



**TABLE 1  
RACER Trust - Coldwater Road  
Per-and Polyfluoroalkyl Substances Sampling Results  
1278 E. Stanley Rd Residential Drinking Water Results**

**Coldwater Road - 1278 E. Stanley Rd Residential Well**

Perfluorinated Compound	Well/Sample ID:	USEPA PFAS National Primary Drinking Water Regulation (NPDWR)	EGLE Part 201 Generic Cleanup Criteria and Screening Levels	1278 E. Stanley Rd - RAW - 20241017	1278 E. Stanley Rd - SINK - 20241017	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK
		Drinking Water	Drinking Water	10/17/2024	10/17/2024	6/28/2024	6/28/2024	3/20/2024	3/20/2024	1/4/2024	1/4/2024
Sample Date:	Drinking Water	Drinking Water	Drinking Water	10/17/2024	10/17/2024	6/28/2024	6/28/2024	3/20/2024	3/20/2024	1/4/2024	1/4/2024
Perfluorohexanoic Acid (PFHxA)	--	--	<b>400,000</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorobutane Sulfonic Acid (PFBS)	--	--	<b>420</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluoroheptanoic Acid (PFHpA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctanoic Acid ( <b>PFOA</b> )	<b>4</b>	<b>8</b>	<b>8</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorohexane Sulfonic Acid (PFHxS)	<b>10</b>	<b>51</b>	<b>51</b>	<2	<2	<2	<2	<2	<2	<b>2</b>	<2
Perfluorononanoic Acid (PFNA)	<b>10</b>	<b>6</b>	<b>6</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorodecanoic Acid (PFDA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctane Sulfonic Acid ( <b>PFOS</b> )	<b>4</b>	<b>16</b>	<b>16</b>	<b>33</b>	<2	<b>28</b>	<2	<b>38</b>	<2	<b>42</b>	<2
Perfluoroundecanoic Acid (PFUnDA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorododecanoic Acid (PFDoDA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotridecanoic Acid (PFTTrDA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotetradecanoic Acid (PFTeDA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	--	--	--	<2	<2	<2	<2	<2	<2	<2	<2
Hexafluoropropylene oxide dimer (HFPO-DA)	<b>10</b>	<b>370</b>	<b>370</b>	<2	<2	<2	<2	<2	<2	<2	<2
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, & PFBS	<b>Hazard Index of 1 (unitless)</b>	--	--	--	--	--	--	--	--	--	--
Total Other Per-and Polyfluoroalkyl Substances	--	--	--	<b>33.0</b>	<b>0.0</b>	<b>28.0</b>	<b>0.0</b>	<b>38.0</b>	<b>0.0</b>	<b>44.0</b>	<b>0.0</b>
<b>Metals</b>											
Arsenic	--	--	<b>10 (A)</b>	<b>12</b>	<2	<b>11</b>	<2	<b>13</b>	<2	<b>12</b>	<2

- Notes
- 1) Detections in **bold**.
  - 2) PFAS concentrations reported in nanograms per liter (ng/L).  
Arsenic concentrations reported in micrograms per liter (µg/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 EGLE drinking water criteria are highlighted in yellow.
  - 8) Arsenic concentrations above the EGLE residential drinking water criteria (10 (A) µg/L ) are highlighted in yellow.
  - 9) The United States Environmental Protection Agency (USEPA) enacted new maximum contaminant levels (MCLs) for PFOS of 4 ng/l; however, EGLE has not yet adopted those standards.
  - 10) The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.
  - 11) A - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
  - 12) Samples collected on September 6, 2018 and September 25, 2018 were collected by EGLE.
  - 13) SINK samples collected at kitchen sink which is run through whole house filter system.
  - 14) The whole house PFAS filter was last changed on July 7, 2023.
  - 15) Light gray header is most recent sampling event result.
  - 16) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.
  - 17) 1 - suspect -- Trizma lot contaminated.



**TABLE 1  
RACER Trust - Coldwater Road  
Per-and Polyfluoroalkyl Substances Sampling Results  
1278 E. Stanley Rd Residential Drinking Water Results**

**Coldwater Road - 1278 E. Stanley Rd Residential Well**

Perfluorinated Compound	Well/Sample ID:	USEPA PFAS National Primary Drinking Water Regulation (NPDWR)	EGLE Part 201 Generic Cleanup Criteria and Screening Levels	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK
		Sample Date:	Drinking Water	Drinking Water	10/4/2023	10/4/2023	7/7/2023	7/7/2023	4/6/2023	4/6/2023	1/4/2023
Perfluorohexanoic Acid (PFHxA)		--	<b>400,000</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorobutane Sulfonic Acid (PFBS)		--	<b>420</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluoroheptanoic Acid (PFHpA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctanoic Acid ( <b>PFOA</b> )		<b>4</b>	<b>8</b>	<b>2 1</b>	<2	<2	<2	<2	<2	<2	<2
Perfluorohexane Sulfonic Acid (PFHxS)		<b>10</b>	<b>51</b>	<b>2</b>	<2	<b>3</b>	<2	<b>2</b>	<2	<b>2</b>	<2
Perfluorononanoic Acid (PFNA)		<b>10</b>	<b>6</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorodecanoic Acid (PFDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctane Sulfonic Acid ( <b>PFOS</b> )		<b>4</b>	<b>16</b>	<b>51</b>	<2	<b>51</b>	<b>4</b>	<b>22</b>	<2	<b>37</b>	<2
Perfluoroundecanoic Acid (PFUnDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorododecanoic Acid (PFDoDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotridecanoic Acid (PFTrDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotetradecanoic Acid (PFTeDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
11-chloroicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Hexafluoropropylene oxide dimer (HFPO-DA)		<b>10</b>	<b>370</b>	<2	<2	<2	<2	<2	<2	<2	<2
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, & PFBS		<b>Hazard Index of 1 (unitless)</b>	--	--	--	--	--	--	--	--	--
Total Other Per-and Polyfluoroalkyl Substances		--	--	<b>55.0</b>	<b>0.0</b>	<b>54.0</b>	<b>4.0</b>	<b>24.0</b>	<b>0.0</b>	<b>39.0</b>	<b>0.0</b>
<b>Metals</b>											
Arsenic		--	<b>10 (A)</b>	<b>12</b>	<b>3</b>	<b>13</b>	<2	<b>14</b>	<2	<b>15</b>	<2

