ID	Alternate ID	X (easting)	Y (northing)	Sample Type
BH06		247658.25	417946.91	Ground Water
BH107		247667.9	418016.6	Ground Water
BH206		247728.9	417920.2	Ground Water
BH207		247710	418063.1	Ground Water
BH213		248005.6	418208.4	Leachate
BH214		247876.4	418097.8	Leachate
BH215		247955	418102.8	Leachate
BHW1		247942	418007	Leachate
SW6	SW6 Upstream (U/S)	247280.51	417066.083	Surface Water
SW8	SW8 Downstream (D/S)	247662.275	419302.586	Surface Water
BH403		247716.5	417994.3	Ground Water
BH411		247631.1	418020.5	Groundwater
BH635D		247724.5	418119.25	Ground Water
Cloghole		248891	420011	Surface Water
Culmore WWTW		247786	423148	Surface Water
Drumahoe Discharge (Tributary)		246046	414865	Surface Water

Method	
TM135	PFAS by LC-MS - Determination of Specific Perfluorinated Alkyl Acids and Sulfonates with Reversed Phase Liquid Chromatography and Mass Spectroscopy detection after a Solid Phase Extraction clean-up process has been performed.
PM121	Preparation of PFAS liquid samples – As received samples are centrifuged and the supernatant is used for PFAS analysis.

Sample Date	Sample Type	Sample ID	Method	PFAAS	PFBA	PFPeA	PFBS	PFHxA	4:2 FTS	PFPeS	PFHpA	PFHxS	PFOA	6:2 FTS	PFHpS	PFNA	PFOSA	PFOS	PFDA	8:2 FTS	PFNS	PFUnA	N-MeFOSAA	N-EtFOSAA	PFDS	PFDoA	PFTrDA	PFTeDA
19/09/2021	Surface Water	Culmore WWTW	TM135/PM121		<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.2	<0.1	<0.05	<1	<0.05	<0.05	<0.2	<0.05	<0.05	<1	<0.2	<0.05	<0.05	<0.05	<0.05
19/09/2021	Surface Water	Drumahoe Discharge (Trubutary)	TM135/PM121		<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.2	<0.1	<0.05	<1	<0.05	<0.05	<0.2	<0.05	<0.05	<1	<0.2	<0.05	<0.05	<0.05	<0.05
20/08/2021	Landfill Leachate	BHW1	TM135/PM121		<0.05	<0.05	<0.05	0.08	<0.1	<0.05	<0.05	<0.05	0.26	<0.2	<0.1	<0.05	<1	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.05	<0.05	<0.05	<0.05
20/08/2021	Landfill Leachate	BH213	TM135/PM121		<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.1	<0.05	<1	0.11	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.05	<0.05	<0.05	<0.05
20/08/2021	Landfill Leachate	BH214	TM135/PM121		<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.1	<0.05	<1	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.05	<0.05	<0.05	<0.05
20/08/2021	Landfill Leachate	BH215	TM135/PM121		<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.1	<0.05	<1	0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.2	<0.05	<0.05	<0.05	<0.05
19/08/2021	Surface Water	SW6 U/S	TM135/PM121		<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.1	<0.05	<1	<0.05	<0.05	<0.10 {AA}	<0.05	<0.05	<1	<0.2	<0.05	<0.05	<0.05	<0.05
19/08/2021	Surface Water	SW8 D/S	TM135/PM121		<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.1	<0.05	<1	<0.05	<0.05	<0.10 {AA}	<0.05	<0.05	<1	<0.2	<0.05	<0.05	<0.05	<0.05

Total Oxidisable Precursors (TOP) Assay

Background

Thousands of polyfluorinated compounds (PFAA precursors) are used in industrial and consumer products and there is concern that these may overtime biotransform to PFAAs. TOP Assay is a procedure developed to estimate the effect of these precusors on future PFAAs concentration.

