
PFTTrDA*	Not detected	2.0	1.0	ng/L	2	72629-94-8	
FOSA*	Not detected	2.0	0.80	ng/L	2	754-91-6	
PFTeDA*	Not detected	4.0	0.40	ng/L	2	376-06-7	
11Cl-PF3OUdS*	Not detected	2.0	0.80	ng/L	2	763051-92-9	
9Cl-PF3ONS*	Not detected	2.0	0.80	ng/L	2	756426-58-1	
ADONA*	Not detected	2.0	1.0	ng/L	2	919005-14-4	
HFPO-DA*	Not detected	10	2.0	ng/L	2	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10	2.0	ng/L	2	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10	2.0	ng/L	2	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10	1.0	ng/L	2	356-02-5	

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

I-Matrix interference with internal standard



Analytical Laboratory Report

Lab Sample ID: S76097.01 (continued)

Sample Tag: SAN-06-20250626

34 PFAs, Method: ASTMD7979-19M, Run Date: 06/30/25 18:26, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBSA*	Not detected	2.0	1.2	ng/L	2	30334-69-1	
PFECHS*	150	2.0	1.0	ng/L	2	80988-54-1	
PFHxSA*	Not detected	2.0	0.80	ng/L	2	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S76097.02

Sample Tag: SAN-12-20250626

Collected Date/Time: 06/26/2025 11:50

Matrix: Liquid

COC Reference: 043446

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	5.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	12.28/6.48/12	ASTMD7979-19M	06/30/25 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 06/30/25 19:06, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	4.8	10	2.1	ng/L	2.07	375-22-4	J
PFPeA*	20	4.1	1.2	ng/L	2.07	2706-90-3	
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.07	757124-72-4	
PFHxA*	19	2.1	1.2	ng/L	2.07	307-24-4	
PFBS*	4.2	2.1	0.62	ng/L	2.07	375-73-5	
PFHpA*	1.3	2.1	0.83	ng/L	2.07	375-85-9	J
PFPeS*	Not detected	2.1	1.9	ng/L	2.07	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.0	ng/L	2.07	27619-97-2	
PFOA*	2.9	2.1	0.83	ng/L	2.07	335-67-1	
PFHxS*	8.2	2.1	1.0	ng/L	2.07	355-46-4	
PFHxS-LN*	6.8	2.1	1.0	ng/L	2.07	355-46-4-LN	
PFHxS-BR*	1.3	2.1	1.0	ng/L	2.07	355-46-4-BR	J
PFNA*	Not detected	2.1	1.0	ng/L	2.07	375-95-1	
8:2 FTSA*	Not detected	2.1	1.2	ng/L	2.07	39108-34-4	
PFHpS*	1.8	2.1	0.83	ng/L	2.07	375-92-8	J
PFDA*	Not detected	2.1	1.2	ng/L	2.07	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.0	ng/L	2.07	2355-31-9	
EtFOSAA*	Not detected	4.1	1.0	ng/L	2.07	2991-50-6	
PFOS*	57	2.1	0.83	ng/L	2.07	1763-23-1	
PFOS-LN*	25	2.1	0.83	ng/L	2.07	1763-23-1-LN	
PFOS-BR*	32	2.1	0.83	ng/L	2.07	1763-23-1-BR	
PFUnDA*	Not detected	2.1	0.83	ng/L	2.07	2058-94-8	
PFNS*	Not detected	2.1	1.0	ng/L	2.07	68259-12-1	
PFDODA*	Not detected	2.1	0.62	ng/L	2.07	307-55-1	
PFDS*	Not detected	2.1	1.0	ng/L	2.07	335-77-3	
PFTTrDA*	Not detected	2.1	0.83	ng/L	2.07	72629-94-8	
FOSA*	Not detected	2.1	0.83	ng/L	2.07	754-91-6	
PFTeDA*	Not detected	4.1	0.62	ng/L	2.07	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.0	ng/L	2.07	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.0	ng/L	2.07	756426-58-1	
ADONA*	Not detected	2.1	0.62	ng/L	2.07	919005-14-4	
HFPO-DA*	Not detected	10	2.1	ng/L	2.07	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	10	8.3	ng/L	2.07	812-70-4	
FPePA (5:3 FTCA)*	Not detected	10	4.1	ng/L	2.07	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	10	4.1	ng/L	2.07	356-02-5	
PFBSA*	Not detected	2.1	0.62	ng/L	2.07	30334-69-1	