- Notes
- 1) Detections in **bold**.
  - 2) PFAS concentrations reported in nanograms per liter (ng/L).  
Arsenic concentrations reported in micrograms per liter (µg/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 EGLE drinking water criteria are highlighted in yellow.
  - 8) Arsenic concentrations above the EGLE residential drinking water criteria (10 (A) µg/L ) are highlighted in yellow.
  - 9) The United States Environmental Protection Agency (USEPA) enacted new maximum contaminant levels (MCLs) for PFOS of 4 ng/l; however, EGLE has not yet adopted those standards.
  - 10) The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.
  - 11) A - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
  - 12) Samples collected on September 6, 2018 and September 25, 2018 were collected by EGLE.
  - 13) SINK samples collected at kitchen sink which is run through whole house filter system.
  - 14) The whole house PFAS filter was last changed on July 7, 2023.
  - 15) Light gray header is most recent sampling event result.
  - 16) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.
  - 17) 1 - suspect -- Trizma lot contaminated.



**TABLE 1  
RACER Trust - Coldwater Road  
Per-and Polyfluoroalkyl Substances Sampling Results  
1278 E. Stanley Rd Residential Drinking Water Results**

**Coldwater Road - 1278 E. Stanley Rd Residential Well**

Perfluorinated Compound	Well/Sample ID:	USEPA PFAS National Primary Drinking Water Regulation (NPDWR)	EGLE Part 201 Generic Cleanup Criteria and Screening Levels	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK
		Drinking Water	Drinking Water	10/6/2022	10/6/2022	7/7/2022	7/7/2022	3/16/2022	3/16/2022	1/5/2022	1/5/2022
	Sample Date:	Drinking Water	Drinking Water	10/6/2022	10/6/2022	7/7/2022	7/7/2022	3/16/2022	3/16/2022	1/5/2022	1/5/2022
Perfluorohexanoic Acid (PFHxA)		--	<b>400,000</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorobutane Sulfonic Acid (PFBS)		--	<b>420</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluoroheptanoic Acid (PFHpA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctanoic Acid ( <b>PFOA</b> )		<b>4</b>	<b>8</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorohexane Sulfonic Acid (PFHxS)		<b>10</b>	<b>51</b>	<b>3</b>	<2	<b>2</b>	<2	<2	<2	<2	<2
Perfluorononanoic Acid (PFNA)		<b>10</b>	<b>6</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorodecanoic Acid (PFDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctane Sulfonic Acid ( <b>PFOS</b> )		<b>4</b>	<b>16</b>	<b>44</b>	<2	<b>41</b>	<2	<b>23</b>	<b>3</b>	<b>19</b>	<2
Perfluoroundecanoic Acid (PFUnDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorododecanoic Acid (PFDoDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotridecanoic Acid (PFTTrDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotetradecanoic Acid (PFTeDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
11-chloroicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Hexafluoropropylene oxide dimer (HFPO-DA)		<b>10</b>	<b>370</b>	<2	<2	<2	<2	<2	<2	<2	<2
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, & PFBS		<b>Hazard Index of 1 (unitless)</b>	--	--	--	--	--	--	--	--	--
Total Other Per-and Polyfluoroalkyl Substances		--	--	<b>47.0</b>	<b>0.0</b>	<b>43.0</b>	<b>0.0</b>	<b>23.0</b>	<b>3.0</b>	<b>19.0</b>	<b>0.0</b>
<b>Metals</b>											
Arsenic		--	<b>10 (A)</b>	<b>15</b>	<2	<b>17</b>	<2	<b>16</b>	<2	<b>22</b>	<2

- Notes
- 1) Detections in **bold**.
  - 2) PFAS concentrations reported in nanograms per liter (ng/L).  
Arsenic concentrations reported in micrograms per liter (µg/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 EGLE drinking water criteria are highlighted in yellow.
  - 8) Arsenic concentrations above the EGLE residential drinking water criteria (10 (A) µg/L ) are highlighted in yellow.
  - 9) The United States Environmental Protection Agency (USEPA) enacted new maximum contaminant levels (MCLs) for PFOS of 4 ng/l; however, EGLE has not yet adopted those standards.
  - 10) The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.
  - 11) A - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
  - 12) Samples collected on September 6, 2018 and September 25, 2018 were collected by EGLE.
  - 13) SINK samples collected at kitchen sink which is run through whole house filter system.
  - 14) The whole house PFAS filter was last changed on July 7, 2023.
  - 15) Light gray header is most recent sampling event result.
  - 16) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.
  - 17) 1 - suspect -- Trizma lot contaminated.



**TABLE 1  
RACER Trust - Coldwater Road  
Per-and Polyfluoroalkyl Substances Sampling Results  
1278 E. Stanley Rd Residential Drinking Water Results**

**Coldwater Road - 1278 E. Stanley Rd Residential Well**

Perfluorinated Compound	Well/Sample ID:	USEPA PFAS National Primary Drinking Water Regulation (NPDWR)	EGLE Part 201 Generic Cleanup Criteria and Screening Levels	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK
		Sample Date:	Drinking Water	Drinking Water	9/30/2021	9/30/2021	6/29/2021	6/29/2021	3/26/2021	3/26/2021	12/18/2020
Perfluorohexanoic Acid (PFHxA)		--	<b>400,000</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorobutane Sulfonic Acid (PFBS)		--	<b>420</b>	<2	<2	<b>0.42 J</b>	<2	<2	<2	<2	<2
Perfluoroheptanoic Acid (PFHpA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctanoic Acid ( <b>PFOA</b> )		<b>4</b>	<b>8</b>	<2	<2	<b>0.66 J</b>	<2	<2	<2	<2	<2
Perfluorohexane Sulfonic Acid (PFHxS)		<b>10</b>	<b>51</b>	<b>3</b>	<2	<b>3</b>	<2	<b>0.6 J</b>	<2	<2	<2
Perfluorononanoic Acid (PFNA)		<b>10</b>	<b>6</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorodecanoic Acid (PFDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctane Sulfonic Acid ( <b>PFOS</b> )		<b>4</b>	<b>16</b>	<b>49</b>	<2	<b>55</b>	<2	<b>8</b>	<2	<b>20</b>	<2
Perfluoroundecanoic Acid (PFUnDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorododecanoic Acid (PFDoDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotridecanoic Acid (PFTTrDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotetradecanoic Acid (PFTeDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
4,8-dioxo-3H-perfluorononanoic acid (ADONA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Hexafluoropropylene oxide dimer (HFPO-DA)		<b>10</b>	<b>370</b>	<2	<2	<2	<2	<2	<2	<2	<2
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, & PFBS		<b>Hazard Index of 1 (unitless)</b>	--	--	--	--	--	--	--	--	--
Total Other Per-and Polyfluoroalkyl Substances		--	--	<b>52.0</b>	<b>0.0</b>	<b>59.1</b>	<b>0.0</b>	<b>8.6</b>	<b>0.0</b>	<b>20.0</b>	<b>0.0</b>
<b>Metals</b>											
Arsenic		--	<b>10 (A)</b>	<b>19</b>	<2	<b>16</b>	<b>10</b>	<b>25</b>	<b>13</b>	<b>18</b>	<b>11</b>