Analysis

The received water samples were treated with potassium persulphate (60mM) and sodium hydroxide (0.125M) before heating at 85C for 6 hours. Once cool the samples were neutralised with HCl prior to analysis by LC/MS/MS for PFAS suite. The received water samples were also analysed untreated by LC/MS/MS for PFAS suite alongside the treated samples. The difference between the treated and untreated concentrations is the concentration of the non-discrete PFAA precursors.

Results

All results are in µg/L

Sample Date	Sample Type	Sample ID	Column4	C13 Precursor	Pre-TOPs00	% Rec	Post-TOPs	% Oxidation
19/09/2021	Surface Water	Culmore WWTW	TOP Assay	C13 6:2 FTS	0.039	98	ND	100
19/09/2021	Surface Water	Drumahoe Discharge (Tributary)	TOP Assay	C13 6:2 FTS	0.036	90	ND	100

Sample Date	Sample Type	Sample ID	Column4	Column5	4:2 FTS	6:2 FTS	8:2 FTS	N-MeFOSAA	N-EtFOSAA	PFBA	PFPeA	PFBS	PFHxA	5:3 FTCA	PFPeS	PFHpA	PFHxS	PFOA	PFHpS	PFNA	PFOSA	PFOS	PFDA	PFNS	PFUna	PFDS	PFDoA	PFTrDA	PFTeDA
19/09/2021	Surface Water	Culmore WWTW	TOP Assay	Pre-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	0.002	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/09/2021	Surface Water	Culmore WWTW	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/09/2021	Surface Water	Culmore WWTW	TOP Assay	Difference	<0.004	<0.004	<0.004	<0.004	<0.004	-0.002	<0.001	-0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/09/2021	Surface Water	Drumahoe Discharge (Tributary)	TOP Assay	Pre-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/09/2021	Surface Water	Drumahoe Discharge (Tributary)	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/09/2021	Surface Water	Drumahoe Discharge (Tributary)	TOP Assay	Difference	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Sample Date	Sample Type	Sample ID	Column4	C13 Precursor	Pre-TOPs00	% Rec	Post-TOPs	% Oxidation
19/08/2021	Surface Water	SW6 Upstream (U/S)	TOP Assay	C13 6:2 FTS	0.038	95	ND	100
19/08/2021	Surface Water	SW8 Downstream (D/S)	TOP Assay	C13 6:2 FTS	0.032	80	ND	100

