

Former Fort Devens, Stage 2A Validation – Electronic Data Loaded Between 9/24/2018 and 4/17/2020

KOMAN, PFAS RI, Vertical Profile Samples-Cold Spring Brook

Cold Spring Brook

	Locations: 75VP-20-02	75VP-20-02	75VP-20-02	75VP-20-02	75VP-20-02
Field Sample ID:	75VP-20-02-13-15	75VP-20-02-18-20	75VP-20-02-23-25	75VP-20-02-28-30	75VP-20-02-33-35
Sample Begin Depth:	13.00	18.00	23.00	28.00	33.00
Sample End Depth:	15.00	20.00	25.00	30.00	35.00
Sample Date:	03/30/2020	03/30/2020	03/30/2020	03/30/2020	03/30/2020
<b>PFAS (ng/L)</b>					
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	18.0 U	17.0 U	18.0 U	53.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.50 U	9.10 U	8.70 U	8.90 U	26.0 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.50 U	9.10 U	8.70 U	8.90 U	26.0 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.50 U	9.10 U	8.70 U	8.90 U	26.0 U
Perfluorobutanesulfonic acid (PFBS)	<b>12.0</b>	<b>6.20</b>	<b>8.70</b>	<b>35.0</b>	<b>5.30</b>
Perfluorodecanoic acid (PFDA)	0.950 U	0.910 U	0.870 U	0.890 U	2.60 U
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.30 U	1.30 U	4.00 U
Perfluoroheptanoic acid (PFHpA)	<b>19.0</b>	<b>12.0</b>	<b>16.0</b>	<b>33.0</b>	<b>4.10 J</b>
Perfluorohexanesulfonic acid (PFHxS)	<b>640</b>	<b>420</b>	<b>470</b>	<b>730</b>	<b>150</b>
Perfluorohexanoic acid (PFHxA)	<b>69.0</b>	<b>42.0</b>	<b>55.0</b>	<b>100</b>	<b>12.0</b>
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.30 U	1.30 U	4.00 U
Perfluorooctanesulfonic acid (PFOS)	<b>170</b>	<b>130</b>	<b>96.0</b>	<b>20.0</b>	<b>19.0</b>
Perfluorooctanoic acid (PFOA)	<b>120</b>	<b>82.0</b>	<b>82.0</b>	<b>81.0</b>	<b>18.0</b>
Perfluorotetradecanoic acid (PFTA)	2.90 U	2.70 U	2.60 U	2.70 U	7.90 U
Perfluorotridecanoic acid (PFTrDA)	2.90 U	2.70 U	2.60 U	2.70 U	7.90 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.30 U	1.30 U	4.00 U

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	Locations: 75VP-20-02	75VP-20-02	75VP-20-03	75VP-20-03	75VP-20-03
<b>Field Sample ID:</b>	75VP-20-02-4-6	75VP-20-02-8-10	75VP-20-03-10-12	75VP-20-03-15-17	75VP-20-03-20-22
<b>Sample Begin Depth:</b>	4.00	8.00	10.00	15.00	20.00
<b>Sample End Depth:</b>	6.00	10.00	12.00	17.00	22.00
<b>Sample Date:</b>	03/30/2020	03/30/2020	03/31/2020	03/31/2020	03/31/2020
<b>PFAS (ng/L)</b>					
6:2 Fluorotelomer sulfonate (6:2 FTS)	26.0 U	55.0 U	20.0 U	42.0 U	53.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	13.0 U	27.0 U	9.80 U	21.0 U	27.0 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	13.0 U	27.0 U	9.80 U	21.0 U	27.0 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	13.0 U	27.0 U	9.80 U	21.0 U	27.0 U
Perfluorobutanesulfonic acid (PFBS)	<b>11.0</b>	<b>13.0</b>	<b>9.50</b>	<b>7.10</b>	<b>10.0</b>
Perfluorodecanoic acid (PFDA)	1.30 U	2.70 U	0.980 U	2.10 U	2.70 U
Perfluorododecanoic acid (PFDoA)	1.90 U	4.10 U	1.50 U	3.10 U	4.00 U
Perfluoroheptanoic acid (PFHpA)	<b>9.50</b>	<b>23.0</b>	<b>19.0</b>	<b>15.0</b>	<b>18.0</b>
Perfluorohexanesulfonic acid (PFHxS)	<b>62.0</b>	<b>670</b>	<b>610</b>	<b>360</b>	<b>490</b>
Perfluorohexanoic acid (PFHxA)	<b>13.0</b>	<b>73.0</b>	<b>63.0</b>	<b>46.0</b>	<b>53.0</b>
Perfluorononanoic acid (PFNA)	1.90 U	4.10 U	1.50 U	3.10 U	4.00 U
Perfluorooctanesulfonic acid (PFOS)	<b>22.0</b>	<b>180</b>	<b>150</b>	<b>75.0</b>	<b>63.0</b>
Perfluorooctanoic acid (PFOA)	<b>20.0</b>	<b>140</b>	<b>93.0</b>	<b>65.0</b>	<b>76.0</b>
Perfluorotetradecanoic acid (PFTA)	3.90 U	8.20 U	2.90 U	6.20 U	8.00 U
Perfluorotridecanoic acid (PFTrDA)	3.90 U	8.20 U	2.90 U	6.20 U	8.00 U
Perfluoroundecanoic acid (PFUnA)	1.90 U	4.10 U	1.50 U	3.10 U	4.00 U