- Notes
- 1) Detections in **bold**.
  - 2) PFAS concentrations reported in nanograms per liter (ng/L).  
Arsenic concentrations reported in micrograms per liter (µg/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 EGLE drinking water criteria are highlighted in yellow.
  - 8) Arsenic concentrations above the EGLE residential drinking water criteria (10 (A) µg/L ) are highlighted in yellow.
  - 9) The United States Environmental Protection Agency (USEPA) enacted new maximum contaminant levels (MCLs) for PFOS of 4 ng/l; however, EGLE has not yet adopted those standards.
  - 10) The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.
  - 11) A - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
  - 12) Samples collected on September 6, 2018 and September 25, 2018 were collected by EGLE.
  - 13) SINK samples collected at kitchen sink which is run through whole house filter system.
  - 14) The whole house PFAS filter was last changed on July 7, 2023.
  - 15) Light gray header is most recent sampling event result.
  - 16) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.
  - 17) 1 - suspect -- Trizma lot contaminated.



**TABLE 1  
RACER Trust - Coldwater Road  
Per-and Polyfluoroalkyl Substances Sampling Results  
1278 E. Stanley Rd Residential Drinking Water Results**

**Coldwater Road - 1278 E. Stanley Rd Residential Well**

Perfluorinated Compound	Well/Sample ID:	USEPA PFAS National Primary Drinking Water Regulation (NPDWR)	EGLE Part 201 Generic Cleanup Criteria and Screening Levels	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK	1278 E. Stanley Rd - RAW	1278 E. Stanley Rd - SINK
		Sample Date:	Drinking Water	Drinking Water	8/14/2020	8/14/2020	5/15/2020	5/15/2020	12/19/2019	12/19/2019	8/22/2019
Perfluorohexanoic Acid (PFHxA)		--	<b>400,000</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorobutane Sulfonic Acid (PFBS)		--	<b>420</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluoroheptanoic Acid (PFHpA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctanoic Acid ( <b>PFOA</b> )		<b>4</b>	<b>8</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorohexane Sulfonic Acid (PFHxS)		<b>10</b>	<b>51</b>	<2	<2	<2	<2	<b>3</b>	<2	<2	<2
Perfluorononanoic Acid (PFNA)		<b>10</b>	<b>6</b>	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorodecanoic Acid (PFDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorooctane Sulfonic Acid ( <b>PFOS</b> )		<b>4</b>	<b>16</b>	<b>22</b>	<2	<b>22</b>	<2	<b>42</b>	<2	<b>24</b>	<2
Perfluoroundecanoic Acid (PFUnDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorododecanoic Acid (PFDoDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotridecanoic Acid (PFTrDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
Perfluorotetradecanoic Acid (PFTeDA)		--	--	<2	<2	<2	<2	<2	<2	<2	<2
11-chloroicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)		--	--	<2	<2	--	--	--	--	--	--
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)		--	--	<2	<2	--	--	--	--	--	--
4,8-dioxa-3H-perfluorononanoic acid (ADONA)		--	--	<2	<2	--	--	--	--	--	--
Hexafluoropropylene oxide dimer (HFPO-DA)		<b>10</b>	<b>370</b>	<2	<2	--	--	--	--	--	--
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, & PFBS		<b>Hazard Index of 1 (unitless)</b>	--	--	--	--	--	--	--	--	--
Total Other Per-and Polyfluoroalkyl Substances		--	--	<b>22.0</b>	<b>0.0</b>	<b>22.0</b>	<b>0.0</b>	<b>45.0</b>	<b>0.0</b>	<b>24.0</b>	<b>0.0</b>
<b>Metals</b>											
Arsenic		--	<b>10 (A)</b>	<b>15</b>	<b>8</b>	<b>13</b>	<b>8</b>	<b>15</b>	<b>5</b>	<b>14</b>	<b>6</b>

- Notes
- 1) Detections in **bold**.
  - 2) PFAS concentrations reported in nanograms per liter (ng/L).  
Arsenic concentrations reported in micrograms per liter (µg/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 EGLE drinking water criteria are highlighted in yellow.
  - 8) Arsenic concentrations above the EGLE residential drinking water criteria (10 (A) µg/L ) are highlighted in yellow.
  - 9) The United States Environmental Protection Agency (USEPA) enacted new maximum contaminant levels (MCLs) for PFOS of 4 ng/l; however, EGLE has not yet adopted those standards.
  - 10) The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.
  - 11) A - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
  - 12) Samples collected on September 6, 2018 and September 25, 2018 were collected by EGLE.
  - 13) SINK samples collected at kitchen sink which is run through whole house filter system.
  - 14) The whole house PFAS filter was last changed on July 7, 2023.
  - 15) Light gray header is most recent sampling event result.
  - 16) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.
  - 17) 1 - suspect -- Trizma lot contaminated.