Sample Date	Sample Type	Sample ID	Column4	Column5	4:2 FTS	6:2 FTS	8:2 FTS	N-MeFOSAA	N-EtFOSAA	PFBA	PFPeA	PFBS	PFHxA	5:3 FTCA	PFPeS	PFHpA	PFHxS	PFOA	PFHpS	PFNA	PFOSA	PFOS	PFDA	PFNS	PFUna	PFDS	PFDoA	PFTrDA	PFTeDA
19/08/2021	Surface Water	SW6 Upstream (U/S)	TOP Assay	Pre-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/08/2021	Surface Water	SW6 Upstream (U/S)	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/08/2021	Surface Water	SW6 Upstream (U/S)	TOP Assay	Difference	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/08/2021	Surface Water	SW8 Downstream (D/S)	TOP Assay	Pre-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/08/2021	Surface Water	SW8 Downstream (D/S)	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19/08/2021	Surface Water	SW8 Downstream (D/S)	TOP Assay	Difference	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Sample Date	Sample Type	Sample ID	Column4	Column5	4:2 FTS	6:2 FTS	8:2 FTS	N-MeFOSAA	N-EtFOSAA	PFBA	PFPeA	PFBS	PFHxA	PFPeS	PFHpA	PFHxS	PFOA	PFHpS	PFNA	PFOSA	PFOS	PFDA	PFNS	PFUna	PFDS	PFDoA	PFTrDA	PFTeDA	Column6	Total
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-Tops	<0.001	0.162	0.049	<0.004	<0.004	0.027	<0.001	0.045	0.026	0.003	0.031	0.017	0.143	<0.001	0.013	<0.001	0.023	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		0.546
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-Tops	<0.001	0.033	0.01	<0.004	<0.004	0.289	0.094	0.073	0.189	0.002	0.07	0.021	0.26	0.001	0.016	<0.001	0.025	0.012	0.001	<0.001	<0.001	<0.001	<0.001	<0.001		1.096
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Difference	<0.001	-0.129	-0.039	<0.004	<0.004	0.262	0.094	0.028	0.163	-0.001	0.039	0.004	0.117	0.001	0.003	<0.001	0.002	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-Tops	<0.001	0.116	0.031	<0.004	<0.004	<0.001	<0.001	0.03	<0.001	0.005	<0.001	0.023	0.011	0.001	<0.001	<0.001	0.022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		0.239
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-Tops	<0.001	0.148	0.037	<0.004	0.008	0.191	0.1	0.056	0.239	0.002	0.057	0.027	0.205	0.001	0.013	0.001	0.061	0.011	0.001	0.001	<0.001	0.001	<0.001	<0.001		1.16
20/08/2021	Landfill Leachate	BH213	TOP Assay	Difference	<0.001	0.032	0.006	<0.004	0.004	0.191	0.1	0.026	0.239	-0.003	0.057	0.004	0.194	<0.001	0.013	0.001	0.039	0.011	0.001	0.001	<0.001	0.001	<0.001	<0.001		
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-Tops	<0.001	0.128	0.01	<0.004	<0.004	0.022	<0.001	0.034	0.034	0.001	<0.001	0.009	0.008	0.001	<0.001	<0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		0.25
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-Tops	<0.001	0.093	0.006	<0.004	<0.004	0.521	0.235	0.06	0.674	0.003	0.115	0.013	0.132	<0.001	0.041	<0.001	0.005	0.032	0.001	0.008	<0.001	0.016	0.001	0.001		1.957
20/08/2021	Landfill Leachate	BH214	TOP Assay	Difference	<0.001	-0.035	-0.004	<0.004	<0.004	0.499	0.235	0.026	0.64	0.002	0.115	0.004	0.124	-0.001	0.041	<0.001	0.003	0.031	0.001	0.008	<0.001	0.016	0.001	0.001		
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-Tops	<0.001	0.193	0.053	0.035	<0.004	0.008	<0.001	0.011	<0.001	0.005	<0.001	0.009	0.021	0.001	0.001	0.001	0.047	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		0.385
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-Tops	<0.001	0.075	0.025	0.01	<0.004	0.339	0.133	0.021	0.296	0.002	0.093	0.017	0.511	0.001	0.014	0.003	0.108	0.006	<0.001	0.001	<0.001	<0.001	<0.001	<0.001		1.655
20/08/2021	Landfill Leachate	BH215	TOP Assay	Difference	<0.001	-0.118	-0.028	-0.025	<0.004	0.331	0.133	0.01	0.296	-0.003	0.093	0.008	0.49	<0.001	0.013	0.002	0.061	0.006	<0.001	0.001	<0.001	<0.001	<0.001	<0.001		
2x oxidation to achieve >pH12																														

Total Oxidisable Precursors (TOP) Assay

Background

Thousands of polyfluorinated compounds (PFAA precursors) are used in industrial and consumer products and there is concern that these may overtime biotransform to PFAAs. TOP Assay is a procedure developed to estimate the effect of these precusors on future PFAAs concentration.

Analysis

The received water samples were treated with potassium persulphate (60mM) and sodium hydroxide (0.125M) before heating at 85C for 6 hours. Once cool the samples were neutralised with HCl prior to analysis by LC/MS/MS for PFAS suite.
The received water samples were also analysed untreated by LC/MS/MS for PFAS suite alongside the treated samples. The difference between the treated and untreated concentrations is the concentration of the non-discrete PFAA precursors.
Samples were analysed neat and treated with 4x oxidant dose. C13 6:2 FTS added to monitor the effectiveness of the oxidation.
Results have been Internal Standard corrected.