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	75VP-20-03	75VP-20-03	75VP-20-03	75VP-20-03 (FD)	75VP-20-04
<b>Locations:</b>	75VP-20-03	75VP-20-03	75VP-20-03	75VP-20-03 (FD)	75VP-20-04
<b>Field Sample ID:</b>	75VP-20-03-25-27	75VP-20-03-30-32	75VP-20-03-5-7	A1-VP-DUP-1-3312020	75VP-20-04-10-12
<b>Sample Begin Depth:</b>	25.00	30.00	5.00	20.00	10.00
<b>Sample End Depth:</b>	27.00	32.00	7.00	22.00	12.00
<b>Sample Date:</b>	03/31/2020	03/31/2020	03/31/2020	03/31/2020	04/01/2020
<b>PFAS (ng/L)</b>					
6:2 Fluorotelomer sulfonate (6:2 FTS)	31.0 U	53.0 U	19.0 U	54.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	16.0 U	27.0 U	9.30 U	27.0 U	9.00 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	16.0 U	27.0 U	9.30 U	27.0 U	9.00 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	16.0 U	27.0 U	9.30 U	27.0 U	9.00 U
Perfluorobutanesulfonic acid (PFBS)	<b>44.0</b>	<b>16.0</b>	<b>8.50</b>	<b>10.0</b>	<b>9.20</b>
Perfluorodecanoic acid (PFDA)	1.60 U	2.70 U	4.70 U	2.70 U	0.900 U
Perfluorododecanoic acid (PFDoA)	2.40 U	4.00 U	1.40 U	4.10 U	1.30 U
Perfluoroheptanoic acid (PFHpA)	<b>32.0</b>	<b>12.0</b>	<b>18.0</b>	<b>17.0</b>	<b>15.0</b>
Perfluorohexanesulfonic acid (PFHxS)	<b>660</b>	<b>230</b>	<b>580</b>	<b>490</b>	<b>400</b>
Perfluorohexanoic acid (PFHxA)	<b>100</b>	<b>37.0</b>	<b>59.0</b>	<b>52.0</b>	<b>49.0</b>
Perfluorononanoic acid (PFNA)	2.40 U	4.00 U	1.40 U	4.10 U	1.30 U
Perfluorooctanesulfonic acid (PFOS)	<b>26.0</b>	<b>22.0</b>	<b>170</b>	<b>66.0</b>	<b>65.0</b>
Perfluorooctanoic acid (PFOA)	<b>81.0</b>	<b>31.0</b>	<b>110</b>	<b>77.0</b>	<b>68.0</b>
Perfluorotetradecanoic acid (PFTA)	4.70 U	8.00 U	2.80 U	8.20 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)	4.70 U	8.00 U	2.80 U	8.20 U	<b>1.00 J</b>
Perfluoroundecanoic acid (PFUnA)	2.40 U	4.00 U	7.00 U	4.10 U	1.30 U

