

PFAS Nomenclature
GSU Monitoring Well Sampling Analytical Results
Year 2, Quarter 1
Iosco County, Michigan
60612721

Chemical Name	Abbreviation	Cas Number
Perfluorobutanoic acid	PFBA	375-22-4
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorononanoic acid	PFNA	375-95-1
Perfluorodecanoic acid	PFDA	335-76-2
Perfluoroundecanoic acid	PFUnA	2058-94-8
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluorotridecanoic acid	PFTTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTeDA	376-06-7
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9Cl-PF3ONS	756426-58-1
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4
Perfluoro-2-propoxypropanoic acid	HFPO-DA	13252-13-6
Perfluorodecane sulfonic acid	PFDS	335-77-3
Perfluorobutane sulfonic acid	PFBS	375-73-5
Perfluoropentane sulfonic acid	PFPeS	2706-91-4
Perfluorohexane sulfonic acid	PFHxS	355-46-4
Perfluoroheptane sulfonic acid	PFHpS	375-92-8
Perfluorooctane sulfonic acid	PFOS	1763-23-1
Perfluorononane sulfonic acid	PFNS	68259-12-1
Perfluorooctanesulfonamide	PFOSA	754-91-6
4:2 Fluorotelomer sulfonic acid	4:2 FTS	757124-72-4
6:2 Fluorotelomer sulfonic acid	6:2 FTS	27619-97-2
8:2 Fluorotelomer sulfonic acid	8:2FTS	39108-34-4
N-Ethyl Perfluorooctane sulfonamido acetic acid	EtFOSAA	2991-50-6
N-Methyl Perfluorooctane sulfonamide	MeFOSAA	2355-31-9

	Perfluoroalkyl Carboxylic Acids (PFCAs)
	Perfluoropolyether carboxylic acids (PFPE)
	Perfluoroalkane Sulfonic Acids (PFSAs)
	Perfluoroalkane Sulfonamides (FASAs)
	Fluorotelomer Sulfonic Acids (FTSAs)
	N-Ethyl Perfluoroalkane Sulfonamidoacetic Acids (EtFASAAs)
	N-Methyl Perfluoroalkane Sulfonamidoacetic Acids (MeFASAAs)

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs) Sample Sample Date Lab Report		DEQ-CR-MW002 20 - 25 ft					DEQ-CR-MW003				
		GW1910081420RAP 10/8/2019 1903623	GW2001221050MK 1/22/2020 2000165	GW2004151045RL 4/15/2020 2000899	GW2007151105RL 7/15/2020 2001522	GW2010281015RL 10/28/2020 2002372	GW2010281545RL 10/28/2020 2002372				Result
Compound	Unit	Result	Result	Result	Result	Result					
PFBA	ng/l	< 2.11	2.39 J	1.62 J	2.84 J	1.95 J				< 2.01	
PFPeA	ng/l	< 2.11	< 2.02	< 2.02	1.5 J	< 2.02				< 2.01	
PFHxA	ng/l	< 2.11	< 2.02	2.97 J	1.8 J	1.62 J				< 2.01	
PFHpA	ng/l	< 2.11	3.03 J, Q	4.69 Q	2.07 J	1.09 J				< 2.01	
PFOA	ng/l	2.12 J	7.31	7.65	4.37	2.52 J				< 2.01	
PFNA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02				< 2.01	
PFDA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02				< 2.01	
PFUnA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02				< 2.01	
PFDoA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02				< 2.01	
PFTTrDA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02				< 2.01	
PFTeDA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02				< 2.01	
11CI-PF3OUdS	ng/l	---	< 2.02	< 2.02	< 2.15	< 2.02	Oct - 2019 Not Sampled	Jan - 2020 Not Sampled	Apr - 2020 Not Sampled	Jul - 2020 Not Sampled	< 2.01
9CI-PF3ONS	ng/l	---	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
ADONA	ng/l	---	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
HFPO-DA	ng/l	---	< 3.02	< 3.04	< 3.22	< 2.02					< 2.01
PFDS	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
PFBS	ng/l	< 2.11	1.93 J	< 2.02	< 2.15	2.16 J					< 2.01
PFPeS	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	3.77 J					< 2.01
PFHxS	ng/l	< 2.11	4.93	4.5	1.85 J	1.4 J					< 2.01
PFHpS	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
PFOS	ng/l	12.9	41.5	43.9	25.4	26.8					< 2.01
PFNS	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
PFOSA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
4:2 FTS	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
6:2 FTS	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
8:2 FTS	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
EtFOSAA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
MeFOSAA	ng/l	< 2.11	< 2.02	< 2.02	< 2.15	< 2.02					< 2.01
Total PFAS	ng/l	15.02	61.09	65.33	39.83	41.31					ND

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location		DEQ-CR-MW005				
Well Screen Interval (bgs)		18 - 23 ft				
Sample		GW1910081505RAP	GW2001221050RAP	GW2004150840RL		
Sample Date		10/8/2019	1/22/2020	4/15/2020		
Lab Report		1903623	2000165	2000899		
Compound	Unit	Result	Result	Result		
PFBA	ng/l	< 2.05	< 2.05	< 2.03		
PFPeA	ng/l	< 2.05	< 2.05	< 2.03		
PFHxA	ng/l	< 2.05	< 2.05	< 2.03		
PFHpA	ng/l	< 2.05	< 2.05	< 2.03		
PFOA	ng/l	< 2.05	< 2.05	< 2.03		
PFNA	ng/l	< 2.05	< 2.05	< 2.03		
PFDA	ng/l	< 2.05	< 2.05	< 2.03		
PFUnA	ng/l	< 2.05	< 2.05	< 2.03		
PFDoA	ng/l	< 2.05	< 2.05	< 2.03		
PFTTrDA	ng/l	< 2.05	< 2.05	< 2.03		
PFTeDA	ng/l	< 2.05	< 2.05	< 2.03		
11Cl-PF3OUdS	ng/l	---	< 2.05	< 2.03	Jul - 2020 Not Sampled	Oct - 2020 Not Sampled
9Cl-PF3ONS	ng/l	---	< 2.05	< 2.03		
ADONA	ng/l	---	< 2.05	< 2.03		
HFPO-DA	ng/l	---	< 3.07	< 3.05		
PFDS	ng/l	< 2.05	< 2.05	< 2.03		
PFBS	ng/l	< 2.05	< 2.05	< 2.03		
PFPeS	ng/l	< 2.05	< 2.05	< 2.03		
PFHxS	ng/l	< 2.05	< 2.05	< 2.03		
PFHpS	ng/l	< 2.05	< 2.05	< 2.03		
PFOS	ng/l	< 2.05	< 2.05	< 2.03		
PFNS	ng/l	< 2.05	< 2.05	< 2.03		
PFOSA	ng/l	< 2.05	< 2.05	< 2.03		
4:2 FTS	ng/l	< 2.05	< 2.05	< 2.03		
6:2 FTS	ng/l	< 2.05	< 2.05	< 2.03		
8:2 FTS	ng/l	< 2.05	< 2.05	< 2.03		
EtFOSAA	ng/l	< 2.05	< 2.05	2.24 J		
MeFOSAA	ng/l	< 2.05	< 2.05	< 2.03		
Total PFAS	ng/l	ND	ND	2.24		