Results

All results are in µg/L

Sample Date	Sample Type	Sample ID	Column4	Column5	C13 6:2 FTS
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-TOPs	2.188
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-TOPs%	0.025
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Oxidation	98.9
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-TOPs	0.432
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-TOPs%	0.624
20/08/2021	Landfill Leachate	BH213	TOP Assay	Oxidation	-44.4
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-TOPs	0.719
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-TOPs%	0.023
20/08/2021	Landfill Leachate	BH214	TOP Assay	Oxidation	96.8
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-TOPs	0.796
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-TOPs%	0.096
20/08/2021	Landfill Leachate	BH215	TOP Assay	Oxidation	87.9

Sample Date	Sample Type	Sample ID	Column4	Column5	4:2 FTS	6:2 FTS	8:2 FTS	N-MeFOSAA	N-EtFOSAA	PFOSA	PFBA	PFPeA	PFBS	PFHxA	PFPeS	PFHpA	PFHxS	PFOA	PFHpS	PFNA	PFOS	PFDA	PFNS	PFUna	PFDS	PFDoA	PFTrDA	PFTeDA	5:3 FTCA
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-Tops	<0.004	0.091	0.023	0.011	<0.004	<0.004	0.005	0.01	0.024	0.048	0.003	0.038	0.016	0.2	<0.001	0.055	0.019	0.032	0.002	0.001	<0.001	0.001	0.001	0.001	0.018
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.127	0.079	0.043	0.187	0.002	0.062	0.018	0.177	0.001	0.018	0.017	0.007	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Difference	<0.004	0.091	0.023	0.011	<0.004	<0.004	0.122	0.069	0.019	0.139	-0.001	0.024	0.002	-0.023	0.001	-0.037	-0.002	-0.025	0.002	0	<0.001	-0.001	-0.001	-0.001	-0.018
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-Tops	<0.004	0.028	0.021	0.023	0.037	<0.004	0.062	0.011	0.029	0.015	0.002	0.004	0.012	0.113	0.002	0.007	0.027	0.078	0.001	0.005	0.001	0.015	0.004	0.005	0.008
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-Tops	<0.004	0.013	<0.004	<0.004	<0.004	<0.004	0.127	0.103	0.049	0.155	0.003	0.084	0.021	0.154	0.001	0.028	0.035	0.018	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH213	TOP Assay	Difference	<0.004	-0.015	-0.021	-0.023	-0.037	<0.004	0.065	0.092	0.02	0.14	0.001	0.08	0.009	0.041	-0.001	0.021	0.008	-0.06	-0.001	-0.002	-0.001	-0.015	-0.004	-0.005	-0.008
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-Tops	<0.004	0.017	<0.004	0.021	0.015	<0.004	0.021	0.008	0.011	0.103	0.001	0.03	0.007	0.067	0.001	0.037	0.005	DR	<0.001	0.008	<0.001	0.006	0.002	0.003	0.011
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-Tops	<0.004	0.001	<0.004	<0.004	<0.004	<0.004	0.111	0.067	0.023	0.214	0.003	0.068	0.012	0.084	<0.001	0.032	0.005	0.019	<0.001	0.005	<0.001	0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH214	TOP Assay	Difference	<0.004	-0.016	<0.004	-0.021	-0.015	<0.004	0.09	0.059	0.012	0.111	0.002	0.038	0.005	0.017	-0.001	-0.005	0	0.026	<0.001	-0.003	<0.001	-0.005	-0.002	-0.003	-0.011
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-Tops	<0.004	0.048	0.029	0.155	0.01	0.022	0.015	0.003	0.006	0.043	0.002	0.023	0.011	0.117	0.001	0.05	0.049	0.009	<0.001	0.002	<0.001	0.002	0.001	0.002	0.008
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.113	0.054	0.014	0.145	0.003	0.069	0.023	0.194	0.003	0.015	0.1	-0.017	<0.001	0.002	<0.001	0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH215	TOP Assay	Difference	<0.004	0.048	0.029	0.155	0.01	0.022	0.098	0.051	0.008	0.102	0.001	0.046	0.012	0.077	0.002	-0.035	0.051		<0.001	0	<0.001	-0.001	-0.001	-0.001	-0.008

