

**Gustavus October 2021 Private Well Analytical Results - PFAS**

Sample Name:			PW-010	PW-012		PW-037	PW-038	PW-039	PW-040	PW-059		PW-205.1		PW-203		PW-211	PW-221	PW-401	PW-414
Analyte	EPA LHA	Units	10/25/2021	10/26/2021	10/26/2021 DUP	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/27/2021	10/27/2021 DUP	10/25/2021	10/25/2021 DUP	10/31/2021	10/31/2021 DUP	10/26/2021	10/26/2021	10/26/2021	10/25/2021
Perfluorohexanesulfonic acid (PFHxS)	—	ng/L	<1.9	2.1	2.2	<2.1	<1.9	<1.9	<2.0	1.5 J	1.4 J	1.9	2.0	<1.8	<1.8	<2.0	<1.9	5.3	1.4 J
Perfluorohexanoic acid (PFHxA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	2.5	2.3	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	2.3	<2.0
Perfluoroheptanoic acid (PFHpA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	1.7 J	1.5 J	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	1.2 J	<2.0
Perfluorononanoic acid (PFNA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
Perfluorobutanesulfonic acid (PFBS)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	1.7 J	1.6 J	0.22 J	0.26 J	<1.8	<1.8	0.51 J	<1.9	0.37 J	<2.0
Perfluorodecanoic acid (PFDA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
Perfluoroundecanoic acid (PFUnA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
Perfluorododecanoic acid (PFDoA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
Perfluorotridecanoic acid (PFTTrDA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
Perfluorotetradecanoic acid (PFTeA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
N-Methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	—	ng/L	<4.9	<4.8	<4.7	<5.2	<4.8	<4.9	<5.1	<4.9	<5.0	<4.7	<4.6	<4.4	<4.5	2.2 J	<4.9	<4.7	<4.9
N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	—	ng/L	<4.9	<4.8	<4.7	<5.2	<4.8	<4.9	<5.1	<4.9	<5.0	<4.7	<4.6	<4.4	<4.5	<5.0	<4.9	<4.7	<4.9
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	—	ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
Hexafluoropropylene oxide dimer acid (HFPO-DA)	—	ng/L	<3.9	<3.8	<3.8	<4.2	<3.9	<3.9	<4.1	<3.9	<4.0	<3.8	<3.7	<3.5	<3.6	<4.0	<3.9	<3.8	<3.9
Perfluorooctanesulfonic acid (PFOS)	70†	ng/L	<1.9	4.8	4.9	<2.1	<1.9	<1.9	<2.0	1.2 J	1.4 J*	2.7	2.6	<1.8	<1.8	0.74 J	<1.9	17	0.91 J
Perfluorooctanoic acid (PFOA)		ng/L	<1.9	<1.9	<1.9	<2.1	<1.9	<1.9	<2.0	5.3	5.3	<1.9	<1.8	<1.8	<1.8	<2.0	<1.9	<1.9	<2.0
LHA Combined (PFOS + PFOA)	70†	ng/L	N/A	4.8 ‡	4.9 ‡	N/A	N/A	N/A	N/A	6.5 J	6.7 J*	2.7 ‡	2.6 ‡	N/A	N/A	0.74 J‡	N/A	17 ‡	0.91 J‡

- Notes: Results reported from Test America work order .
- 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.
  - MDL method detection limit
  - RL Reporting limit
  - DUP Field-duplicate sample
  - < Analyte not detected; listed as <LOQ unless otherwise flagged due to quality-control (QC) failures.
  - J Estimated concentration, detected between the MDL and RL. Flag applied by the laboratory.
  - J\* Estimated concentration due to a laboratory QC failure. Flag applied by Shannon & Wilson, Inc.
  - ‡ more result that is not detected greater than the MDL.
  - N/A because PFOS and PFOA were not detected in the project sample.
  - No applicable regulatory limit exists for the associated analyte.