Footnotes:

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4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs)		DEQ-CR-MW006					
		20 - 25 ft					
Sample		GW1910081555RAP	GW2001220950MK	GW2004150945RL	GW2007151005RL	GW2007151005RL-FD	GW2010280930RL
Sample Date		10/8/2019	1/22/2020	4/15/2020	7/15/2020	7/15/2020	10/28/2020
Lab Report		1903623	2000165	2000899	2001522	2001522	2002372
Compound	Unit	Result	Result	Result	Result	Result	Result
PFBA	ng/l	2.22 J	2.71 J	3.17 J	2.46 J	2.13 J	1.45 J
PFPeA	ng/l	2.29 J	< 1.99	< 1.99	< 2.07	< 1.92	1.23 J
PFHxA	ng/l	3.03 J	< 1.99	< 1.99	< 2.07	< 1.92	1.21 J
PFHpA	ng/l	1.52 J, Q	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFOA	ng/l	5.64	3.85 J	5.57	3.44 J	3.19 J	3.85 J
PFNA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFDA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFUnA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFDoA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFTTrDA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFTeDA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
11Cl-PF3OUdS	ng/l	---	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
9Cl-PF3ONS	ng/l	---	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
ADONA	ng/l	---	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
HFPO-DA	ng/l	---	< 2.99	< 2.99	< 3.11	< 2.87	< 1.99
PFDS	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFBS	ng/l	< 2.05	1.66 J	1.94 J	< 2.07	< 1.92	< 1.99
PFPeS	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFHxS	ng/l	15.6	12.4	7.55	6.92	6.49	11
PFHpS	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFOS	ng/l	6.08 Q	7.27	3.79 J	5.96	6.31	9.89
PFNS	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
PFOSA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
4:2 FTS	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
6:2 FTS	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
8:2 FTS	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
EtFOSAA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
MeFOSAA	ng/l	< 2.05	< 1.99	< 1.99	< 2.07	< 1.92	< 1.99
Total PFAS	ng/l	36.38	27.89	22.02	18.78	18.12	28.63

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs)		DEQ-LD-MW001				
		10 - 15 ft				
Sample		GW1910091100RAP	GW2001221215RAP	GW2004151505RL	GW2007151325RL	GW2010281300RL
Sample Date		10/9/2019	1/22/2020	4/15/2020	7/15/2020	10/28/2020
Lab Report		1903623	2000165	2000899	2001522	2002372
Compound	Unit	Result	Result	Result	Result	Result
PFBA	ng/l	5.93	1.67 J	< 2.04	1.79 J	1.27 J
PFPeA	ng/l	4.55	< 2.06	< 2.04	< 1.98	< 1.95
PFHxA	ng/l	6.81	1.66 J	< 2.04	< 1.98	< 1.95
PFHpA	ng/l	2.33 J, Q	< 2.06	< 2.04	< 1.98	< 1.95
PFOA	ng/l	3.44 J	3.12 J	2.56 J	3.24 J	2.03 J
PFNA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFDA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFUnA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFDoA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFTTrDA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFTeDA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
11Cl-PF3OUdS	ng/l	---	< 2.06	< 2.04	< 1.98	< 1.95
9Cl-PF3ONS	ng/l	---	< 2.06	< 2.04	< 1.98	< 1.95
ADONA	ng/l	---	< 2.06	< 2.04	< 1.98	< 1.95
HFPO-DA	ng/l	---	< 3.09	< 3.06	< 2.96	< 1.95
PFDS	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFBS	ng/l	3.32 J	2.36 J	2.23 J	2.63 J	2.23 J
PFPeS	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFHxS	ng/l	3.33 J	1.82 J	1.71 J	3.53 J	3.33 J
PFHpS	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFOS	ng/l	2.05 J, Q	2.66 J	< 2.04	2.26 J	2.76 J
PFNS	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
PFOSA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
4:2 FTS	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
6:2 FTS	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
8:2 FTS	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
EtFOSAA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
MeFOSAA	ng/l	< 2.07	< 2.06	< 2.04	< 1.98	< 1.95
Total PFAS	ng/l	31.76	13.29	6.5	13.45	11.62

Footnotes:

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3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721

Location		DEQ-LD-MW003						
Well Screen Interval (bgs)		10-15 ft						
Sample		GW1910091215RAP	GW2001221350RAP	GW2004151350RL	FD2004151350RL	GW2007151240RL	GW2010281145RL	FD2010281145RL
Sample Date		10/9/2019	1/22/2020	4/15/2020	4/15/2020	7/15/2020	10/28/2020	10/28/2020
Lab Report		1903623	2000165	2000899	2000899	2001522	2002372	2002372
Compound	Unit	Result	Result	Result	Result	Result	Result	Result
PFBA	ng/l	< 2.17	3.43 J	2.83 J	3.02 J	3.45 J	4.41	4.81
PFPeA	ng/l	1.7 J	6.97	4.5	5.25	7.06	16.9	16.6
PFHxA	ng/l	2.56 J	7.95	4.96	4.59 Q	6.63	14.7	15.9
PFHpA	ng/l	< 2.17	2.22 J	1.72 J, Q	1.58 J, Q	< 2.07	4.37	4.55
PFOA	ng/l	2.57 J	6.25	4.09	4.68	4.4	11	10.2
PFNA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFDA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFUnA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFDoA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFTTrDA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFTeDA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
11Cl-PF3OUdS	ng/l	---	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
9Cl-PF3ONS	ng/l	---	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
ADONA	ng/l	---	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
HFPO-DA	ng/l	---	< 3.01	< 3.02	< 3.02	< 3.10	< 2.04	< 1.99
PFDS	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFBS	ng/l	1.66 J	2.73 J	2.3 J	2.64 J, Q	3.29 J	4.45	5.1
PFPeS	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFHxS	ng/l	< 2.17	2.36 J	1.4 J	1.57 J	2.23 J	3.91 J	3.83 J
PFHpS	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFOS	ng/l	< 2.17	2.6 J	< 2.02	< 2.02	< 2.07	2.34 J	2.38 J
PFNS	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
PFOSA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
4:2 FTS	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
6:2 FTS	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
8:2 FTS	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
EtFOSAA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
MeFOSAA	ng/l	< 2.17	< 2.01	< 2.02	< 2.02	< 2.07	< 2.04	< 1.99
Total PFAS	ng/l	8.49	34.51	21.8	23.33	27.06	62.08	63.37