Total Oxidisable Precursors (TOP) Assay

Background

Thousands of polyfluorinated compounds (PFAA precursors) are used in industrial and consumer products and there is concern that these may overtime biotransform to PFAAs. TOP Assay is a procedure developed to estimate the effect of these precusors on future PFAAs concentration.

Analysis

The received water samples were treated with potassium persulphate (60mM) and sodium hydroxide (0.125M) before heating at 85C for 6 hours. Once cool the samples were neutralised with HCl prior to analysis by LC/MS/MS for PFAS suite.
The received water samples were also analysed untreated by LC/MS/MS for PFAS suite alongside the treated samples. The difference between the treated and untreated concentrations is the concentration of the non-discrete PFAA precursors.
Samples were treated with x4 oxidant.
C13 6:2 FTS added to monitor the effectiveness of the oxidation.
These results have NOT been Internal Standard corrected.

Results

Sample Date	Sample Type	Sample ID	Column4	Column5	C13 6:2 FTS
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-TOPs	2.124
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-TOPs	ND
20/08/2021	Landfill Leachate	BHW1	TOP Assay	% Oxidation	100
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-TOPs	0.088
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-TOPs	0.624
20/08/2021	Landfill Leachate	BH213	TOP Assay	% Oxidation	-609.1
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-TOPs	0.062
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-TOPs	ND
20/08/2021	Landfill Leachate	BH214	TOP Assay	% Oxidation	100
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-TOPs	0.779
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-TOPs	0.097
20/08/2021	Landfill Leachate	BH215	TOP Assay	% Oxidation	87.5

Sample Date	Sample Type	Sample ID	Column4	Column5	MPFOA	MPFOS
20/08/2021	Landfill Leachate	BHW1	TOP Assay	% Recovery Pre-TOPs	5.9	39.4
20/08/2021	Landfill Leachate	BHW1	TOP Assay	% Recovery Post-TOPs	35.6	50.4
20/08/2021	Landfill Leachate	BH213	TOP Assay	% Recovery Pre-TOPs	0.4	15.7
20/08/2021	Landfill Leachate	BH213	TOP Assay	% Recovery Post-TOPs	60.4	89.8
20/08/2021	Landfill Leachate	BH214	TOP Assay	% Recovery Pre-TOPs	1.2	32.7
20/08/2021	Landfill Leachate	BH214	TOP Assay	% Recovery Post-TOPs	69.8	97
20/08/2021	Landfill Leachate	BH215	TOP Assay	% Recovery Pre-TOPs	1.9	31.4
20/08/2021	Landfill Leachate	BH215	TOP Assay	% Recovery Post-TOPs	52.5	75