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	75VP-20-04	75VP-20-04	75VP-20-04	75VP-20-04	75VP-20-04
<b>Locations:</b>	75VP-20-04	75VP-20-04	75VP-20-04	75VP-20-04	75VP-20-04
<b>Field Sample ID:</b>	75VP-20-04-15-17	75VP-20-04-20-22	75VP-20-04-25-27	75VP-20-04-30-32	75VP-20-04-5-7
<b>Sample Begin Depth:</b>	15.00	20.00	25.00	30.00	5.00
<b>Sample End Depth:</b>	17.00	22.00	27.00	32.00	7.00
<b>Sample Date:</b>	04/01/2020	04/01/2020	04/01/2020	04/01/2020	04/01/2020
<b>PFAS (ng/L)</b>					
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	18.0 U	17.0 U	39.0 U	21.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	8.80 U	9.00 U	8.70 U	20.0 U	10.0 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	8.80 U	9.00 U	8.70 U	20.0 U	10.0 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	8.80 U	9.00 U	8.70 U	20.0 U	10.0 U
Perfluorobutanesulfonic acid (PFBS)	<b>6.10</b>	<b>16.0</b>	<b>33.0</b>	<b>2.70 J</b>	<b>18.0</b>
Perfluorodecanoic acid (PFDA)	0.880 U	0.900 U	0.870 U	2.00 U	1.00 U
Perfluorododecanoic acid (PFDoA)	1.30 U	1.30 U	1.30 U	2.90 U	1.60 U
Perfluoroheptanoic acid (PFHpA)	<b>11.0</b>	<b>22.0</b>	<b>10.0</b>	<b>1.90 J</b>	<b>18.0</b>
Perfluorohexanesulfonic acid (PFHxS)	<b>240</b>	<b>540</b>	<b>200</b>	<b>45.0 J</b>	<b>420</b>
Perfluorohexanoic acid (PFHxA)	<b>32.0</b>	<b>58.0</b>	<b>54.0</b>	<b>6.10</b>	<b>58.0</b>
Perfluorononanoic acid (PFNA)	1.30 U	1.30 U	1.30 U	2.90 U	1.60 U
Perfluorooctanesulfonic acid (PFOS)	<b>39.0</b>	<b>41.0</b>	<b>2.30 J</b>	<b>5.60 J</b>	<b>29.0</b>
Perfluorooctanoic acid (PFOA)	<b>41.0</b>	<b>71.0</b>	<b>19.0</b>	<b>7.60</b>	<b>63.0</b>
Perfluorotetradecanoic acid (PFTA)	2.60 U	2.70 U	2.60 U	5.90 U	3.10 U
Perfluorotridecanoic acid (PFTrDA)	2.60 U	2.70 U	2.60 U	5.90 U	3.10 U
Perfluoroundecanoic acid (PFUnA)	1.30 U	1.30 U	1.30 U	2.90 U	1.60 U

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Locations: 75VP-20-04 (FD)

Field Sample ID: A1-VP-DUP-1-412020

Sample Begin Depth: 30.00

Sample End Depth: 32.00

Sample Date: 04/01/2020

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**PFAS (ng/L)**

6:2 Fluorotelomer sulfonate (6:2 FTS)	29.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	14.0 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	14.0 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	14.0 U
Perfluorobutanesulfonic acid (PFBS)	<b>2.00 J</b>
Perfluorodecanoic acid (PFDA)	1.40 U
Perfluorododecanoic acid (PFDoA)	2.20 U
Perfluoroheptanoic acid (PFHpA)	<b>1.50 J</b>
Perfluorohexanesulfonic acid (PFHxS)	<b>32.0 J</b>
Perfluorohexanoic acid (PFHxA)	<b>4.50</b>
Perfluorononanoic acid (PFNA)	2.20 U
Perfluorooctanesulfonic acid (PFOS)	<b>4.10 J</b>
Perfluorooctanoic acid (PFOA)	<b>4.80</b>
Perfluorotetradecanoic acid (PFTA)	4.30 U
Perfluorotridecanoic acid (PFTrDA)	4.30 U
Perfluoroundecanoic acid (PFUnA)	2.20 U

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S2AVE: EPA Stage 2A electronic review of data as defined in 'Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use', 13 January 2009. Data elements present in the Electronic Data Deliverable (EDD) and included in the project's electronic Quality Assurance Project Plan (eQAPP) were evaluated using automated data review software only.

Detects are displayed in bold font

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### Data Qualifier Definitions

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- J: The analyte was positively identified, but the associated numerical value is estimated and represents the approximate concentration of the analyte in the sample.
- U: The analyte was not detected above the reported sample quantitation limit.
- UJ: The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate.
- R: The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

### Units

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MG/KG = milligrams per kilogram  
NG/L = nanograms per liter  
PERCENT = percent  
PPT = parts per thousand  
UG/KG = microgram per kilogram  
UG/L = microgram per liter