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs) Sample Sample Date Lab Report	DEQ-LD-MW005					DEQ-RR-MW003				
	5 - 10 ft					12 - 17 ft				
	GW1910081710RAP	GW2001221650RAP	GW2004151605RL			GW1910081440GSC	GW2001231315MK	GW2004141105GSC		GW2010291015RL
Compound	Unit	Result	Result	Result						Result
PFBA	ng/l	14.5	13.1	11.9			2.09 J	2.38 J	< 1.99	< 2.03
PFPeA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFHxA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFHpA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFOA	ng/l	2.77 J	2.6 J	2.78 J			< 2.02	< 2.02	< 1.99	< 2.03
PFNA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFDA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFUnA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFDoA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFTTrDA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFTeDA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
11CI-PF3OUdS	ng/l	---	< 2.01	< 2.02	Jul - 2020	Oct - 2020	---	< 2.02	< 1.99	Jul - 2020
9CI-PF3ONS	ng/l	---	< 2.01	< 2.02	Not	Not	---	< 2.02	< 1.99	Not
ADONA	ng/l	---	< 2.01	< 2.02	Sampled	Sampled	---	< 2.02	< 1.99	Sampled
HFPO-DA	ng/l	---	< 3.01	< 3.04			---	< 3.02	< 2.99	
PFDS	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFBS	ng/l	9.29	7.79	10.3			47.6	8.68	< 1.99	2.33 J
PFPeS	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFHxS	ng/l	4.96	9.49	6.28			< 2.02	< 2.02	< 1.99	< 2.03
PFHpS	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFOS	ng/l	3.1 J, Q	3.08 J	2.51 J			< 2.02	1.87 J	< 1.99	< 2.03
PFNS	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
PFOSA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
4:2 FTS	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
6:2 FTS	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
8:2 FTS	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
EtFOSAA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
MeFOSAA	ng/l	< 2.16	< 2.01	< 2.02			< 2.02	< 2.02	< 1.99	< 2.03
Total PFAS	ng/l	34.62	36.06	33.77			49.69	12.93	ND	2.33

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
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Location Well Screen Interval (bgs)		DEQ-RR-MW004				
		17 - 22 ft				
Sample		GW1910090950GSC	GW2001231225MK	GW2004141140GSC	GW2007151245GSC	GW2010290855RL
Sample Date		10/9/2019	1/23/2020	4/14/2020	7/15/2020	10/29/2020
Lab Report		1903623	2000166	2000899	2001522	2002372
Compound	Unit	Result	Result	Result	Result	Result
PFBA	ng/l	1.49 J	9.59	6.1	4.05	19.4
PFPeA	ng/l	< 2.09	2.66 J	3.07 J	1.82 J	8.33
PFHxA	ng/l	< 2.09	1.91 J	1.67 J, Q	< 2.01	8.03
PFHpA	ng/l	< 2.09	1.41 J	< 2.03	< 2.01	2.26 J
PFOA	ng/l	< 2.09	3.96 J	2.88 J	2.00 J	2.84 J
PFNA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFDA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFUnA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFDoA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFTTrDA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFTeDA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
11Cl-PF3OUdS	ng/l	---	< 2.02	< 2.03	< 2.01	< 2.17
9Cl-PF3ONS	ng/l	---	< 2.02	< 2.03	< 2.01	< 2.17
ADONA	ng/l	---	< 2.02	< 2.03	< 2.01	< 2.17
HFPO-DA	ng/l	---	< 3.02	< 3.05	< 3.01	< 2.17
PFDS	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFBS	ng/l	99.1	103	399	611	194
PFPeS	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFHxS	ng/l	< 2.09	2.87 J	1.69 J	< 2.01	4.07 J
PFHpS	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFOS	ng/l	11	18.9	27.5	9.86	15.4
PFNS	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
PFOSA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
4:2 FTS	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
6:2 FTS	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
8:2 FTS	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
EtFOSAA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
MeFOSAA	ng/l	< 2.09	< 2.02	< 2.03	< 2.01	< 2.17
Total PFAS	ng/l	111.59	144.3	441.91	628.73	254.33

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
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Location Well Screen Interval (bgs)		DEQ-RR-MW005				
		13 - 18 ft				
Sample		GW1910081530GSC	GW2001231425MK	GW2004141340GSC	GW2007151140GSC	GW2010291120RL
Sample Date		10/8/2019	1/23/2020	4/14/2020	7/15/2020	10/29/2020
Lab Report		1903623	2000166	2000899	2001522	2002372
Compound	Unit	Result	Result	Result	Result	Result
PFBA	ng/l	23.5	7.92	24.1	174	39.8
PFPeA	ng/l	22.6	13.1	14.7	502	110
PFHxA	ng/l	13.7	9.27	10.6	215	64
PFHpA	ng/l	1.62 J	1.99 J, Q	1.93 J, Q	18.7	2.74 J
PFOA	ng/l	4.36	8.96	5.17	33.7	6.95
PFNA	ng/l	< 2.03	< 2.12	< 1.97	6.13	< 2.02
PFDA	ng/l	< 2.03	< 2.12	< 1.97	6.86	1.76 J
PFUnA	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
PFDoA	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
PFTTrDA	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
PFTeDA	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
11Cl-PF3OUdS	ng/l	---	< 2.12	< 1.97	< 2.10	< 2.02
9Cl-PF3ONS	ng/l	---	< 2.12	< 1.97	< 2.10	< 2.02
ADONA	ng/l	---	< 2.12	< 1.97	< 2.10	< 2.02
HFPO-DA	ng/l	---	< 3.18	< 2.95	< 3.15	< 2.02
PFDS	ng/l	3.16 J	4.32	4.87	11.2 Q	6.18
PFBS	ng/l	328	93.7	357	819	219
PFPeS	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
PFHxS	ng/l	1.98 J	< 2.12	< 1.97	2.14 J	< 2.02
PFHpS	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
PFOS	ng/l	39.7	46.5	21.3	150	46.2
PFNS	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
PFOSA	ng/l	24	12.6	17.1	30.1	38
4:2 FTS	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
6:2 FTS	ng/l	< 2.03	< 2.12	< 1.97	4.93	< 2.02
8:2 FTS	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
EtFOSAA	ng/l	< 2.03	3.48 J	5.94	7.63	1.49 J
MeFOSAA	ng/l	< 2.03	< 2.12	< 1.97	< 2.10	< 2.02
Total PFAS	ng/l	462.62	201.84	462.71	1981.4	536.12