Sample Date	Sample Type	Sample ID	Column4	Column5	4:2 FTS	6:2 FTS	8:2 FTS	N-MeFOSAA	N-EtFOSAA	PFOSA	PFBA	PFPeA	PFBS	PFHxA	PFPeS	PFHpA	PFHxS	PFOA	PFHpS	PFNA	PFOS	PFDA	PFNS	PFUna	PFDS	PFDoA	PFTrDA	PFTeDA	5:3 FTCA
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-Tops	<0.004	0.044	0.009	<0.004	<0.004	<0.004	0.002	0.001	0.011	0.003	0.002	0.003	0.007	0.015	<0.001	0.004	0.008	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.11	0.051	0.028	DR	0.001	0.035	0.01	DR	<0.001	0.008	0.009	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Difference	<0.004	-0.044	-0.009	<0.004	<0.004	<0.004	0.108	0.05	0.017	0.001	-0.001	0.032	0.003	0.001	<0.001	0.004	0.001	0.001	-0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-0.001
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-Tops	<0.004	0.004	<0.004	<0.004	<0.004	<0.004	<0.001	<0.001	0.005	DR	<0.001	<0.001	0.002	DR	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-Tops	<0.004	0.013	<0.004	<0.004	<0.004	<0.004	0.212	DR	0.082	0.001	0.003	DR	0.022	0.001	0.001	0.024	0.042	0.014	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH213	TOP Assay	Difference	<0.004	0.009	<0.004	<0.004	<0.004	<0.004	0.212	<0.001	0.077	DR	0.003	0.001	0.02	DR	0.001	0.024	0.038	0.014	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-Tops	<0.004	0.005	<0.004	<0.004	<0.004	<0.004	<0.001	0.109	0.004	0.001	0.003	DR	0.002	0.003	<0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.198	0.109	0.028	DR	0.003	0.001	0.013	DR	<0.001	0.034	0.005	0.017	<0.001	0.005	<0.001	0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH214	TOP Assay	Difference	<0.004	-0.005	<0.004	<0.004	<0.004	<0.004	0.198	<0.001	0.024		0	0.094	0.011		<0.001	0.033	0.003	0.016	<0.001	0.005	<0.001	0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-Tops	<0.004	0.015	0.008	0.011	<0.004	<0.004	<0.001	0.047	0.002		0.003	0.093	0.004		<0.001	0.001	0.019	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-Tops	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.143	0.047	0.012		0.003		0.021		0.002	0.011	DR	0.006	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
20/08/2021	Landfill Leachate	BH215	TOP Assay	Difference	<0.004	-0.015	-0.008	-0.011	<0.004	<0.004	0.143		0.01		0		0.017		0.002	0.01		0.005	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Total Oxidisable Precursors (TOP) Assay

Background

Thousands of polyfluorinated compounds (PFAA precursors) are used in industrial and consumer products and there is concern that these may overtime biotransform to PFAAs. TOP Assay is a procedure developed to estimate the effect of these precusors on future PFAAs concentration.

Analysis

The received water samples were treated with potassium persulphate (60mM) and sodium hydroxide (0.125M) before heating at 85C for 6 hours. Once cool the samples were neutralised with HCl prior to analysis by LC/MS/MS for PFAS suite.
The received water samples were also analysed untreated by LC/MS/MS for PFAS suite alongside the treated samples. The difference between the treated and untreated concentrations is the concentration of the non-discrete PFAA precursors.
A x10 dilution was performed on the samples prior to TOP assay. Samples were treated with x2 oxidant. C13 6:2 FTS added to monitor the effectiveness of the oxidation.
Results have been Internal Standard corrected.

Results

All results are in µg/L

Sample Date	Sample Type	Sample ID	Column4	Column5	C13 6:2 FTS
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-TOPs	6.515
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-TOPs	ND
20/08/2021	Landfill Leachate	BHW1	TOP Assay	% Oxidation	100
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-TOPs	3.197
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-TOPs	ND
20/08/2021	Landfill Leachate	BH213	TOP Assay	% Oxidation	100
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-TOPs	3.747
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-TOPs	0.044
20/08/2021	Landfill Leachate	BH214	TOP Assay	% Oxidation	98.8
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-TOPs	0.335
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-TOPs	ND
20/08/2021	Landfill Leachate	BH215	TOP Assay	% Oxidation	100