**TABLE 1  
RACER Trust - Coldwater Road  
Per-and Polyfluoroalkyl Substances Sampling Results  
1278 E. Stanley Rd Residential Drinking Water Results**

**Coldwater Road - 1278 E. Stanley Rd Residential Well**

Perfluorinated Compound	Well/Sample ID:	USEPA PFAS National Primary Drinking Water Regulation (NPDWR)	EGLE Part 201 Generic Cleanup Criteria and Screening Levels	03216 1278 E. Stanley Rd-RW (Replacement Well)	03216 1278 E. Stanley Rd-RW (Replacement Well)	03216 1278 E. Stanley Rd (Post-under the sink carbon filtration)	03216 1278 E. Stanley Rd (Post-Water Softener/Iron Treatment)	03216 1278 E. Stanley Rd (Duplicate)	03216 1278 E. Stanley Rd (Pre-Water Softener/Iron Treatment)	03216 1278 E. Stanley Rd
		Drinking Water	Drinking Water	6/28/2019	5/20/2019	10/30/2018	9/25/2018	9/25/2018	9/25/2018	9/6/2018
Perfluorohexanoic Acid (PFHxA)		--	<b>400,000</b>	<2	<2	<2	<2	<2	<2	<2
Perfluorobutane Sulfonic Acid (PFBS)		--	<b>420</b>	<2	<2	<2	<2	<2	<2	<2
Perfluoroheptanoic Acid (PFHpA)		--	--	<2	<2	<2	<2	<2	<2	<2
Perfluorooctanoic Acid ( <b>PFOA</b> )		<b>4</b>	<b>8</b>	<2	<2	<2	<2	<2	<2	<2
Perfluorohexane Sulfonic Acid (PFHxS)		<b>10</b>	<b>51</b>	<b>3</b>	<b>3</b>	<2	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
Perfluorononanoic Acid (PFNA)		<b>10</b>	<b>6</b>	<2	<2	<2	<2	<2	<2	<2
Perfluorodecanoic Acid (PFDA)		--	--	<2	<2	<2	<2	<2	<2	<2
N-methyl Perfluorooctanesulfonamidoacetic Acid (N-MeFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid (EtFOSAA)		--	--	<2	<2	<2	<2	<2	<2	<2
Perfluorooctane Sulfonic Acid ( <b>PFOS</b> )		<b>4</b>	<b>16</b>	<b>40</b>	<b>33</b>	<2	<b>69</b>	<b>59</b>	<b>63</b>	<b>73</b>
Perfluoroundecanoic Acid (PFUnDA)		--	--	<2	<2	<2	<2	<2	<2	<2
Perfluorododecanoic Acid (PFDoDA)		--	--	<2	<2	<2	<2	<2	<2	<2
Perfluorotridecanoic Acid (PFTeDA)		--	--	<2	<2	<2	<2	<2	<2	<2
Perfluorotetradecanoic Acid (PFTeDA)		--	--	<2	<2	<2	<2	<2	<2	<2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)		--	--	--	--	--	--	--	--	--
9-chlorohexadecafluoro-3-oxanone1-sulfonic acid (9Cl-PF3ONS)		--	--	--	--	--	--	--	--	--
4,8-dioxa-3H-perfluorononanoic acid (ADONA)		--	--	--	--	--	--	--	--	--
Hexafluoropropylene oxide dimer (HFPO-DA)		<b>10</b>	<b>370</b>	--	--	--	--	--	--	--
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, & PFBS		<b>Hazard Index of 1 (unitless)</b>	--	--	--	--	--	--	--	--
Total Other Per-and Polyfluoroalkyl Substances		--	--	<b>43.0</b>	<b>36.0</b>	<b>0.0</b>	<b>73.0</b>	<b>63.0</b>	<b>67.0</b>	<b>77.0</b>
<b>Metals</b>										
Arsenic		--	<b>10 (A)</b>	--	--	--	--	--	--	--

- Notes
- 1) Detections in **bold**.
  - 2) PFAS concentrations reported in nanograms per liter (ng/L).  
Arsenic concentrations reported in micrograms per liter (µg/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 EGLE drinking water criteria are highlighted in yellow.
  - 8) Arsenic concentrations above the EGLE residential drinking water criteria (10 (A) µg/L ) are highlighted in yellow.
  - 9) The United States Environmental Protection Agency (USEPA) enacted new maximum contaminant levels (MCLs) for PFOS of 4 ng/l; however, EGLE has not yet adopted those standards.
  - 10) The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.
  - 11) A - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
  - 12) Samples collected on September 6, 2018 and September 25, 2018 were collected by EGLE.
  - 13) SINK samples collected at kitchen sink which is run through whole house filter system.
  - 14) The whole house PFAS filter was last changed on July 7, 2023.
  - 15) Light gray header is most recent sampling event result.
  - 16) QA/QC Samples were either not detected above the reporting limit or below the EGLE Part 201 Groundwater Generic Cleanup Criteria.
  - 17) 1 - suspect -- Trizma lot contaminated.



# Analytical Laboratory Report

Report ID: S67529.01(01)  
Generated on 10/29/2024

**Report to**

---

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

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

Additional Contacts: Kevin Schneider

**Report produced by**

---

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): S67529.01-S67529.03  
Project: RACER Coldwater Road  
Collected Date(s): 10/17/2024  
Submitted Date/Time: 10/17/2024 16:20  
Sampled by: Kevin Schneider  
P.O. #: 1940008845 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
E200.8	EPA Method 200.8 Revision 5.4
E537.1	EPA Method 537.1 Version 1.0 November 2018
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007



# Analytical Laboratory Report

## Parameter Summary

Parameter	Synonym	Cas #
PFHxA	Perfluorohexanoic Acid	307-24-4
PFBS	Perfluorobutane sulfonic Acid	375-73-5
PFHpA	Perfluoroheptanoic Acid	375-85-9
PFOA	Perfluorooctanoic Acid	335-67-1
PFHxS	Perfluorohexane Sulfonic Acid	355-46-4
PFNA	Perfluorononanoic Acid	375-95-1
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
PFUnDA	Perfluoroundecanoic Acid	2058-94-8
PFDoDA	Perfluorododecanoic Acid	307-55-1
PFTTrDA	Perfluorotridecanoic Acid	72629-94-8
PFTeDA	Perfluorotetradecanoic Acid	376-06-7
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone1-sulfonic acid	756426-58-1
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4
HFPO-DA	Hexafluoropropylene oxide dimer	13252-13-6



# Analytical Laboratory Report

## Sample Summary (3 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S67529.01	1278 E. Stanley Rd - SINK - 20241017	Drinking Water	10/17/24 08:45
S67529.02	1278 E. Stanley Rd - RAW - 20241017	Drinking Water	10/17/24 09:00
S67529.03	Field Blank - 20241017	Water	10/17/24 09:02