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
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60612721**

Location Well Screen Interval (bgs) Sample Sample Date Lab Report		DEQ-RR-MW006 11 - 16 ft				DEQ-RR-MW007 10 - 15 ft			
		GW1910091040GSC 10/9/2019 1903623	GW2001231110MK 1/23/2020 2000166	GW2004141240GSC 4/14/2020 2000899	GW2007151210GSC 7/15/2020 2001522	GW1910081655GSC 10/8/2019 1903623	GW2001231000MK 1/23/2020 2000166	GW2004141420GSC 4/14/2020 2000899	GW2007151005GSC 7/15/2020 2001522
Compound	Unit	Result	Result	Result	Result	Result	Result	Result	Result
PFBA	ng/l	3.43 J	2.2 J	< 2.06	< 2.07	1.66 J	2.48 J	< 1.95	< 2.01
PFPeA	ng/l	3.36 J	2.73 J	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFHxA	ng/l	3.1 J	2.52 J	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFHpA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	1.77 J	< 2.01
PFOA	ng/l	1.57 J	1.4 J	< 2.06	< 2.07	5.65	6.7	6.73	4.18
PFNA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFDA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFUnA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFDoA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFTTrDA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFTeDA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
11Cl-PF3OUdS	ng/l	---	< 2.00	< 2.06	< 2.07	---	< 2.11	< 1.95	< 2.01
9Cl-PF3ONS	ng/l	---	< 2.00	< 2.06	< 2.07	---	< 2.11	< 1.95	< 2.01
ADONA	ng/l	---	< 2.00	< 2.06	< 2.07	---	< 2.11	< 1.95	< 2.01
HFPO-DA	ng/l	---	< 3.00	< 3.09	< 3.11	---	< 3.16	< 2.93	< 3.01
PFDS	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFBS	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFPeS	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFHxS	ng/l	1.79 J	2.03 J	< 2.06	1.75 J	1.64 J	3.36 J	3.42 J	1.87 J
PFHpS	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFOS	ng/l	6	8.72	3.36 J	< 2.07	41.4	35.9	57.9	39.7
PFNS	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
PFOSA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
4:2 FTS	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
6:2 FTS	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
8:2 FTS	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
EtFOSAA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
MeFOSAA	ng/l	< 2.05	< 2.00	< 2.06	< 2.07	< 2.12	< 2.11	< 1.95	< 2.01
Total PFAS	ng/l	19.25	19.6	3.36	1.75	50.35	48.44	69.82	45.75

Oct - 2020
Not
Sampled

Oct - 2020
Not
Sampled

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs) Sample Sample Date Lab Report		DEQ-RR-MW008 8 - 13 ft				RI-MW001 3 - 8 ft					
		GW1910081610GSC 10/8/2019 1903623	GW2001231455RAP 1/23/2020 2000166	GW2004141505GSC 4/14/2020 2000899	GW2007151055GSC 7/15/2020 2001522						GW2010281655RL 10/28/2020 2002372
Compound	Unit	Result	Result	Result	Result						Result
PFBA	ng/l	9.53	3.3 J	4.2	3.4 J						7.5
PFPeA	ng/l	41.1	16.1	12.1	10.1						6.43
PFHxA	ng/l	23.3	10.6	12.5	11.1						6.42
PFHpA	ng/l	4.93	2.02 J, Q	3.59 J	< 2.04						7.14
PFOA	ng/l	16.8	16	13.9	10.1						8.43
PFNA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFDA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFUnA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFDoA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFTTrDA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFTeDA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
11CI-PF3OUdS	ng/l	---	< 2.05	< 1.98	< 2.04	Oct - 2020 Not Sampled	Oct - 2019 Not Sampled	Jan - 2020 Not Sampled	Apr - 2020 Not Sampled	Jul - 2020 Not Sampled	< 2.02
9CI-PF3ONS	ng/l	---	< 2.05	< 1.98	< 2.04						< 2.02
ADONA	ng/l	---	< 2.05	< 1.98	< 2.04						< 2.02
HFPO-DA	ng/l	---	< 3.07	< 2.96	< 3.06						< 2.02
PFDS	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFBS	ng/l	14	22.9	51.6	10.5						3.99 J
PFPeS	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFHxS	ng/l	5.98	4.94	5.34	3.28 J						2.87 J
PFHpS	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFOS	ng/l	11.6	16	8.56	11.7						5.2
PFNS	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
PFOSA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
4:2 FTS	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
6:2 FTS	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
8:2 FTS	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
EtFOSAA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
MeFOSAA	ng/l	< 2.16	< 2.05	< 1.98	< 2.04						< 2.02
Total PFAS	ng/l	127.24	91.86	111.79	60.18						47.98