Sample Date	Sample Type	Sample ID	Column1	Sample	4:2 FTS	6:2 FTS	8:2 FTS	N-MeFOSAA	N-EtFOSAA	PFOSA	PFBA	PFPeA	PFBS	PFHxA	PFPeS	PFHpA	PFHxS	PFOA	PFHpS	PFNA	PFOS	PFDA	PFNS	PFUna	PFDS	PFDoA	PFTrDA	PFTeDA	5:3 FTCA
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-TOPs	<0.04	0.111	<0.04	<0.04	<0.04	<0.04	0.045	0.010	0.044	0.079	<0.01	0.052	0.019	0.189	<0.01	0.029	0.023	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.041	0.026	0.065	0.051	<0.01	0.029	0.024	0.110	<0.01	0.012	0.026	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Difference	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-0.004	0.016	0.021	-0.028	<0.01	-0.023	0.005	-0.079	<0.01	-0.017	0.003	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-TOPs	<0.04	0.099	<0.04	<0.04	0.052	<0.04	0.179	<0.01	0.029	<0.01	<0.01	0.026	0.031	0.131	<0.01	0.026	0.065	0.035	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.216	0.190	0.068	0.239	<0.01	0.130	0.027	0.226	<0.01	0.050	0.068	0.025	<0.01	0.010	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH213	TOP Assay	Difference	<0.04	-0.099	<0.04	<0.04	-0.052	<0.04	0.037	0.19	0.039	0.239	<0.01	0.104	-0.004	0.095	<0.01	0.024	0.003	-0.010	<0.01	0.010	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-TOPs	<0.04	0.092	<0.04	<0.04	<0.04	<0.04	0.157	<0.01	0.049	0.119	0.011	0.040	0.015	0.068	<0.01	0.012	0.031	0.022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.025
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.012	0.01	0.039	0.031	<0.01	0.014	0.011	0.019	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH214	TOP Assay	Difference	<0.04	-0.092	<0.04	<0.04	<0.04	<0.04	-0.145	0.01	-0.01	-0.088	-0.011	-0.026	-0.004	-0.049	<0.01	0.000	-0.031	-0.022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-0.025
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-TOPs	<0.04	0.100	<0.04	0.208	<0.04	<0.04	0.078	0.035	0.027	0.091	<0.01	0.040	0.013	0.107	<0.01	0.017	0.068	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.071
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.019	0.013	0.020	0.026	<0.01	0.017	0.023	0.075	<0.01	<0.01	0.146	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH215	TOP Assay	Difference	<0.04	-0.100	<0.04	-0.208	<0.04	<0.04	-0.059	-0.022	-0.007	-0.065	<0.01	-0.023	0.010	-0.032	<0.01	-0.017	0.078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-0.071

Total Oxidisable Precursors (TOP) Assay

Background

Thousands of polyfluorinated compounds (PFAA precursors) are used in industrial and consumer products and there is concern that these may overtime biotransform to PFAAs. TOP Assay is a procedure developed to estimate the effect of these precusors on future PFAAs concentration.

Analysis

The received water samples were treated with potassium persulphate (60mM) and sodium hydroxide (0.125M) before heating at 85C for 6 hours. Once cool the samples were neutralised with HCl prior to analysis by LC/MS/MS for PFAS suite.
The received water samples were also analysed untreated by LC/MS/MS for PFAS suite alongside the treated samples. The difference between the treated and untreated concentrations is the concentration of the non-discrete PFAA precursors.
A x10 dilution was performed on the samples prior to TOP assay. Samples were treated with x2 oxidant.
C13 6:2 FTS added to monitor the effectiveness of the oxidation. These results have NOT been Internal Standard corrected

Results

All results are in µg/L

Sample Date	Sample Type	Sample ID	Column4	Mass Labelled Precursc	C13 6:2 FTS
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-TOPs	6.496
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-TOPs	ND
20/08/2021	Landfill Leachate	BHW1	TOP Assay	% Oxidation	100.0
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-TOPs	3.177
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-TOPs	ND
20/08/2021	Landfill Leachate	BH213	TOP Assay	% Oxidation	100.0
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-TOPs	3.679
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-TOPs	0.045
20/08/2021	Landfill Leachate	BH214	TOP Assay	% Oxidation	98.8
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-TOPs	0.336
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-TOPs	ND
20/08/2021	Landfill Leachate	BH215	TOP Assay	% Oxidation	100.0