# Analytical Laboratory Report

Lab Sample ID: S67529.01

Sample Tag: 1278 E. Stanley Rd - SINK - 20241017

Collected Date/Time: 10/17/2024 08:45

Matrix: Drinking Water

COC Reference: 172705

### Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	250mL Plastic	Trizma	Yes	4.3	IR
1	125mL Plastic	HNO3	Yes	4.3	IR

### Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Sample Amount*	300.32 ml	E537.1	10/23/24 11:00	PTW	
pH check for DW PFAs*	7	N/A	10/23/24 11:00	KYD	
Metal Digestion	Completed	SW3015A	10/23/24 15:45	CCM	

### Metals

Method: E200.8, Run Date: 10/23/24 16:40, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Arsenic	Not detected	0.002		mg/L	2	7440-38-2		0.010

### Organics

PFAs Drinking Water, Method: E537.1, Run Date: 10/24/24 16:17, Analyst: KYD

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
PFHxA	Not detected	2		ng/L	1	307-24-4		
PFBS	Not detected	2		ng/L	1	375-73-5		
PFHpA	Not detected	2		ng/L	1	375-85-9		
PFOA	Not detected	2		ng/L	1	335-67-1		4.0
PFHxS	Not detected	2		ng/L	1	355-46-4		10
PFNA	Not detected	2		ng/L	1	375-95-1		10
PFDA	Not detected	2		ng/L	1	335-76-2		
N-MeFOSAA	Not detected	2		ng/L	1	2355-31-9		
EtFOSAA*	Not detected	2		ng/L	1	2991-50-6		
PFOS	Not detected	2		ng/L	1	1763-23-1		4.0
PFUnDA	Not detected	2		ng/L	1	2058-94-8		
PFDoDA	Not detected	2		ng/L	1	307-55-1		
PFTTrDA	Not detected	2		ng/L	1	72629-94-8		
PFTeDA	Not detected	2		ng/L	1	376-06-7		
11Cl-PF3OUdS	Not detected	2		ng/L	1	763051-92-9		
9Cl-PF3ONS	Not detected	2		ng/L	1	756426-58-1		
ADONA	Not detected	2		ng/L	1	919005-14-4		
HFPO-DA	Not detected	2		ng/L	1	13252-13-6		10



# Analytical Laboratory Report

**Lab Sample ID: S67529.02**

Sample Tag: 1278 E. Stanley Rd - RAW - 20241017

Collected Date/Time: 10/17/2024 09:00

Matrix: Drinking Water

COC Reference: 172705

**Sample Containers**

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	250mL Plastic	Trizma	Yes	4.3	IR
1	125mL Plastic	HNO3	Yes	4.3	IR

**Extraction / Prep.**

Parameter	Result	Method	Run Date	Analyst	Flags
Sample Amount*	285.10 ml	E537.1	10/23/24 11:00	PTW	
pH check for DW PFAs*	7	N/A	10/23/24 11:00	KYD	
Metal Digestion	Completed	SW3015A	10/23/24 15:45	CCM	

**Metals**

**Method: E200.8, Run Date: 10/23/24 16:41, Analyst: CCM**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
Arsenic	0.012	0.002		mg/L	2	7440-38-2	!	0.010

**Organics**

**PFAs Drinking Water, Method: E537.1, Run Date: 10/24/24 16:47, Analyst: KYD**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
PFHxA	Not detected	2		ng/L	1	307-24-4		
PFBS	Not detected	2		ng/L	1	375-73-5		
PFHpA	Not detected	2		ng/L	1	375-85-9		
PFOA	Not detected	2		ng/L	1	335-67-1		4.0
PFHxS	Not detected	2		ng/L	1	355-46-4		10
PFNA	Not detected	2		ng/L	1	375-95-1		10
PFDA	Not detected	2		ng/L	1	335-76-2		
N-MeFOSAA	Not detected	2		ng/L	1	2355-31-9		
EtFOSAA*	Not detected	2		ng/L	1	2991-50-6		
PFOS	33	2		ng/L	1	1763-23-1	!	4.0
PFUnDA	Not detected	2		ng/L	1	2058-94-8		
PFDoDA	Not detected	2		ng/L	1	307-55-1		
PFTTrDA	Not detected	2		ng/L	1	72629-94-8		
PFTeDA	Not detected	2		ng/L	1	376-06-7		
11Cl-PF3OUdS	Not detected	2		ng/L	1	763051-92-9		
9Cl-PF3ONS	Not detected	2		ng/L	1	756426-58-1		
ADONA	Not detected	2		ng/L	1	919005-14-4		
HFPO-DA	Not detected	2		ng/L	1	13252-13-6		10

!-Result is outside of stated limit criteria



# Analytical Laboratory Report

Lab Sample ID: S67529.03

Sample Tag: Field Blank - 20241017

Collected Date/Time: 10/17/2024 09:02

Matrix: Water

COC Reference: 172705

### Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	250mL Plastic	Trizma	Yes	4.3	IR

### Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Sample Amount*	279.00 ml	E537.1	10/23/24 11:00	PTW	
pH check for DW PFAs*	7	N/A	10/23/24 11:00	KYD	

### Organics

**PFAs Drinking Water, Method: E537.1, Run Date: 10/24/24 16:02, Analyst: KCV**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	Limits
PFHxA*	Not detected	2		ng/L	1	307-24-4		
PFBS*	Not detected	2		ng/L	1	375-73-5		
PFHpA*	Not detected	2		ng/L	1	375-85-9		
PFOA*	Not detected	2		ng/L	1	335-67-1		4.0
PFHxS*	Not detected	2		ng/L	1	355-46-4		10
PFNA*	Not detected	2		ng/L	1	375-95-1		10
PFDA*	Not detected	2		ng/L	1	335-76-2		
N-MeFOSAA*	Not detected	2		ng/L	1	2355-31-9		
EtFOSAA*	Not detected	2		ng/L	1	2991-50-6		
PFOS*	Not detected	2		ng/L	1	1763-23-1		4.0
PFUnDA*	Not detected	2		ng/L	1	2058-94-8		
PFDoDA*	Not detected	2		ng/L	1	307-55-1		
PFTTrDA*	Not detected	2		ng/L	1	72629-94-8		
PFTeDA*	Not detected	2		ng/L	1	376-06-7		
11Cl-PF3OUdS*	Not detected	2		ng/L	1	763051-92-9		
9Cl-PF3ONS*	Not detected	2		ng/L	1	756426-58-1		
ADONA*	Not detected	2		ng/L	1	919005-14-4		
HFPO-DA*	Not detected	2		ng/L	1	13252-13-6		10