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs) Sample Sample Date Lab Report	RI-MW002				RI-MW003						
	2 - 7 ft				2 - 7 ft						
					GW2010281745RL 10/28/2020 2002372	GW1910091430RAP 10/9/2019 1903624	GW2001221710MK 1/22/2020 2000166	GW2004151325GSC 4/15/2020 2000899	GW2007151830RL 7/15/2020 2001522		
Compound	Unit				Result	Result	Result	Result	Result		
PFBA	ng/l				9.07	8.98	3.04 J	6.27	9.96		
PFPeA	ng/l				4.27	7.18	2.02 J	5.77	13.5		
PFHxA	ng/l				3 J	8.7	2.87 J	5.73 Q	15.5		
PFHpA	ng/l				1.85 J	2.87 J, Q	< 2.02	1.37 J, Q	3.61 J		
PFOA	ng/l				2.67 J	8.7	3.54 J	3.45 J	7.42		
PFNA	ng/l				< 2.07	1.59 J	< 2.02	< 2.00	1.87 J		
PFDA	ng/l				< 2.07	< 2.07	< 2.02	< 2.00	< 1.99		
PFUnA	ng/l				< 2.07	< 2.07	< 2.02	< 2.00	< 1.99		
PFDoA	ng/l				< 2.07	< 2.07	< 2.02	< 2.00	< 1.99		
PFTTrDA	ng/l				< 2.07	< 2.07	< 2.02	< 2.00	< 1.99		
PFTeDA	ng/l				< 2.07	< 2.07	< 2.02	< 2.00	< 1.99		
11CI-PF3OUdS	ng/l	Oct - 2019	Jan - 2020	Apr - 2020	Jul - 2020	< 2.07	---	< 2.02	< 2.00	< 1.99	Oct - 2020 Not Sampled
9CI-PF3ONS	ng/l	Not	Not	Not	Not	< 2.07	---	< 2.02	< 2.00	< 1.99	
ADONA	ng/l	Not	Not	Not	Not	< 2.07	---	< 2.02	< 2.00	< 1.99	
HFPO-DA	ng/l	Not	Not	Not	Not	< 2.07	---	< 3.02	< 3.00	< 2.99	
PFDS	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
PFBS	ng/l					1.98 J	3.05 J	< 2.02	2.52 J	3.8 J	
PFPeS	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
PFHxS	ng/l					1.91 J	4.55	1.45 J	1.66 J	5.17	
PFHpS	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
PFOS	ng/l					1.43 J	3.75 J	3.76 J	2.26 J	7.6	
PFNS	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
PFOSA	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
4:2 FTS	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
6:2 FTS	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
8:2 FTS	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
EtFOSAA	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
MeFOSAA	ng/l					< 2.07	< 2.07	< 2.02	< 2.00	< 1.99	
Total PFAS	ng/l					26.18	49.37	16.68	29.03	68.43	

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

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Location		RI-MW004				
Well Screen Interval (bgs)		5 - 10 ft				
Sample					GW2007151735RL	
Sample Date					7/15/2020	
Lab Report					2001522	
Compound	Unit				Result	
PFBA	ng/l				2.49 J	
PFPeA	ng/l				< 2.02	
PFHxA	ng/l				< 2.02	
PFHpA	ng/l				< 2.02	
PFOA	ng/l				< 2.02	
PFNA	ng/l				< 2.02	
PFDA	ng/l				< 2.02	
PFUnA	ng/l				< 2.02	
PFDaA	ng/l				< 2.02	
PFTrDA	ng/l				< 2.02	
PFTeDA	ng/l				< 2.02	
11Cl-PF3OUdS	ng/l	Oct - 2019	Jan - 2020	Apr - 2020	< 2.02	Oct - 2020
9Cl-PF3ONS	ng/l	Not	Not	Not	< 2.02	Not
ADONA	ng/l	Sampled	Sampled	Sampled	< 2.02	Sampled
HFPO-DA	ng/l				< 3.04	
PFDS	ng/l				< 2.02	
PFBS	ng/l				< 2.02	
PFPeS	ng/l				< 2.02	
PFHxS	ng/l				< 2.02	
PFHpS	ng/l				< 2.02	
PFOS	ng/l				< 2.02	
PFNS	ng/l				< 2.02	
PFOSA	ng/l				< 2.02	
4:2 FTS	ng/l				< 2.02	
6:2 FTS	ng/l				< 2.02	
8:2 FTS	ng/l				< 2.02	
EtFOSAA	ng/l				< 2.02	
MeFOSAA	ng/l				< 2.02	
Total PFAS	ng/l				2.49	

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

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Location Well Screen Interval (bgs)		RI-MW007						
		39 - 40 ft						
Sample		GW1910090935RAP	GW1910090935RAP-FD	GW2001221255MK	GW2001221255MK-FD	GW2004151110GSC	GW2007160910RL	GW2010281335RL
Sample Date		10/9/2019	10/9/2019	1/22/2020	1/22/2020	4/15/2020	7/16/2020	10/28/2020
Lab Report		1903624	1903624	2000165	2000165	2000899	2001523	2002372
Compound	Unit	Result	Result	Result	Result	Result	Result	Result
PFBA	ng/l	< 2.13	< 2.02	2.59 J	2.68 J	2.31 J	1.81 J	1.89 J
PFPeA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFHxA	ng/l	< 2.13	< 2.02	1.76 J	< 2.07	1.52 J, Q	< 2.00	1.79 J, Q
PFHpA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFOA	ng/l	< 2.13	< 2.02	1.9 J	1.74 J	1.73 J	< 2.00	1.41 J
PFNA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFDA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFUnA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFDaA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFTTrDA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFTeDA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
11Cl-PF3OUdS	ng/l	---	---	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
9Cl-PF3ONS	ng/l	---	---	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
ADONA	ng/l	---	---	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
HFPO-DA	ng/l	---	---	< 3.13	< 3.11	< 2.99	< 3.00	< 2.00
PFDS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFBS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFPeS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFHxS	ng/l	3.65 J	3.02 J	5.84	5.64	4.47	3.31 J	3.39 J
PFHpS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFOS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFNS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
PFOSA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
4:2 FTS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
6:2 FTS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
8:2 FTS	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
EtFOSAA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
MeFOSAA	ng/l	< 2.13	< 2.02	< 2.08	< 2.07	< 1.99	< 2.00	< 2.00
Total PFAS	ng/l	3.65	3.02	12.09	10.06	10.03	5.12	8.48

