

BURLINGTON DRINKING WATER SUPPLY PFAS SAMPLING																
Ed Thomas Water Treatment Plant																
LAB	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	GEL	Enthalpy	GEL	Enthalpy
Sample	ET Fin	ET Raw	ET Fin	ET Raw	ET Fin	ET Raw	ET Fin	ET Raw	ET Fin	ET Raw	ET Fin*	ET Fin DEQ*	ET Raw*	ET Raw DEQ*	ET Fin*	
date	4/16/2020	4/16/2020	5/15/2020	5/15/2020	6/10/2020	6/10/2020	8/10/2021	8/10/2021	7/13/2022	7/13/2022	9/21/2022	9/21/2022	9/21/2022	9/21/2022	10/12/2022	
time	1110	1115	925	930	1300	1300	1055	1050	1040	1037	906		904		1004	
PFOA	8.26	9.68	11.1	12.5	7.86	8.17	12.5	20.7	15.2	18.3	18.0	16.2	19.7	18.7	14.5	
PFOS	12.0	14.10	12.8	15.80	8.25	10.80	8.83	24.7	17.4	24.8	24.0	26.3	24.8	34	24.3	
PFBA	0	0	0	0	0	0	0	0	0	0	3.65	7.73	4.26	7.93	4.12	
PFPeA	0	0	0	0	0	0	0	0	4.66	5.63	5.56	4.65	5.67	5.43	4.46	
PFHxA	3.69	3.63	5.23	5.76	0	0	0	8.34	6.16	7.05	6.88	7.29	7.00	7.80	6.12	
PFHpA	2.7	3.03	4.19	3.99	0	0	0	0	5.65	6.08	6.40	7.05	7.27	7.27	6.23	
PFNA	0.83	0.89	0	0	0	0	0	0	1.12	1.37	1.64	1.57	1.54	2.06	1.32	
PFDA	0.34	0.32	0	0	0	0	0	0	0	0.701	0.743	0.803	0.811	0.982	0.588	
PFUnA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PFDoA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PFTTrDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PFTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L-PFBS	0	0	0	0	0	0	0	0	2.27	2.3	2.41	2.52	2.42	2.78	1.99	
PFPeS	0.68	0.98	0	0	0	0	0	0	1.58	1.64	1.64	1.97	1.61	2.36	1.14	
PFHxS	2.65	2.62	5.64	5.69	0	0	0	0	4.63	5.78	5.59	5.83	6.53	7.25	5.43	
PFHpS	0.36	0.44	0	0	0	0	0	0	0.664	0.937	1.12	0.845	1.27	1.31	0.656	
PFNS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PFDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PFOSA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
N-MeFOSAA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
N-EtFOSAA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11Cl-PF3OUds																
9Cl-PF3ONS																
ADONA																
NFDHA																
PFEESA																
PFMBA																
PFMPA																
PMPA																
PFPrA												16				
4:2 FTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:2 FTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:2 FTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HFPO-DA (GenX)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PFOA + PFOS	20.26	23.78	23.90	28.30	16.11	18.97	21.33	45.40	32.60	43.10	42.00	42.50	44.50	52.70	38.80	
SUM ALL	31.50	35.70	38.96	43.74	16.11	18.97	21.33	53.74	59.33	74.59	77.63	82.76	82.88	97.87	70.85	
PFOA + PFOS removal %	14.8		15.5		15.1		53.0		24.4		5.6				-6.9	
Total PFAS removal %	11.8		10.9		15.1		60.3		20.5		6.3				-10.9	
Raw water = water from lake prior to treatment																
Finished water = treated water																
*DEQ sampled also -analysis by GEL Labs, unknown method																
Samples analyzed by Enthalpy unless noted - proprietary isotope dilution method																
Samples analyzed 11/9/2022 and after are by PACE Analytical using EPA Method 533 (draft).																

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LAB	GEL	Enthalpy	GEL	Enthalpy	*PACE Analytical	GEL	Enthalpy	*PACE Analytical	GEL	*PACE Analytical	*PACE Analytical		
Sample date time	ET Fin DEQ* 10/12/2022	ET Raw* 10/12/2022 1008	ET Raw DEQ* 10/12/2022	ET Fin* 11/9/2022 939	ET Fin* 11/9/2022 0906	ET Fin DEQ* 11/9/2022	ET Raw* 11/9/2022 937	ET Raw* 11/9/2022 0903	ET Raw DEQ* 11/9/2022	ET Fin 1/23/2023 0841	ET Raw 1/23/2023 0845	Ed Thomas Average Finished Water	Ed Thomas Average Raw Water
PFOA	25.3	15.3	22.2	16.2	12.0	16.6	20.1	15	21.2	9.7	9.0	14.11	16.20
PFOS	32.5	21.0	24.3	18.9	15.0	21.6	24.4	23.0	32.6	6.8	6.6	17.59	21.61
PFBA	5.21	0	9.24	4.07	3.5	4.06	4.17	4.1	6.01	4.1	3.3	2.80	3.00
PFPeA	6.24	5.23	6.05	4.81	4.6	5.5	5.21	6.6	6.61	3.3	3.6	3.37	3.85
PFHxA	8.12	6.17	8.62	7.15	5.8	7.06	8.13	6.7	8.90	4.5	4.2	5.23	6.33
PFHpA	8.27	6.55	8.34	6.26	5.3	7.57	7.6	6.5	7.67	3.9	3.4	4.89	5.21
PFNA	2.72	1.21	2.8	0.974	0	1.54	1.46	0	2.13	0	0	0.90	1.04
PFDA	1.08	0	0.906	0	0	0	0.649	0	0	0	0	0.27	0.34
PFUnA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PFDoA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PFTTrDA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PFTA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
L-PFBS	3.1	2.2	3.8	2.48	2.2	2.77	3.23	2.7	3.43	0	0	1.52	1.76
PFPeS	2.2	1.13	2.12	1.23	0	1.62	1.76	0	2.25	0	0	0.93	1.07
PFHxS	7.13	5.11	6.51	4.03	4.3	4.93	5.10	6.0	7.05	3.8	3.4	4.15	4.70
PFHpS	1.3	0	0.793	0	0	0.889	0.664	0	1.21	0	0	0.45	0.51
PFNS	0	0	0	0	0	0	24.4	0	0	0	0	0.00	2.22
PFDS	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PFOSA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
N-MeFOSAA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
N-EtFOSAA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
11Cl-PF3OUds	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
9Cl-PF3ONS	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
ADONA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
NFDHA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PFEESA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PFMBA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PFMPA	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PMPA	0	0	0	0	0	0	0	0	0.226	0	0	0.00	0.08
PFPrA	24.8	0	2.37	0	0	16.8	0	0	2.73	0	0	19.20	1.70
4:2 FTS	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
6:2 FTS	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
8:2 FTS	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
HFPO-DA (GenX)	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
PFOA + PFOS	57.80	36.30	46.50	35.10	27.00	38.20	44.50	38.00	53.80	16.50	15.60	31.70	37.80
SUM ALL	103.17	63.90	95.68	66.10	52.70	74.14	106.87	70.60	99.06	36.10	33.50	56.21	67.47
PFOA + PFOS removal %				21.1	28.9					-5.8		16.1	
Total PFAS removal %				38.1	25.4					-7.8		16.7	
									Raw water = water from lake prior to treatment				
									Finished water = treated water				
									*DEQ sampled also -analysis by GEL Labs, unknown method				
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