# Merit Laboratories Login Checklist

Lab Set ID:S67529

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

Client:RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Submitted: 10/17/2024 16:20 Login User: BJB

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 4.3 |
| 02. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Received on ice/ cooling process begun                 |
| 03. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples shipped  |
| 04. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples left in 24 hr. drop box                        |
| 05. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Are there custody seals/tape or is the drop box locked |

## Chain of Custody

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

## Preservation

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

## Bottle Conditions

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

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

Client Review By: \_\_\_\_\_ Date: \_\_\_\_\_

# Merit Laboratories Bottle Preservation Check

Lab Set ID: S67529      Submitted: 10/17/2024 16:20

Client: RAMBOLL (Ramboll Americas)

Project: RACER Coldwater Road

Initial Preservation Check: 10/17/2024 16:47 BJB

Preservation Recheck (E200.8): N/A

Attention: Clifford Yantz

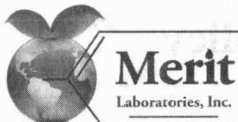
Address: Ramboll Americas  
2090 Commonwealth Blvd  
Ann Arbor, MI 48105

Phone: 313-333-0211

FAX:

Email: Clifford.Yantz@ramboll.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S67529.01	125mL Plastic HNO3	<2			
S67529.02	125mL Plastic HNO3	<2			



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

C.O.C. PAGE # 1 OF 1

172705

**REPORT TO**

**CHAIN OF CUSTODY RECORD**

**INVOICE TO**

CONTACT NAME *Clifford Yantze / Kevin Schneider*  
 COMPANY *Ramboll*  
 ADDRESS *2090 Commonwealth Blvd*  
 CITY *Ann Arbor* STATE *Mi* ZIP CODE *48105*  
 PHONE NO. CELL NO. *733-333-0211* P.O. NO. *19400 8845 Task 37*  
 E-MAIL ADDRESS *Kevin.Schneider@Ramboll.com* *Clifford.Yantze@Ramboll.com* QUOTE NO.

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 *RAIER Coldwater Road* SAMPLER(S) - PLEASE PRINT/SIGN NAME *Kevin Schneider [Signature]*  
 TURNAROUND TIME REQUIRED  1 DAY  2 DAYS  3 DAYS  STANDARD  OTHER  
 DELIVERABLES REQUIRED  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=WIPE 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 <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	MeOH	OTHER	P-FAS (5m)	Arsenic
	DATE	TIME												
<i>67529.01</i>	<i>10/17/24</i>	<i>845</i>	<i>1278 E. Stanley Rd - SINK - 20241017</i>	<i>DW</i>	<i>4</i>			<i>1</i>				<i>3</i>	<i>X</i>	<i>X</i>
<i>.02</i>	<i>↓</i>	<i>900</i>	<i>1278 E. Stanley Rd - RAW - 20241017</i>	<i>DW</i>	<i>4</i>			<i>1</i>				<i>3</i>	<i>X</i>	<i>X</i>
<i>.03</i>	<i>↓</i>	<i>902</i>	<i>Field Blank - 20241017</i>	<i>L</i>	<i>1</i>							<i>1</i>	<i>X</i>	
<i>BS</i>														
<i>PLEASE PROVIDE EDD</i>														

RELINQUISHED BY: *[Signature]*  Sampler DATE *10/17/24* TIME *14:30*  
 RECEIVED BY: *[Signature]* DATE *10/17/24* TIME *14:20*  
 RELINQUISHED BY: *[Signature]* DATE *10/17/24* TIME *16:14*  
 RECEIVED BY: DATE TIME

RELINQUISHED BY: DATE TIME  
 SIGNATURE/ORGANIZATION  
 RECEIVED BY: *Barbe Ball* DATE *10/17/2024* TIME *16:20*  
 SIGNATURE/ORGANIZATION  
 SEAL NO. SEAL INTACT YES  NO  INITIALS  
 NOTES: TEMP. ON ARRIVAL *4.3*



# Quality Control Report

Report ID: QC-S67529-01  
Generated on 10/31/2024

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

Report Produced by  
Merit Laboratories  
2680 East Lansing Drive  
East Lansing, MI 48823

Phone: 313-333-0211 FAX:

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

## Report Summary

Lab Sample ID(s): S67529.01-S67529.03  
Project: RACER Coldwater Road  
Submitted Date/Time: 10/17/2024 16:20  
Sampled by: Kevin Schneider  
P.O. #: 1940008845 TASK37

## QC Report Sections

- Cover Page (Page 1)
- Analysis Summary (Pages 2-4)
- Prep Batch Summary (Page 5)
- Surrogates per Lab Sample (Pages 6-8)
- Surrogates per QC Sample (Page 9)
- Internal Standards per Lab Sample (Pages 10-12)
- Internal Standards per QC Sample (Page 13)
- Batch QC Results (Pages 14-16)

## 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: S67529.01**

Sample Tag: 1278 E. Stanley Rd - SINK - 20241017

Collected Date/Time: 10/17/2024 08:45

Matrix: Drinking Water

COC Reference: 172705

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<b>Metals</b>						
Arsenic	E200.8	10/23/24 16:40	MT4-24-1023B	MTD-102324-6	No	BLK/LCS/MS/MSD
<b>Organics - Volatiles</b>						
PFAs Drinking Water	E537.1	10/24/24 16:17	CI241024DW	PD241023W1	Yes	BLK/LCS/MS/DUP

# QC Report - Analysis Summary

**Lab Sample ID: S67529.02**

Sample Tag: 1278 E. Stanley Rd - RAW - 20241017

Collected Date/Time: 10/17/2024 09:00

Matrix: Drinking Water

COC Reference: 172705

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<b>Metals</b>						
Arsenic	E200.8	10/23/24 16:41	MT4-24-1023B	MTD-102324-6	No	BLK/LCS/MS/MSD
<b>Organics - Volatiles</b>						
PFAs Drinking Water	E537.1	10/24/24 16:47	CI241024DW	PD241023W1	Yes	BLK/LCS/MS/DUP

