

## December 2020 Monitoring Well PFAS Analytical Results

Sample Name			MW-1-15	MW-1-40	MW-2-20	MW-2-30	MW-3-15	MW-3-40	MW-4-20	MW-5-20	MW-
Sample Date			12/30/2020	12/30/2020	12/31/2020	12/31/2020	12/30/2020	12/30/2020	12/31/2020	1/1/2021	1/1/2021 (DUP)
Analyte	EPA LHA	Units	Water	Water	Water	Water	Water	Water	Water	Water	Water
Perfluorohexanesulfonic acid (PFHxS)	-	ng/L	<1.8	1.1 J	64	<1.8	3.6	14	0.65 J	1.3 J	2.6
Perfluorohexanoic acid (PFHxA)	-	ng/L	<1.8	<1.8	63	<1.8	5.1	1.6 J	<1.8	<1.8	<1.7
Perfluoroheptanoic acid (PFHpA)	-	ng/L	<1.8	<1.8	54	0.70 J	2.7	0.43 J	<1.8	<1.8	0.29 J*
Perfluorononanoic acid (PFNA)	-	ng/L	<1.8	<1.8	4.0	0.48 J	<1.8	<1.8	<1.8	<1.8	<1.7
Perfluorobutanesulfonic acid (PFBS)	-	ng/L	0.20 J	<1.8	9.5	1.4 J	1.2 J	1.2 J	0.46 J*	0.44 J	0.37 J
Perfluorodecanoic acid (PFDA)	-	ng/L	<1.8	<1.8	0.34 J	<1.8	<1.8	<1.8	<1.8	<1.8	<1.7
Perfluoroundecanoic acid (PFUnA)	-	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.7
Perfluorododecanoic acid (PFDoA)	-	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.7
Perfluorotridecanoic acid (PFTrDA)	-	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.7
Perfluorotetradecanoic acid (PFTeA)	-	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.7
N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	-	ng/L	<4.5	<4.6	<4.4	<4.5	<4.5	<4.5	<4.5	<4.5	<4.3
N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	-	ng/L	<4.5	<4.6	<4.4	<4.5	<4.5	<4.5	<4.5	<4.5	<4.3
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	-	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.7
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	-	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.7
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	-	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.7
Hexafluoropropylene oxide dimer acid (HFPO-DA)	-	ng/L	<3.6	<3.7	<3.5	<3.6	<3.6	<3.6	<3.6	<3.6	<3.5
Perfluorooctanesulfonic acid (PFOS)	70†	ng/L	<1.8	0.56 J*	<b>250</b>	<1.8	5.1	13 J*	<1.8	1.7 J	1.3 J*
Perfluorooctanoic acid (PFOA)		ng/L	<1.8	<1.8	<b>67</b>	1.4 J	0.94 J	1.3 J	<1.8	1.0 J	<1.7
LHA Combined (PFOS + PFOA)	70†	ng/L	N/A	0.56 J †‡	<b>317</b>	1.4 J †‡	6.0 J	14 J	N/A	2.7 J	1.3 J †‡

ng/L nanograms per liter, equivalent to parts per trillion

EPA Environmental Protection Agency

LHA Lifetime Health Advisory

† EPA LHA level is 70 ppt for PFOS and PFOA combined.

&lt; Analyte not detected; listed as less than the reporting limit (RL) unless otherwise flagged due to quality-control (QC) failures.

**Bold** Concentration exceeds LHA level.

DUP Field-duplicate sample

J Estimated concentration, detected greater than the method detection limit (MDL) and less than the RL. Flag applied by the laboratory.

J\* Estimated concentration due to quality control failures. Flag applied by Shannon &amp; Wilson, Inc.

‡ Minimum concentration, the LHA Combined concentration includes one or more result that is not detected greater than the MDL.

N/A Not applicable. The LHA Combined concentration could not be calculated; PFOS and PFOA were not detected in the project sample.

## December 2020 Monitoring Well PFAS Analytical Results

Sample Name	6-20		MW-7-20		MW-8-20	MW-9-30	MW-10-20	MW-11-15	MW-12-10		
	Sample Date	Units	1/1/2021	12/30/2020 (DUP)	12/30/2020	1/1/2021	12/30/2020	1/1/2021	12/31/2020	12/31/2020 (DUP)	12/31/2020
Analyte	EPA LHA	Units	Water	Water	Water	Water	Water	Water	Water	Water	Water
Perfluorohexanesulfonic acid (PFHxS)	-	ng/L	2.8	1.1 J	1.0 J	0.62 J	11	5.4	830	29	31
Perfluorohexanoic acid (PFHxA)	-	ng/L	<1.8	1.2 J	1.2 J	<1.7	4.6	5.3	180	13	13
Perfluoroheptanoic acid (PFHpA)	-	ng/L	<1.8	0.89 J	0.91 J	<1.7	2.0	1.8	19	15	15
Perfluorononanoic acid (PFNA)	-	ng/L	<1.8	<1.9	<1.8	<1.7	<1.8	<1.8	2.2	2.5	2.6
Perfluorobutanesulfonic acid (PFBS)	-	ng/L	0.32 J	<1.9	0.43 J	<1.7	0.66 J	0.42 J	35	0.71 J	0.68 J
Perfluorodecanoic acid (PFDA)	-	ng/L	<1.8	<1.9	<1.8	<1.7	<1.8	<1.8	1.3 J	0.65 J	0.51 J
Perfluoroundecanoic acid (PFUnA)	-	ng/L	<1.8	<1.9	<1.8	<1.7	<1.8	<1.8	<1.7	<1.8	<1.8
Perfluorododecanoic acid (PFDoA)	-	ng/L	<1.8	<1.9	<1.8	<1.7	<1.8	<1.8	<1.7	<1.8	<1.8
Perfluorotridecanoic acid (PFTrDA)	-	ng/L	<1.8	<1.9	<1.8	<1.7	<1.8	<1.8	<1.7	<1.8	<1.8
Perfluorotetradecanoic acid (PFTeA)	-	ng/L	<1.8	<1.9	<1.8	<1.7	<1.8	<1.8	<1.7	<1.8	<1.8
N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	-	ng/L	<4.5	<4.8	<4.5	<4.4	<4.5	<4.6	<4.3	<4.6	<4.4
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4,8-Dioxa-3H-perfluorononanoic acid (DONA)	-	ng/L	<1.8	<1.9	<1.8	<1.7	<1.8	<1.8	<1.7	<1.8	<1.8
Hexafluoropropylene oxide dimer acid (HFPO-DA)	-	ng/L	<3.6	<3.8	<3.6	<3.5	<3.6	<3.7	<3.5	<3.7	<3.5
Perfluorooctanesulfonic acid (PFOS)	70†	ng/L	1.2 J*	4.5	4.8	<1.7	<b>92</b>	39	<b>6,100</b>	<b>100</b>	<b>100</b>
Perfluorooctanoic acid (PFOA)		ng/L	<1.8	1.3 J	1.1 J	<1.7	1.0 J	<1.8	<b>92</b>	<b>8.8</b>	<b>9.5</b>
LHA Combined (PFOS + PFOA)	70†	ng/L	1.2 J ‡	5.8 J	5.9 J	N/A	<b>93 J</b>	39 ‡	<b>6192</b>	<b>109</b>	<b>110</b>

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