

Table 1 - July 2023 Water-Supply Well PFAS Analytical Results - Gustavus DOT&PF

Analytical Method	Analyte	DEC Regulatory Limit	Units	NPS Well	PW-012	PW-032	PW-038	PW-039
				NPS Well 7/19/2023	PW-012 7/15/2023	PW-032 7/17/2023	PW-038 7/17/2023	PW-039 7/17/2023
	Perfluorooctanesulfonic acid (PFOS)	70 [‡]	ng/L	5.2 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluorooctanoic acid (PFOA)	70 [‡]	ng/L	3.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	10 [†]	ng/L	<3.8 N*	<3.9 N*	<3.9 N*	<3.8 N*	<3.7 N*
	Perfluorobutanesulfonic acid (PFBS)	2000 [†]	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluorodecanoic acid (PFDA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluorododecanoic acid (PFDoA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluoroheptanoic acid (PFHpA)	N/A	ng/L	1.6 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluorohexanesulfonic acid (PFHxS)	N/A	ng/L	5.1 N*	0.65 N*	<1.9 N*	<1.9 N*	0.56 N*
DoD QSM Table B-15, EPA 537(Mod)	Perfluorohexanoic acid (PFHxA)	N/A	ng/L	2.5 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluorononanoic acid (PFNA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluorotetradecanoic acid (PFTeA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluorotridecanoic acid (PFTrDA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	Perfluoroundecanoic acid (PFUnA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*
	N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	N/A	ng/L	<4.8 N*	<4.9 N*	<4.9 N*	<4.8 N*	<4.6 N*
	N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	N/A	ng/L	<4.8 N*	<4.9 N*	<4.9 N*	<4.8 N*	<4.6 N*

Notes: Results reported from Eurofins Environment Testing work order 320-102821-1.

† Final EPA PFAS LHAs (HFPO/PFBS)

‡ DEC Drinking Water Action Level = 70 ng/L for sum of PFOS and PFOA

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Analytical Method	Analyte	DEC Regulatory Limit	Units	PW-040	PW-045	PW-059	PW-061	PW-203
				PW-040 7/19/2023	PW-045 7/19/2023	PW-059 7/14/2023	PW-061 7/19/2023	PW-203 7/15/2023
DoD QSM Table B-15, EPA 537(Mod)	Perfluorooctanesulfonic acid (PFOS)	70 [‡]	ng/L	<1.9 N*	1.1 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluorooctanoic acid (PFOA)	70 [‡]	ng/L	<1.9 N*	<1.9 N*	0.68 N*	1.5 N*	<1.9 N*
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	10 [†]	ng/L	<3.8 N*	<3.8 N*	<3.8 N*	<3.7 N*	<3.7 N*
	Perfluorobutanesulfonic acid (PFBS)	2000 [†]	ng/L	<1.9 N*	<1.9 N*	1.2 N*	0.37 N*	<1.9 N*
	Perfluorodecanoic acid (PFDA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluorododecanoic acid (PFDoA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluoroheptanoic acid (PFHpA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	0.88 N*	<1.9 N*
	Perfluorohexanesulfonic acid (PFHxS)	N/A	ng/L	<1.9 N*	0.45 N*	1.7 N*	1.0 N*	0.52 N*
	Perfluorohexanoic acid (PFHxA)	N/A	ng/L	<1.9 N*	<1.9 N*	0.89 N*	1.8 N*	<1.9 N*
	Perfluorononanoic acid (PFNA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluorotetradecanoic acid (PFTeA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluorotridecanoic acid (PFTrDA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluoroundecanoic acid (PFUnA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	N/A	ng/L	<4.8 N*	<4.7 N*	<4.7 N*	<4.7 N*	<4.6 N*
	N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	N/A	ng/L	<4.8 N*	<4.7 N*	<4.7 N*	<4.7 N*	<4.6 N*

Notes: Results reported from Eurofins Environment Testing work order 320-102821-1.

† Final EPA PFAS LHAs (HFPO/PFBS)