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

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Location Well Screen Interval (bgs) Sample Sample Date Lab Report	RI-MW008 18 - 19 ft				RI-MW008 27.5 - 28.5 ft					
	GW2010281430RL 10/28/2020 2002372	GW1910091525RAP 10/9/2019 1903624	GW2001221500RAP 1/22/2020 2000165	GW2004151005GSC 4/15/2020 2000899	GW2007160945RL 7/16/2020 2001523					
Compound	Unit	Result	Result	Result	Result	Result	Result	Result		
PFBA	ng/l	1.54 J	1.98 J	3.7 J	1.56 J	1.85 J				
PFPeA	ng/l	1.12 J	2.67 J	5.26	4.63	4.37				
PFHxA	ng/l	1.76 J	4.14	10.2	8.88	6.9				
PFHpA	ng/l	< 2.04	1.46 J, Q	4.48 Q	4.54	4.19				
PFOA	ng/l	3.46 J	3.08 J	6.05	4.03	3.95 J				
PFNA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFDA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFUnA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFDoA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFTTrDA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFTeDA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
11Cl-PF3OUdS	ng/l	< 2.04	---	< 1.98	< 1.96	< 2.03			Oct - 2020	
9Cl-PF3ONS	ng/l	< 2.04	---	< 1.98	< 1.96	< 2.03			Not	
ADONA	ng/l	< 2.04	---	< 1.98	< 1.96	< 2.03			Sampled	
HFPO-DA	ng/l	< 2.04	---	< 2.98	< 2.94	< 3.05				
PFDS	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFBS	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFPeS	ng/l	< 2.04	< 2.02	1.56 J, Q	1.54 J, Q	< 2.03				
PFHxS	ng/l	3.79 J	4.22	7.91	7	7.59				
PFHpS	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFOS	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFNS	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
PFOSA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
4:2 FTS	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
6:2 FTS	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
8:2 FTS	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
EtFOSAA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
MeFOSAA	ng/l	< 2.04	< 2.02	< 1.98	< 1.96	< 2.03				
Total PFAS	ng/l	11.67	17.55	39.16	32.18	28.85				

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

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Location		RI-MW024					
Well Screen Interval (bgs)		17 - 18 ft					
Sample		GW1910100900GSC	GW1910100900GSC-FD	GW2004141605GSC	GW2007151400GSC	GW2007151400GSC-FD	
Sample Date		10/10/2019	10/10/2019	4/14/2020	7/15/2020	7/15/2020	
Lab Report		1903624	1903624	2000899	2001522	2001522	
Compound	Unit	Result	Result	Result	Result	Result	
PFBA	ng/l	< 2.07	< 2.02	3.55 J	< 1.97	< 2.04	
PFPeA	ng/l	< 2.07	< 2.02	1.67 J	< 1.97	< 2.04	
PFHxA	ng/l	< 2.07	< 2.02	2.55 J, Q	< 1.97	< 2.04	
PFHpA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFOA	ng/l	2.31 J	2.5 J	3.96 J	1.57 J	< 2.04	
PFNA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFDA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFUnA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFDoA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFTTrDA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFTeDA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
11Cl-PF3OUdS	ng/l	---	---	< 1.99	< 1.97	< 2.04	Oct - 2020
9Cl-PF3ONS	ng/l	---	---	< 1.99	< 1.97	< 2.04	Not
ADONA	ng/l	---	---	< 1.99	< 1.97	< 2.04	Sampled
HFPO-DA	ng/l	---	---	< 2.99	< 2.95	< 3.06	
PFDS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFBS	ng/l	8.07	7.91	15.3	5.49	4.5	
PFPeS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFHxS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFHpS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFOS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFNS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
PFOSA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
4:2 FTS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
6:2 FTS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
8:2 FTS	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
EtFOSAA	ng/l	< 2.07	< 2.02	< 1.98	< 1.97	< 2.04	
MeFOSAA	ng/l	< 2.07	< 2.02	< 1.99	< 1.97	< 2.04	
Total PFAS	ng/l	10.38	10.41	27.03	7.06	4.5	

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

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Location Well Screen Interval (bgs)		RI-MW024 26 - 27 ft			RI-MW025 5.5 - 10.5 ft						
		Sample Date	Sample Date	Sample Date							
Lab Report		1903624	2000166	2000899						2001522	
Compound	Unit	Result	Result	Result						Result	
PFBA	ng/l	< 2.02	< 1.96	< 1.99						3.59 J	
PFPeA	ng/l	2 J	< 1.96	2.36 J						< 2.07	
PFHxA	ng/l	3.88 J	2.33 J, Q	3.61 J						< 2.07	
PFHpA	ng/l	2.04 J, Q	< 1.96	< 1.99						< 2.07	
PFOA	ng/l	1.65 J	2.77 J	3.07 J						1.83 J	
PFNA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFDA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFUnA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFDoA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFTTrDA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFTeDA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
11CI-PF3OUdS	ng/l	---	< 1.96	< 1.99	Jul - 2020 Not Sampled	Oct - 2020 Not Sampled	Oct - 2019 Not Sampled	Jan - 2020 Not Sampled	Apr - 2020 Not Sampled	< 2.07	Oct - 2020 Not Sampled
9CI-PF3ONS	ng/l	---	< 1.96	< 1.99						< 2.07	
ADONA	ng/l	---	< 1.96	< 1.99						< 2.07	
HFPO-DA	ng/l	---	< 2.94	< 2.99						< 3.11	
PFDS	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFBS	ng/l	3.98 J	2.69 J	3.74 J, Q						< 2.07	
PFPeS	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFHxS	ng/l	7.07	1.49 J	1.7 J						< 2.07	
PFHpS	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFOS	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFNS	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
PFOSA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
4:2 FTS	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
6:2 FTS	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
8:2 FTS	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
EtFOSAA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
MeFOSAA	ng/l	< 2.02	< 1.96	< 1.99						< 2.07	
Total PFAS	ng/l	20.62	9.28	14.48						5.42	

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

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Location Well Screen Interval (bgs) Sample Sample Date Lab Report	RI-MW026 16 - 21 ft					RI-MW026 32 - 33 ft					
	Compound	Unit	Oct - 2019 Not Sampled	Jan - 2020 Not Sampled	Apr - 2020 Not Sampled	Jul - 2020 Not Sampled	GW2010281555CM 10/28/2020 2002372 Result	GW2001231320RAP 1/23/2020 2000166 Result	Apr - 2020 Not Sampled	GW2007151440GSC 7/15/2020 2001522 Result	GW2010281445CM 10/28/2020 2002372 Result
PFBA	ng/l					< 2.08	1.85 J		< 2.10	2.22 J	
PFPeA	ng/l					< 2.08	5.01		2.52 J	5.56	
PFHxA	ng/l					< 2.08	5.25		2.94 J	5.66	
PFHpA	ng/l					< 2.08	5.43		3.35 J	2.84 J	
PFOA	ng/l					< 2.08	16.8		12.9	11	
PFNA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFDA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFUnA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFDoA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFTTrDA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFTeDA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
11Cl-PF3OUdS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
9Cl-PF3ONS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
ADONA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
HFPO-DA	ng/l					< 2.08	< 2.99		< 3.15	< 2.04	
PFDS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFBS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFPeS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFHxS	ng/l					< 2.08	6.64		4.15 J	4.52	
PFHpS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFOS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFNS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
PFOSA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
4:2 FTS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
6:2 FTS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
8:2 FTS	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
EtFOSAA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
MeFOSAA	ng/l					< 2.08	< 1.99		< 2.10	< 2.04	
Total PFAS	ng/l					ND	40.98		25.86	31.8	