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



Analytical Laboratory Report

Lab Sample ID: S76097.02 (continued)

Sample Tag: SAN-12-20250626

34 PFAs, Method: ASTMD7979-19M, Run Date: 06/30/25 19:06, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFECHS*	170	2.1	0.83	ng/L	2.07	80988-54-1	
PFHxSA*	Not detected	2.1	0.62	ng/L	2.07	41997-13-1	



Analytical Laboratory Report

Lab Sample ID: S76097.03

Sample Tag: SAN-14-20250626

Collected Date/Time: 06/26/2025 12:00

Matrix: Liquid

COC Reference: 043446

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	15mL Centrifuge Tube	None	Yes	5.5	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Initial wt. (g) / Final wt. (g) / Volume (ml)*	11.73/6.48/11	ASTMD7979-19M	06/30/25 11:00	CED	

Organics

34 PFAs, Method: ASTMD7979-19M, Run Date: 06/30/25 19:26, Analyst: CED

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFBA*	2.3	11	2.1	ng/L	2.1	375-22-4	J
PFPeA*	2.1	4.2	1.3	ng/L	2.1	2706-90-3	J
4:2 FTSA*	Not detected	2.1	0.21	ng/L	2.1	757124-72-4	
PFHxA*	1.8	2.1	1.3	ng/L	2.1	307-24-4	J
PFBS*	3.2	2.1	0.63	ng/L	2.1	375-73-5	
PFHpA*	1.0	2.1	0.84	ng/L	2.1	375-85-9	J
PFPeS*	Not detected	2.1	1.9	ng/L	2.1	2706-91-4	
6:2 FTSA*	Not detected	2.1	1.1	ng/L	2.1	27619-97-2	
PFOA*	2.7	2.1	0.84	ng/L	2.1	335-67-1	
PFHxS*	1.8	2.1	1.1	ng/L	2.1	355-46-4	J
PFHxS-LN*	1.8	2.1	1.1	ng/L	2.1	355-46-4-LN	J
PFHxS-BR*	Not detected	2.1	1.1	ng/L	2.1	355-46-4-BR	
PFNA*	Not detected	2.1	1.1	ng/L	2.1	375-95-1	
8:2 FTSA*	Not detected	2.1	1.3	ng/L	2.1	39108-34-4	
PFHpS*	Not detected	2.1	0.84	ng/L	2.1	375-92-8	
PFDA*	Not detected	2.1	1.3	ng/L	2.1	335-76-2	
N-MeFOSAA*	Not detected	2.1	1.1	ng/L	2.1	2355-31-9	
EtFOSAA*	Not detected	4.2	1.1	ng/L	2.1	2991-50-6	
PFOS*	30	2.1	0.84	ng/L	2.1	1763-23-1	
PFOS-LN*	16	2.1	0.84	ng/L	2.1	1763-23-1-LN	
PFOS-BR*	13	2.1	0.84	ng/L	2.1	1763-23-1-BR	
PFUnDA*	Not detected	2.1	0.84	ng/L	2.1	2058-94-8	
PFNS*	Not detected	2.1	1.1	ng/L	2.1	68259-12-1	
PFDODA*	Not detected	2.1	0.63	ng/L	2.1	307-55-1	
PFDS*	Not detected	2.1	1.1	ng/L	2.1	335-77-3	
PFTTrDA*	Not detected	2.1	0.84	ng/L	2.1	72629-94-8	
FOSA*	Not detected	2.1	0.84	ng/L	2.1	754-91-6	
PFTeDA*	Not detected	4.2	0.63	ng/L	2.1	376-06-7	
11Cl-PF3OUdS*	Not detected	2.1	1.1	ng/L	2.1	763051-92-9	
9Cl-PF3ONS*	Not detected	2.1	1.1	ng/L	2.1	756426-58-1	
ADONA*	Not detected	2.1	0.63	ng/L	2.1	919005-14-4	
HFPO-DA*	Not detected	11	2.1	ng/L	2.1	13252-13-6	
FHpPA (7:3 FTCA)*	Not detected	11	8.4	ng/L	2.1	812-70-4	
FPePA (5:3 FTCA)*	Not detected	11	4.2	ng/L	2.1	914637-49-3	
FPrPA (3:3 FTCA)*	Not detected	11	4.2	ng/L	2.1	356-02-5	
PFBSA*	Not detected	2.1	0.63	ng/L	2.1	30334-69-1	

