

Summary Table: PFAS Concentrations from MassDEP Anvil 10 + 10 Sampling Initiative

Sample collection date	9/22	9/22	9/22	9/22	9/22	10/21	10/21	10/21	10/21	10/22
Sample type	55 gal. drum 1	55 gal. drum 2	sampling device rinse cntrl. for 55 gal. drum 1 and 2	2.5 gal. jug 1	sampling device rinse cntrl. 2.5 gal. jug 1	55 gal. drum 1	55 gal. drum 2	55 gal. drum 3 and duplicate sample	Sampling device rinse cntrl. for 55 gal. drum 1 and 2	2.5 gal. jug 2 and Duplicate sample
PFAS Compound	Concentration in nanograms per liter (ng/L) or part per trillion (ppt)									
Perfluorobutanoic Acid (PFBA)	692	171	ND ND	52.8 J	ND	716	174	230 216	ND ND	59.2 J 62.9 J
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluoropentanoic Acid (PFPeA)	296	76.6 J	0.370 J ND	35.2 J	ND	290	55.4 J	88.7 J 84.7 J	ND ND	41.5 J 41.2 J
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluorohexanoic Acid (PFHxA)	132	41.2 J	0.407 J ND	17.6 J	0.461 J	105	23.7 J	37.4 J 42.3 J	ND ND	19.7 J ND
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluoroheptanoic Acid (PFHpA)	53.4 J	23.6 J	ND ND	ND	ND	47.6 J	ND	ND 19.2 J	ND ND	ND ND
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ND ND	52.8 J	ND	ND	ND	ND ND	ND ND	59.2 J 57 J
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ND ND	ND	ND	29.8 J	31.6 J	27.6 J 28.9 J	ND ND	ND ND
Perfluorooctanoic Acid (PFOA)	25.7 J	ND	ND ND	ND	ND	21.8 J	ND	ND ND	ND ND	ND ND
Perfluoroheptanesulfonic Acid (PFHpS)	107	100	ND ND	125	ND	ND	98.9	63.0 J 52.0 J	ND ND	138 108
Perfluorononanoic Acid (PFNA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluorooctanesulfonic Acid (PFOS)	73.1 J	ND	ND ND	76.2 J	2.73	ND	ND	ND ND	3.31 ND	132 141
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND

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1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluorodecanoic Acid (PFDA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluoroundecanoic Acid (PFUnA)	13.8 J	ND	ND ND	21.5 J	ND	184	ND	ND ND	ND ND	ND ND
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
Perfluorododecanoic Acid (PFDoA)	ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND ND	ND ND

Table notes: ND = not detected; J = estimated value; Tube rinse cntrl. = sampling device rinsates performed at sampling site prior to sample collection to assess any sampling device contamination. All field and trip blanks were generally non-detect and are not presented. In one, PFOS was detected at 3.3 ppt.

All samples were analyzed by Alpha Analytical, Mansfield, MA. using a modified version of EPA Method 533. Stated reporting limits for product samples were below 100 ng/L with detection limits ranging from approximately 5-50 ng/L depending on the analyte. QA/QC issues were appropriately noted by Alpha Analytical in the lab reports but all QA/QC elements have not been fully reviewed by MassDEP at this time.

The September and October samples were collected by two different contractors using new sampling devices. The October 2.5 gallon jug samples were directly poured into the sample collection tubes.

Initial samples that were collected on 9/2 are not presented. These were invalidated because appropriate field controls were not collected by the contractor and results were consistent with samples being contaminated during collection. In that round, five to thirteen PFAS were detected in duplicate analyses of the single drum 1 sample collected, with a maximum concentration of 25 ug/L (25,000 ppt) for PFBA.