# QC Report - Analysis Summary

Lab Sample ID: S67529.03

Sample Tag: Field Blank - 20241017

Collected Date/Time: 10/17/2024 09:02

Matrix: Water

COC Reference: 172705

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<b>Organics - Volatiles</b>						
PFAs Drinking Water	E537.1	10/24/24 16:02	CI241024DW	PD241023W1	Yes	BLK/LCS/MS/DUP

# QC Report - Prep Batch Summary

## Metals, Prep Batch ID: MTD-102324-6

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S67529.01	Arsenic	E200.8	10/23/24 16:40	MT4-24-1023B
S67529.02	Arsenic	E200.8	10/23/24 16:41	MT4-24-1023B

## Organics - Volatiles, Prep Batch ID: PD241023W1

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

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S67529.01	PFAs Drinking Water	E537.1	10/24/24 16:17	CI241024DW
S67529.02	PFAs Drinking Water	E537.1	10/24/24 16:47	CI241024DW
S67529.03	PFAs Drinking Water	E537.1	10/24/24 16:02	CI241024DW

# QC Report - Surrogates per Lab Sample

Lab Sample ID: S67529.01

Sample Tag: 1278 E. Stanley Rd - SINK - 20241017

Collected Date/Time: 10/17/2024 08:45

Matrix: Drinking Water

COC Reference: 172705

## Organics - Volatiles, Analysis: PFAs Drinking Water

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:17, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
C13PFDA		87.7	70.0	130.0
C13PFHxA		95.4	70.0	130.0
d5NEtFOSAA		86.7	70.0	130.0
13C-HFPO-DA		90.3	70.0	130.0

# QC Report - Surrogates per Lab Sample

Lab Sample ID: S67529.02

Sample Tag: 1278 E. Stanley Rd - RAW - 20241017

Collected Date/Time: 10/17/2024 09:00

Matrix: Drinking Water

COC Reference: 172705

## Organics - Volatiles, Analysis: PFAs Drinking Water

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:47, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
C13PFDA		84.6	70.0	130.0
C13PFHxA		93.4	70.0	130.0
d5NEtFOSAA		84.5	70.0	130.0
13C-HFPO-DA		90.6	70.0	130.0

# QC Report - Surrogates per Lab Sample

Lab Sample ID: S67529.03

Sample Tag: Field Blank - 20241017

Collected Date/Time: 10/17/2024 09:02

Matrix: Water

COC Reference: 172705

## Organics - Volatiles, Analysis: PFAs Drinking Water

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:02, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
C13PFDA		91.4	70.0	130.0
C13PFHxA		94.8	70.0	130.0
d5NEtFOSAA		92.2	70.0	130.0
13C-HFPO-DA		89.1	70.0	130.0

# QC Report - Surrogates per QC Sample

## Organics - Volatiles, Prep Batch ID: PD241023W1

QC Types: BLK/LCS/MS/DUP

### Blank (BLK)

Lab Sample ID: CI241024DW.BLK241023

Run in Batch: CI241024DW, Run Date: 10/24/2024 14:33, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
C13PFDA		91.5	70.0	130.0
C13PFHxA		101.5	70.0	130.0
d5NEtFOSAA		94.9	70.0	130.0
13C-HFPO-DA		101.1	70.0	130.0

### Laboratory Control Sample (LCS)

Lab Sample ID: CI241024DW.LCS241023

Run in Batch: CI241024DW, Run Date: 10/24/2024 14:48, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
C13PFDA		86.1	70.0	130.0
C13PFHxA		100.4	70.0	130.0
d5NEtFOSAA		82.6	70.0	130.0
13C-HFPO-DA		96.6	70.0	130.0

### Matrix Spike (MS)

Lab Sample ID: CI241024DW.6752601M, Parent Sample ID: S67526.01

Run in Batch: CI241024DW, Run Date: 10/24/2024 15:32, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
C13PFDA		92.8	70.0	130.0
C13PFHxA		100.8	70.0	130.0
d5NEtFOSAA		83.9	70.0	130.0
13C-HFPO-DA		92.1	70.0	130.0

### Duplicate (DUP)

Lab Sample ID: CI241024DW.6752901D, Parent Sample ID: S67529.01

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:32, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
C13PFDA		91.9	70.0	130.0
C13PFHxA		103.7	70.0	130.0
d5NEtFOSAA		91.4	70.0	130.0
13C-HFPO-DA		99.7	70.0	130.0

# QC Report - Internal Standards per Lab Sample

Lab Sample ID: S67529.01

Sample Tag: 1278 E. Stanley Rd - SINK - 20241017

Collected Date/Time: 10/17/2024 08:45

Matrix: Drinking Water

COC Reference: 172705

## Organics - Volatiles, Analysis: PFAs Drinking Water

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:17, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
C13PFOA		107.5	50.0	150.0
C13PFOS		104.4	50.0	150.0
d3NMeFOSAA		98.0	50.0	150.0

# QC Report - Internal Standards per Lab Sample

Lab Sample ID: S67529.02

Sample Tag: 1278 E. Stanley Rd - RAW - 20241017

Collected Date/Time: 10/17/2024 09:00

Matrix: Drinking Water

COC Reference: 172705

## Organics - Volatiles, Analysis: PFAs Drinking Water

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:47, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
C13PFOA		107.0	50.0	150.0
C13PFOS		103.2	50.0	150.0
d3NMeFOSAA		94.6	50.0	150.0

# QC Report - Internal Standards per Lab Sample

Lab Sample ID: S67529.03

Sample Tag: Field Blank - 20241017

Collected Date/Time: 10/17/2024 09:02

Matrix: Water

COC Reference: 172705

## Organics - Volatiles, Analysis: PFAs Drinking Water

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:02, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
C13PFOA		100.1	50.0	150.0
C13PFOS		97.3	50.0	150.0
d3NMeFOSAA		88.0	50.0	150.0

# QC Report - Internal Standards per QC Sample

## Organics - Volatiles, Prep Batch ID: PD241023W1

QC Types: BLK/LCS/MS/DUP

### Blank (BLK)

Lab Sample ID: CI241024DW.BLK241023

Run in Batch: CI241024DW, Run Date: 10/24/2024 14:33, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
C13PFOA		93.7	50.0	150.0
C13PFOS		97.7	50.0	150.0
d3NMeFOSAA		91.5	50.0	150.0