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



Analytical Laboratory Report

Lab Sample ID: S76097.03 (continued)

Sample Tag: SAN-14-20250626

34 PFAs, Method: ASTMD7979-19M, Run Date: 06/30/25 19:26, Analyst: CED (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PFECHS*	15	2.1	0.84	ng/L	2.1	80988-54-1	
PFHxSA*	Not detected	2.1	0.63	ng/L	2.1	41997-13-1	

Merit Laboratories Login Checklist

Lab Set ID:S76097

Client:RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Rd

Submitted:06/26/2025 15:20 Login User: PFD

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 5.5 |
| 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, TOX, DO or Alkalinity bottles contain |

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

Client Review By: _____ Date: _____



2680 East Lansing Dr., East Lansing, MI 48823
 Phone (517) 332-0167 Fax (517) 332-6333
 www.meritlabs.com

C.O.C. PAGE # 1 OF 1

043446

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.: 313-333-0211 FAX NO.:
 P.O. NO.: 1940011180 task 37
 QUOTE NO.:
 E-MAIL ADDRESS: clifford.yantz@ramboll.com kevin.schneider@ramboll.com

CONTACT NAME: X SAME
 COMPANY:
 ADDRESS:
 CITY: STATE: ZIP CODE:
 PHONE NO.: FAX NO.: P.O. NO.:

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

PROJECT NO./NAME		SAMPLER(S) - PLEASE PRINT/SIGN NAME		SPECIAL INSTRUCTIONS/NOTES																
RACER Coldwater Rd		Kevin Schneider [Signature]		PFAS (7979) low level repeating with estimated values 34 PFAS list																
TURNAROUND TIME REQUIRED <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> OTHER																				
DELIVERABLES REQUIRED <input type="checkbox"/> STANDARD <input checked="" type="checkbox"/> LEVEL II <input type="checkbox"/> LEVEL III <input type="checkbox"/> OTHER																				
MATRIX CODE:	GW=GROUNDWATER SL=SLUDGE	WW=WASTEWATER O=OIL	S=SOIL A=AIR	L=LIQUID W=WASTE	SD=SOLID M=MISC	# Containers & Preservatives														
MERIT LAB NO.	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION		MATRIX	# OF BOTTLES	NONE	HCL	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER							
76097.01	6-26-25	1140	SAN-06-20250626		L	3		X						X						
.02	↓	1150	SAN-12-20250626		↓	↓		X						X						
.03	↓	1200	SAN-14-20250626		↓	↓		X						X						

RELINQUISHED BY: [Signature] DATE: 6/26/25 TIME: 13:03
 RECEIVED BY: [Signature] DATE: 6/26/25 TIME: 13:03
 RELINQUISHED BY: [Signature] DATE: 6/26/25 TIME: 15:28
 RECEIVED BY: [Signature] DATE: 6/26/25 TIME: 15:28

RELINQUISHED BY: SIGNATURE/ORGANIZATION DATE: TIME:
 RECEIVED BY: SIGNATURE/ORGANIZATION DATE: TIME:
 SEAL NO. SEAL INTACT YES NO INITIALS: NOTES: TEMP. ON ARRIVAL: 5.5
 SEAL NO. SEAL INTACT YES NO INITIALS:

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE