Hillsborough County South-Central System UCMR 5 Quarter 1 Results

Client: Hillsborough Co Public Utilities Dept Project/Site: UCMR5: South Central

Client Sample ID: Central TP WTP

Date Collected: 07/17/23 13:16 Date Received: 07/18/23 09:00

(PEMBA)

acid (PFEESA)

Perfluoro (2-ethoxyethane) sulfonic

Lab Sample ID: 810-69991-1 Matrix: Drinking Water PWSID Number: FL6290787

08/03/23 08:12 08/04/23 08:09

1

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac D 0.0050 08/03/23 08:12 08/04/23 08:09 Perfluorobutanoic acid (PFBA) 0.0072 ug/L 1 Perfluoropentanoic acid (PFPeA) 0.0137 0.0030 ug/L 08/03/23 08:12 08/04/23 08:09 1 Perfluorohexanoic acid (PFHxA) 0.0108 0.0030 ug/L 08/03/23 08:12 08/04/23 08:09 1 0.0030 ug/L 08/03/23 08:12 08/04/23 08:09 Perfluoroheptanoic acid (PFHpA) 0.0048 1 Perfluorooctanoic acid (PFOA) < 0.0040 0 0040 ug/L 08/03/23 08:12 08/04/23 08:09 1 Perfluorononanoic acid (PFNA) < 0.0040 0.0040 08/03/23 08:12 08/04/23 08:09 ug/L 1 Perfluorodecanoic acid (PFDA) < 0.0030 0.0030 08/03/23 08:12 08/04/23 08:09 1 ug/L Perfluoroundecanoic acid (PFUnA) <0.0020 0.0020 08/03/23 08:12 08/04/23 08:09 ug/L 1 Perfluorododecanoic acid (PFDoA) < 0.0030 0.0030 ug/L 08/03/23 08:12 08/04/23 08:09 1 < 0.0030 0.0030 08/03/23 08:12 08/04/23 08:09 4,8-Dioxa-3H-perfluorononanoic acid ug/L 1 (ADONA) 0.0030 08/03/23 08:12 08/04/23 08:09 Perfluorobutanesulfonic acid 0.0050 ug/L 1 (PFBS) Perfluorohexanesulfonic acid (PFHxS) < 0.0030 0.0030 08/03/23 08:12 08/04/23 08:09 ug/L 1 <0.0030 0.0030 08/03/23 08:12 08/04/23 08:09 Perfluoroheptanesulfonic acid ug/L 1 (PFHpS) 0.0040 08/03/23 08:12 08/04/23 08:09 Perfluorooctanesulfonic acid 0.0054 ug/L (PFOS) <0.0040 0.0040 08/03/23 08:12 08/04/23 08:09 Perfluoropentanesulfonic acid ug/L 1 (PFPeS) Hexafluoropropylene Oxide Dimer < 0.0050 0.0050 08/03/23 08:12 08/04/23 08:09 ug/L 1 Acid (HFPO-DA) <0.0020 0.0020 08/03/23 08:12 08/04/23 08:09 9-Chlorohexadecafluoro-3-oxanonan ug/L 1 e-1-sulfonic acid 08/03/23 08:12 08/04/23 08:09 11-Chloroeicosafluoro-3-oxaundecan <0.0050 0.0050 ua/L 1 e-1-sulfonic acid 1H,1H,2H,2H-Perfluorohexane < 0.0030 0.0030 ug/L 08/03/23 08:12 08/04/23 08:09 1 sulfonic acid (4:2 FTS) 0.0050 08/03/23 08:12 08/04/23 08:09 1H,1H,2H,2H-Perfluorooctane sulfonic < 0.0050 ug/L 1 acid (6:2 FTS) 1H,1H,2H,2H-Perfluorodecane < 0.0050 0.0050 ug/L 08/03/23 08:12 08/04/23 08:09 1 sulfonic acid (8:2 FTS) < 0.0200 0.0200 08/03/23 08:12 08/04/23 08:09 Nonafluoro-3,6-dioxaheptanoic acid ua/L 1 (NFDHA) Perfluoro-3-methoxypropanoic acid < 0.0040 0.0040 ug/L 08/03/23 08:12 08/04/23 08:09 1 (PFMPA) Perfluoro-4-methoxybutanoic acid < 0.0030 0.0030 ug/L 08/03/23 08:12 08/04/23 08:09 1

Method: EPA 537.1 UCMR5 - Perfluorinated Alkyl Acids (LC/MS)

< 0.0030

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoac etic acid (NEtFOSAA)	<0.0047		0.0047	ug/L		07/24/23 08:59	07/27/23 10:11	1
N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	<0.0057		0.0057	ug/L		07/24/23 08:59	07/27/23 10:11	1
Perfluorotetradecanoic acid (PFTA)	<0.0076		0.0076	ug/L		07/24/23 08:59	07/27/23 10:11	1
Perfluorotridecanoic acid (PFTrDA)	<0.0066		0.0066	ug/L		07/24/23 08:59	07/27/23 10:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	88		70 - 130			07/24/23 08:59	07/27/23 10:11	1
13C2 PFHxA	87		70 - 130			07/24/23 08:59	07/27/23 10:11	1
13C2 PFDA	90		70 - 130			07/24/23 08:59	07/27/23 10:11	1
13C3 HFPO-DA	86		70 - 130			07/24/23 08:59	07/27/23 10:11	1
Method: EPA 200.7 UCMR5 - N	letals (ICP)							
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<9.00		9.00	ug/L		07/24/23 13:00	07/25/23 16:33	1

0.0030

ug/L

Hillsborough County South-Central System UCMR 5 Quarter 1 Results (Continued)

Client: Hillsborough Co Public Utilities Dept Project/Site: UCMR5: South Central

Client Sample ID: Lithia WTP/Lithia Springs Water Treatment

Plant

Date Collected: 08/28/23 08:50 Date Received: 08/29/23 09:00 Matrix: Drinking Water PWSID Number: FL6290787

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.0050	0.0050	ug/L		09/15/23 06:25	09/16/23 14:19	1
Perfluoropentanoic acid (PFPeA)	0.0043	0.0030	ug/L		09/15/23 08:25	09/16/23 14:19	1
Perfluorohexanoic acid (PFHxA)	0.0032	0.0030	ug/L		09/15/23 06:25	09/16/23 14:19	1
Perfluoroheptanoic acid (PFHpA)	<0.0030	0.0030	ug/L		09/15/23 08:25	09/16/23 14:19	1
Perfluorooctanoic acid (PFOA)	<0.0040	0.0040	ug/L		09/15/23 08:25	09/16/23 14:19	1
Perfluorononanoic acid (PFNA)	<0.0040	0.0040	ug/L		09/15/23 06:25	09/16/23 14:19	1
Perfluorodecanoic acid (PFDA)	<0.0030	0.0030	ug/L		09/15/23 08:25	09/16/23 14:19	1
Perfluoroundecanoic acid (PFUnA)	<0.0020	0.0020	ug/L		09/15/23 06:25	09/16/23 14:19	1
Perfluorododecanoic acid (PFDoA)	<0.0030	0.0030	ug/L		09/15/23 06:25	09/16/23 14:19	1
I,8-Dioxa-3H-perfluorononanoic acid ADONA)	<0.0030	0.0030	ug/L		09/15/23 06:25	09/16/23 14:19	1
Perfluorobutanesulfonic acid (PFBS)	<0.0030	0.0030	ug/L		09/15/23 08:25	09/16/23 14:19	1
Perfluorohexanesulfonic acid (PFHxS)	<0.0030	0.0030	ug/L		09/15/23 08:25	09/16/23 14:19	1
Perfluoroheptanesulfonic acid PFHpS)	<0.0030	0.0030	ug/L		09/15/23 06:25	09/16/23 14:19	1
Perfluorooctanesulfonic acid (PFOS)	<0.0040	0.0040	ug/L		09/15/23 06:25	09/16/23 14:19	1
Perfluoropentanesulfonic acid PFPeS)	<0.0040	0.0040	ug/L		09/15/23 08:25	09/16/23 14:19	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.0050	0.0050	ug/L		09/15/23 06:25	09/16/23 14:19	1
)-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<0.0020	0.0020	ug/L		09/15/23 06:25	09/16/23 14:19	1
1-Chloroeicosafluoro-3-oxaundecan 1-sulfonic acid	<0.0050	0.0050	ug/L			09/16/23 14:19	1
IH, 1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.0030	0.0030	ug/L			09/16/23 14:19	1
IH,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.0050	0.0050	ug/L			09/16/23 14:19	1
IH, 1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.0050	0.0050	ug/L		09/15/23 06:25	09/16/23 14:19	1
Nonafluoro-3,6-dioxaheptanoic acid NFDHA)	<0.0200	0.0200	ug/L			09/16/23 14:19	1
² erfluoro-3-methoxypropanoic acid PFMPA)	<0.0040	0.0040	ug/L			09/16/23 14:19	1
Perfluoro-4-methoxybutanoic acid PFMBA)	<0.0030	0.0030	ug/L		09/15/23 06:25	09/16/23 14:19	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.0030	0.0030	ug/L		09/15/23 06:25	09/16/23 14:19	1

.

Method: EPA 537.1 UCMR5 - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoac	< 0.0047		0.0047	ug/L		07/24/23 08:59	07/27/23 10:00	1
etic acid (NEtFOSAA)								
N-methylperfluorooctanesulfonamidoa cetic acid (NMeFOSAA)	<0.0056		0.0056	ug/L		07/24/23 08:59	07/27/23 10:00	1
Perfluorotetradecanoic acid (PFTA)	<0.0075		0.0075	ug/L		07/24/23 08:59	07/27/23 10:00	1
Perfluorotridecanoic acid (PFTrDA)	<0.0066		0.0066	ug/L		07/24/23 08:59	07/27/23 10:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	80		70 - 130			07/24/23 08:59	07/27/23 10:00	1
13C2 PFHxA	85		70 - 130			07/24/23 08:59	07/27/23 10:00	1
13C2 PFDA	90		70_130			07/24/23 08:59	07/27/23 10:00	1
13C3 HFPO-DA	82		70 - 130			07/24/23 08:59	07/27/23 10:00	1
Method: EDA 200 7 UCMD5								

Method: EPA 200.7 UCMR5 - Metals (ICP) Metals (ICP) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Lithium <9.00</td> 9.00 ug/L 07/24/23 13:00 07/25/23 16:31 1

Job ID: 810-75660-1