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
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Location Well Screen Interval (bgs) Sample Sample Date Lab Report	RI-MW027 20 - 21 ft				RI-MW027 34.5 - 35.3 ft						
	Compound	Unit	Result	Result	Result	Result	Result	Result			
			GW2010281140CM 10/28/2020 2002372					GW2010281250CM 10/28/2020 2002372			
PFBA	ng/l		1.26 J					11.5			
PFPeA	ng/l		1.07 J					18.4			
PFHxA	ng/l		1.19 J					7.71			
PFHpA	ng/l		< 1.98					1.54 J, Q			
PFOA	ng/l		1.82 J					2.39 J			
PFNA	ng/l		< 1.98					< 2.02			
PFDA	ng/l		< 1.98					< 2.02			
PFUnA	ng/l		< 1.98					< 2.02			
PFDoA	ng/l		< 1.98					< 2.02			
PFTTrDA	ng/l		< 1.98					< 2.02			
PFTeDA	ng/l		< 1.98					< 2.02			
11CI-PF3OUdS	ng/l	Oct - 2019 Not Sampled	Jan - 2020 Not Sampled	Apr - 2020 Not Sampled	Jul - 2020 Not Sampled	< 1.98	Oct - 2019 Not Sampled	Jan - 2020 Not Sampled	Apr - 2020 Not Sampled	Jul - 2020 Not Sampled	< 2.02
9CI-PF3ONS	ng/l					< 1.98					< 2.02
ADONA	ng/l					< 1.98					< 2.02
HFPO-DA	ng/l					< 1.98					< 2.02
PFDS	ng/l					< 1.98					< 2.02
PFBS	ng/l					2.68 J					6.57
PFPeS	ng/l					< 1.98					< 2.02
PFHxS	ng/l					4.09					2.22 J
PFHpS	ng/l					< 1.98					< 2.02
PFOS	ng/l					< 1.98					< 2.02
PFNS	ng/l					< 1.98					< 2.02
PFOSA	ng/l					< 1.98					< 2.02
4:2 FTS	ng/l					< 1.98					< 2.02
6:2 FTS	ng/l					< 1.98					< 2.02
8:2 FTS	ng/l					< 1.98					< 2.02
EtFOSAA	ng/l					< 1.98					< 2.02
MeFOSAA	ng/l					< 1.98					< 2.02
Total PFAS	ng/l					12.11					50.33

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201
criteria: 6 ng/L PFNA, 8 ng/L PFOA,
16 ng/L PFOS, 51 ng/L PFHxS,
370 ng/L HFPO-DA, 420 ng/L PFBS,
or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs) Sample Sample Date Lab Report	RI-MW028				RI-MW028						
	5 - 10 ft				20 - 21 ft						
Compound	Unit										
				GW2007151515GSC 7/15/2020 2001522	GW2010281735CM 10/28/2020 2002372				GW2010291115CM 10/29/2020 2002372		
				Result	Result				Result		
PFBA	ng/l			< 2.03	< 2.07				< 2.07		
PFPeA	ng/l			< 2.03	< 2.07				< 2.07		
PFHxA	ng/l			< 2.03	< 2.07				< 2.07		
PFHpA	ng/l			1.77 J	< 2.07				< 2.07		
PFOA	ng/l			2.34 J	< 2.07				< 2.07		
PFNA	ng/l			< 2.03	< 2.07				< 2.07		
PFDA	ng/l			< 2.03	< 2.07				< 2.07		
PFUnA	ng/l			< 2.03	< 2.07				< 2.07		
PFDaA	ng/l			< 2.03	< 2.07				< 2.07		
PFTTrDA	ng/l			< 2.03	< 2.07				< 2.07		
PFTeDA	ng/l			< 2.03	< 2.07				< 2.07		
11Cl-PF3OUdS	ng/l	Oct - 2019	Jan - 2020	Apr - 2020	< 2.03	< 2.07	Oct - 2019	Jan - 2020	Apr - 2020	Jul - 2020	< 2.07
9Cl-PF3ONS	ng/l	Not	Not	Not	< 2.03	< 2.07	Not	Not	Not	Not	< 2.07
ADONA	ng/l	Sampled	Sampled	Sampled	< 2.03	< 2.07	Sampled	Sampled	Sampled	Sampled	< 2.07
HFPO-DA	ng/l				< 3.05	< 2.07					< 2.07
PFDS	ng/l				< 2.03	< 2.07					< 2.07
PFBS	ng/l				< 2.03	1.67 J					< 2.07
PFPeS	ng/l				< 2.03	< 2.07					< 2.07
PFHxS	ng/l				10.5	5.99					< 2.07
PFHpS	ng/l				< 2.03	< 2.07					< 2.07
PFOS	ng/l				7.39	7.95					< 2.07
PFNS	ng/l				< 2.03	< 2.07					< 2.07
PFOSA	ng/l				< 2.03	< 2.07					< 2.07
4:2 FTS	ng/l				< 2.03	< 2.07					< 2.07
6:2 FTS	ng/l				< 2.03	< 2.07					< 2.07
8:2 FTS	ng/l				< 2.03	< 2.07					< 2.07
EtFOSAA	ng/l				< 2.03	< 2.07					< 2.07
MeFOSAA	ng/l				< 2.03	< 2.07					< 2.07
Total PFAS	ng/l				22	15.61					ND