‡ DEC Drinking Water Action Level = 70 ng/L for sum of PFOS and PFOA

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Analytical Method	Analyte	DEC Regulatory Limit	Units	PW-204.1	PW-205.1	PW-207	PW-208.1	PW-308.1
				PW-204.1 7/19/2023	PW-205.1 7/15/2023	PW-207 7/20/2023	PW-208.1 7/17/2023	PW-308.1 7/17/2023
	Perfluorooctanesulfonic acid (PFOS)	70 [‡]	ng/L	40 N*	<1.9 N*	0.61 N*	15 N*	15 N*
	Perfluorooctanoic acid (PFOA)	70 [‡]	ng/L	1.5 N*	<1.9 N*	<1.9 N*	0.61 N*	0.68 N*
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	10 [†]	ng/L	<3.9 N*	<3.8 N*	<3.8 N*	<3.7 N*	<3.8 N*
	Perfluorobutanesulfonic acid (PFBS)	2000 [†]	ng/L	1.2 N*	<1.9 N*	0.40 N*	0.35 N*	0.34 N*
	Perfluorodecanoic acid (PFDA)	N/A	ng/L	<2.0 N*	<1.9 N*	0.97 N*	<1.9 N*	<1.9 N*
	Perfluorododecanoic acid (PFDoA)	N/A	ng/L	<2.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluoroheptanoic acid (PFHpA)	N/A	ng/L	2.5 N*	<1.9 N*	<1.9 N*	0.55 N*	0.58 N*
	Perfluorohexanesulfonic acid (PFHxS)	N/A	ng/L	15 N*	<1.9 N*	0.48 N*	2.8 N*	2.9 N*
DoD QSM Table B-15, EPA 537(Mod)	Perfluorohexanoic acid (PFHxA)	N/A	ng/L	6.8 N*	<1.9 N*	<1.9 N*	1.4 N*	1.4 N*
	Perfluorononanoic acid (PFNA)	N/A	ng/L	<2.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluorotetradecanoic acid (PFTeA)	N/A	ng/L	<2.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluorotridecanoic acid (PFTrDA)	N/A	ng/L	<2.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	Perfluoroundecanoic acid (PFUnA)	N/A	ng/L	<2.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CI-PF3ONS)	N/A	ng/L	<2.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3OUdS)	N/A	ng/L	<2.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	N/A	ng/L	<2.0 N*	<1.9 N*	<1.9 N*	<1.9 N*	<1.9 N*
	N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	N/A	ng/L	<4.9 N*	<4.8 N*	<4.7 N*	<4.7 N*	<4.7 N*
	N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	N/A	ng/L	<4.9 N*	<4.8 N*	<4.7 N*	<4.7 N*	<4.7 N*

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				PW-211 7/15/2023	PW-212 7/15/2023	PW-219 7/15/2023	PW-319 7/15/2023	PW-230 7/15/2023
DoD QSM Table B-15, EPA 537(Mod)	Perfluorooctanesulfonic acid (PFOS)	70 [‡]	ng/L	<1.9 N*	2.7 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Perfluorooctanoic acid (PFOA)	70 [‡]	ng/L	0.69 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	10 [†]	ng/L	<3.8 N*	<3.7 N*	<3.7 N*	<3.7 N*	<3.8 N*
	Perfluorobutanesulfonic acid (PFBS)	2000 [†]	ng/L	1.0 N*	<1.9 N*	<1.9 N*	<1.8 N*	0.32 N*
	Perfluorodecanoic acid (PFDA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Perfluorododecanoic acid (PFDoA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Perfluoroheptanoic acid (PFHpA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Perfluorohexanesulfonic acid (PFHxS)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	1.5 N*
	Perfluorohexanoic acid (PFHxA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Perfluorononanoic acid (PFNA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Perfluorotetradecanoic acid (PFTeA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Perfluorotridecanoic acid (PFTrDA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	Perfluoroundecanoic acid (PFUnA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CI-PF3ONS)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3OUdS)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	N/A	ng/L	<1.9 N*	<1.9 N*	<1.9 N*	<1.8 N*	<1.9 N*
	N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	N/A	ng/L	<4.7 N*	<4.7 N*	<4.7 N*	<4.6 N*	<4.7 N*
	N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	N/A	ng/L	<4.7 N*	<4.7 N*	<4.7 N*	<4.6 N*	<4.7 N*

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				PW-240 7/16/2023	PW-340 7/16/2023	PW-401 7/17/2023	PW-414 7/20/2023	PW-419 7/15/2023
DoD QSM Table B-15, EPA 537(Mod)	Perfluorooctanesulfonic acid (PFOS)	70 [‡]	ng/L	<1.8 N*	<1.9 N*	8.5 N*	1.6 N*	1.9 N*
	Perfluorooctanoic acid (PFOA)	70 [‡]	ng/L	0.67 N*	0.65 N*	<1.9 N*	<2.0 N*	<1.9 N*
	Hexafluoropropylene oxide dimer acid (HFPO-DA)	10 [†]	ng/L	<3.7 N*	<3.9 N*	<3.7 N*	<3.9 N*	<3.9 N*
	Perfluorobutanesulfonic acid (PFBS)	2000 [†]	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
	Perfluorodecanoic acid (PFDA)	N/A	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
	Perfluorododecanoic acid (PFDoA)	N/A	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
	Perfluoroheptanoic acid (PFHpA)	N/A	ng/L	<1.8 N*	<1.9 N*	0.76 N*	<2.0 N*	<1.9 N*
	Perfluorohexanesulfonic acid (PFHxS)	N/A	ng/L	1.2 N*	1.1 N*	2.6 N*	0.70 N*	0.82 N*
	Perfluorohexanoic acid (PFHxA)	N/A	ng/L	0.67 N*	<1.9 N*	2.3 N*	<2.0 N*	<1.9 N*
	Perfluorononanoic acid (PFNA)	N/A	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
	Perfluorotetradecanoic acid (PFTeA)	N/A	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
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	Perfluoroundecanoic acid (PFUnA)	N/A	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CI-PF3ONS)	N/A	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3OUdS)	N/A	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	N/A	ng/L	<1.8 N*	<1.9 N*	<1.9 N*	<2.0 N*	<1.9 N*
	N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	N/A	ng/L	<4.6 N*	<4.8 N*	<4.7 N*	<4.9 N*	<4.8 N*
	N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	N/A	ng/L	<4.6 N*	<4.8 N*	<4.7 N*	<4.9 N*	<4.8 N*

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