### Laboratory Control Sample (LCS)

Lab Sample ID: CI241024DW.LCS241023

Run in Batch: CI241024DW, Run Date: 10/24/2024 14:48, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
C13PFOA		93.4	50.0	150.0
C13PFOS		88.9	50.0	150.0
d3NMeFOSAA		90.5	50.0	150.0

### Matrix Spike (MS)

Lab Sample ID: CI241024DW.6752601M, Parent Sample ID: S67526.01

Run in Batch: CI241024DW, Run Date: 10/24/2024 15:32, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
C13PFOA		93.3	50.0	150.0
C13PFOS		89.7	50.0	150.0
d3NMeFOSAA		93.3	50.0	150.0

### Duplicate (DUP)

Lab Sample ID: CI241024DW.6752901D, Parent Sample ID: S67529.01

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:32, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
C13PFOA		108.8	50.0	150.0
C13PFOS		111.5	50.0	150.0
d3NMeFOSAA		102.1	50.0	150.0

# QC Report - Batch QC Results

## Metals, Prep Batch ID: MTD-102324-6

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

### Blank (BLK)

Lab Sample ID: MT4-24-1023B.018.LRB

Run in Batch: MT4-24-1023B, Run Date: 10/23/2024 16:34, Prep Date: 10/23/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	Conc	RDL	Units
Arsenic		ND	0.000638	mg/L

### Laboratory Control Sample (LCS)

Lab Sample ID: MT4-24-1023B.017.LCS

Run in Batch: MT4-24-1023B, Run Date: 10/23/2024 16:29, Prep Date: 10/23/2024, Matrix: Liquid, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
Arsenic		101	85	115

### Matrix Spike (MS)

Lab Sample ID: MT4-24-1023B.022.MS, Parent Sample ID: S67529.02

Run in Batch: MT4-24-1023B, Run Date: 10/23/2024 16:44, Prep Date: 10/23/2024, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL
Arsenic		102	75	125

### Matrix Spike Duplicate (MSD)

Lab Sample ID: MT4-24-1023B.023.MSD, Parent Sample ID: MT4-24-1023B.022.MS

Run in Batch: MT4-24-1023B, Run Date: 10/23/2024 16:44, Prep Date: 10/23/2024, Matrix: Liquid, Dilution: 2

Analyte	Flags	% Rec	LCL	UCL	RPD	RPD CL
Arsenic		103	75	125	1	20

## QC Report - Batch QC Results

**Organics - Volatiles, Prep Batch ID: PD241023W1**

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

**Blank (BLK)**

Lab Sample ID: CI241024DW.BLK241023

Run in Batch: CI241024DW, Run Date: 10/24/2024 14:33, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	Conc	RDL	Units
PFBS		ND	2	ng/l
PFHxA		ND	2	ng/l
HFPO-DA		ND	2	ng/l
PFHpA		ND	2	ng/l
PFHxS		ND	2	ng/l
ADONA		ND	2	ng/l
PFOA		ND	2	ng/l
PFOS		ND	2	ng/l
PFNA		ND	2	ng/l
9CL-PF3ONS		ND	2	ng/l
PFDA		ND	2	ng/l
N-MeFOSAA		ND	2	ng/l
EtFOSAA		ND	2	ng/l
PFUnDA		ND	2	ng/l
11CL-PF3OUdS		ND	2	ng/l
PFDoDA		ND	2	ng/l
PFTTrDA		ND	2	ng/l
PFTeDA		ND	2	ng/l

**Laboratory Control Sample (LCS)**

Lab Sample ID: CI241024DW.LCS241023

Run in Batch: CI241024DW, Run Date: 10/24/2024 14:48, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFBS		99.0	70.0	130.0
PFHxA		98.0	70.0	130.0
HFPO-DA		97.5	70.0	130.0
PFHpA		93.0	70.0	130.0
PFHxS		99.0	70.0	130.0
ADONA		96.0	70.0	130.0
PFOA		94.0	70.0	130.0
PFOS		94.5	70.0	130.0
PFNA		89.5	70.0	130.0
9CL-PF3ONS		96.5	70.0	130.0
PFDA		89.5	70.0	130.0
N-MeFOSAA		86.5	70.0	130.0
EtFOSAA		86.5	70.0	130.0
PFUnDA		81.0	70.0	130.0
11CL-PF3OUdS		89.0	70.0	130.0
PFDoDA		81.5	70.0	130.0
PFTTrDA		72.5	70.0	130.0
PFTeDA		81.0	70.0	130.0

## QC Report - Batch QC Results

### Organics - Volatiles, Prep Batch ID: PD241023W1 (continued)

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

#### Matrix Spike (MS)

Lab Sample ID: CI241024DW.6752601M, Parent Sample ID: S67526.01

Run in Batch: CI241024DW, Run Date: 10/24/2024 15:32, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	% Rec	LCL	UCL
PFHxA		97.0	70.0	130.0
PFBS		100.0	70.0	130.0
PFHpA		99.4	70.0	130.0
PFOA		98.2	70.0	130.0
PFHxS		100.6	70.0	130.0
PFNA		89.2	70.0	130.0
PFDA		92.8	70.0	130.0
N-MeFOSAA		87.3	70.0	130.0
EtFOSAA		85.5	70.0	130.0
PFOS		95.8	70.0	130.0
PFUnDA		85.5	70.0	130.0
PFDoDA		79.5	70.0	130.0
PFTTrDA		78.9	70.0	130.0
PFTeDA		83.7	70.0	130.0
11CL-PF3OUdS		94.0	70.0	130.0
9CL-PF3ONS		98.8	70.0	130.0
ADONA		97.0	70.0	130.0
HFPO-DA		94.6	70.0	130.0

#### Duplicate (DUP)

Lab Sample ID: CI241024DW.6752901D, Parent Sample ID: S67529.01

Run in Batch: CI241024DW, Run Date: 10/24/2024 16:32, Prep Date: 10/23/2024, Matrix: WW, Dilution: 1

Analyte	Flags	RPD	RPD CL
PFHxA		NC	30.0
PFBS		NC	30.0
PFHpA		NC	30.0
PFOA		NC	30.0
PFHxS		NC	30.0
PFNA		NC	30.0
PFDA		NC	30.0
N-MeFOSAA		NC	30.0
EtFOSAA		NC	30.0
PFOS		NC	30.0
PFUnDA		NC	30.0
PFDoDA		NC	30.0
PFTTrDA		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