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs) Sample Sample Date Lab Report	RI-MW030 24 - 25 ft				RI-MW032 18 - 23 ft			
	GW1910101025RAP	GW2001230915RAP	GW2004141735GSC		GW1910091630RAP	GW2001221530MK	GW2004150915GSC	GW2007151700GSC
	10/10/2019 1903624	1/23/2020 2000166	4/14/2020 2000899		10/9/2019 1903624	1/22/2020 2000166	4/15/2020 2000899	7/15/2020 2001522
Compound	Unit	Result	Result	Result	Result	Result	Result	Result
PFBA	ng/l	< 2.28	4.77	4.33	6.72	8.18	5.64	8.09
PFPeA	ng/l	< 2.28	< 2.05	< 2.08	9.72	15.1	11.2	13
PFHxA	ng/l	< 2.28	< 2.05	< 2.08	13.4	20.4	19.2	20.3
PFHpA	ng/l	< 2.28	< 2.05	< 2.08	3.87 J	5.84	6.59	8.73
PFOA	ng/l	< 2.28	< 2.05	< 2.08	11.3	15.9	17.9	19.8
PFNA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
PFDA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
PFUnA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
PFDoA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
PFTTrDA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
PFTeDA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
11CI-PF3OUdS	ng/l	---	< 2.05	< 2.08	---	< 2.04	< 2.02	< 2.07
9CI-PF3ONS	ng/l	---	< 2.05	< 2.08	---	< 2.04	< 2.02	< 2.07
ADONA	ng/l	---	< 2.05	< 2.08	---	< 2.04	< 2.02	< 2.07
HFPO-DA	ng/l	---	< 3.07	< 3.13	---	< 3.06	< 3.02	< 3.10
PFDS	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
PFBS	ng/l	< 2.28	< 2.05	< 2.08	23.8	27.6	23.8	25.6
PFPeS	ng/l	< 2.28	< 2.05	< 2.08	1.52 J	3.38 J	2.92 J	3.13 J
PFHxS	ng/l	< 2.28	< 2.05	< 2.08	44.3	75.2	71.6	88.3
PFHpS	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
PFOS	ng/l	< 2.28	2.27 J	< 2.08	1.96 J, Q	3.21 J	< 2.02	2.15 J
PFNS	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
PFOSA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
4:2 FTS	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
6:2 FTS	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
8:2 FTS	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
EtFOSAA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
MeFOSAA	ng/l	< 2.28	< 2.05	< 2.08	< 2.16	< 2.04	< 2.02	< 2.07
Total PFAS	ng/l	ND	7.04	4.33	116.59	174.81	158.85	189.1

Jul - 2020
Not
Sampled

Oct - 2020
Not
Sampled

Oct - 2020
Not
Sampled

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location Well Screen Interval (bgs) Sample Sample Date Lab Report		RI-MW032 18 - 33 ft				RI-MW033 13 - 18 ft					
		GW2010291335CM 10/29/2020 2002372	GW1910100915RAP 10/10/2019 1903624	GW2001221440MK 1/22/2020 2000165	GW2004150830GSC 4/15/2020 2000899	GW2007151730GSC 7/15/2020 2001522	GW2010291430CM 10/29/2020 2002372				
Compound	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	
PFBA	ng/l	9.46	2.43 J	5.68	6.51	3.45 J	1.76 J				
PFPeA	ng/l	16.8	1.51 J	< 2.02	1.85 J	3.42 J	1.75 J				
PFHxA	ng/l	26.5	1.53 J	1.9 J, Q	5.91	4.71	3.19 J, Q				
PFHpA	ng/l	12.7	< 2.09	1.68 J	3.3 J	4.68	3.62 J				
PFOA	ng/l	22.4	8.14	10.6	14	17	19.1				
PFNA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFDA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFUnA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFDoA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFTTrDA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFTeDA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
11Cl-PF3OUdS	ng/l	< 1.98	---	< 2.02	< 1.98	< 2.05	< 2.07				
9Cl-PF3ONS	ng/l	< 1.98	---	< 2.02	< 1.98	< 2.05	< 2.07				
ADONA	ng/l	< 1.98	---	< 2.02	< 1.98	< 2.05	< 2.07				
HFPO-DA	ng/l	< 1.98	---	< 3.02	< 2.96	< 3.07	< 2.07				
PFDS	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFBS	ng/l	31.3	3.35 J	2.61 J	6.11	2.97 J	4.69				
PFPeS	ng/l	3.51 J	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFHxS	ng/l	83.7	35.9	26.5	22.8	22.3	39.8				
PFHpS	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFOS	ng/l	2.76 J	3.86 J	4.96	< 1.98	4.28	5.21				
PFNS	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
PFOSA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
4:2 FTS	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
6:2 FTS	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
8:2 FTS	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
EtFOSAA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
MeFOSAA	ng/l	< 1.98	< 2.09	< 2.02	< 1.98	< 2.05	< 2.07				
Total PFAS	ng/l	209.13	56.72	53.93	60.48	62.81	79.12				

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA

**GSU Quarterly Monitoring Well Sampling
October 2020
Iosco County, Michigan
60612721**

Location		RI-MW034				
Well Screen Interval (bgs)		7.5 - 12.5 ft				
Sample					GW2007151800GSC	
Sample Date					7/15/2020	
Lab Report					2001522	
Compound	Unit				Result	
PFBA	ng/l				1.88 J	
PFPeA	ng/l				< 2.02	
PFHxA	ng/l				< 2.02	
PFHpA	ng/l				< 2.02	
PFOA	ng/l				< 2.02	
PFNA	ng/l				< 2.02	
PFDA	ng/l				< 2.02	
PFUnA	ng/l				< 2.02	
PFDoA	ng/l				< 2.02	
PFTTrDA	ng/l				< 2.02	
PFTeDA	ng/l				< 2.02	
11Cl-PF3OUdS	ng/l	Oct - 2019	Jan - 2020	Apr - 2020	< 2.02	Oct - 2020
9Cl-PF3ONS	ng/l	Not	Not	Not	< 2.02	Not
ADONA	ng/l	Sampled	Sampled	Sampled	< 2.02	Sampled
HFPO-DA	ng/l				< 3.02	
PFDS	ng/l				< 2.02	
PFBS	ng/l				1.79 J	
PFPeS	ng/l				< 2.02	
PFHxS	ng/l				2.65 J	
PFHpS	ng/l				< 2.02	
PFOS	ng/l				3.37 J	
PFNS	ng/l				< 2.02	
PFOSA	ng/l				< 2.02	
4:2 FTS	ng/l				< 2.02	
6:2 FTS	ng/l				< 2.02	
8:2 FTS	ng/l				< 2.02	
EtFOSAA	ng/l				< 2.02	
MeFOSAA	ng/l				< 2.02	
Total PFAS	ng/l				9.69	

Footnotes:

1. bgs - Below ground surface
2. ft = feet
3. ND - Result below detection limit
4. ng/l - Nanograms per liter
5. < 2.05 - Result below detection limit
6. --- = Analyte not included in analysis.
6. **BOLD** - Analyte above detection
7. **Highlight** - Above EGLE Part 201 criteria: 6 ng/L PFNA, 8 ng/L PFOA, 16 ng/L PFOS, 51 ng/L PFHxS, 370 ng/L HFPO-DA, 420 ng/L PFBS, or 400,000 ng/L PFHxA