Sample Date	Sample Type	Sample ID	Column4	Mass Labelled Internal	MPFOA	MPFOS
20/08/2021	Landfill Leachate	BHW1	TOP Assay	%RecoveryPre-TOPs	40.4	75.9
20/08/2021	Landfill Leachate	BHW1	TOP Assay	%RecoveryPost-TOPs	91.1	97.1
20/08/2021	Landfill Leachate	BH213	TOP Assay	%RecoveryPre-TOPs	13.6	46.4
20/08/2021	Landfill Leachate	BH213	TOP Assay	%RecoveryPost-TOPs	85.4	100.6
20/08/2021	Landfill Leachate	BH214	TOP Assay	%RecoveryPre-TOPs	19.6	55.3
20/08/2021	Landfill Leachate	BH214	TOP Assay	%RecoveryPost-TOPs	92.5	100.8
20/08/2021	Landfill Leachate	BH215	TOP Assay	%RecoveryPre-TOPs	3.6	4.3
20/08/2021	Landfill Leachate	BH215	TOP Assay	%RecoveryPost-TOPs	91.9	96.2

Sample Date	Sample Type	Sample ID	Column1	Column2	4:2 FTS	6:2 FTS	8:2 FTS	N-MeFOSAA	N-EtFOSAA	PFOSA	PFBA	PFPeA	PFBS	PFHxA	PFPeS	PFHpA	PFHxS	PFOA	PFHpS	PFNA	PFOS	PFDA	PFNS	PFUna	PFDS	PFDoA	PFTrDA	PFTeDA	5:3 FTCA
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Pre-TOPs	<0.04	0.087	<0.04	<0.04	<0.04	<0.04	0.023	<0.01	0.035	0.040	0.013	0.027	0.014	0.104	<0.01	0.015	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Post-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.048	0.029	0.067	0.060	<0.01	0.033	0.024	0.142	<0.01	0.013	0.026	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BHW1	TOP Assay	Difference	<0.04	-0.087	<0.04	<0.04	<0.04	<0.04	0.025	0.029	0.032	0.020	-0.013	0.006	0.010	0.038	<0.01	-0.002	0.008	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH213	TOP Assay	Pre-TOPs	<0.04	0.046	<0.04	<0.04	<0.04	<0.04	0.033	<0.01	0.015	<0.01	0.018	<0.01	0.014	0.024	<0.01	<0.01	0.031	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH213	TOP Assay	Post-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.263	0.229	0.073	0.308	<0.01	0.150	0.028	0.318	<0.01	0.055	0.073	0.026	<0.01	0.010	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH213	TOP Assay	Difference	<0.04	-0.046	<0.04	<0.04	<0.04	<0.04	0.230	0.229	0.058	0.308	-0.018	-0.15	0.014	0.294	<0.01	0.055	0.042	0.026	<0.01	0.010	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH214	TOP Assay	Pre-TOPs	<0.04	0.052	<0.04	<0.04	<0.04	<0.04	0.068	<0.01	0.028	0.029	0.011	0.010	<0.01	0.018	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH214	TOP Assay	Post-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.014	0.012	0.041	0.036	<0.01	0.016	0.012	0.023	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH214	TOP Assay	Difference	<0.04	-0.082	<0.04	<0.04	<0.04	<0.04	-0.054	0.012	0.013	0.007	-0.011	0.006	0.012	0.005	<0.01	0.013	-0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH215	TOP Assay	Pre-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH215	TOP Assay	Post-TOPs	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.022	0.014	0.019	0.030	<0.01	0.022	0.022	0.104	<0.01	<0.01	0.158	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
20/08/2021	Landfill Leachate	BH215	TOP Assay	Difference	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.022	0.014	0.019	0.030	<0.01	0.022	0.022	0.104	<0.01	<0.01	0.158	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Location	Sample Date	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFTrDA	PFTeDA	PFHxDA	PFODA	PFBS	PFPeS	PFHxS	PFHpS	PFOS	PFNS	PFDS	PFUnDS	PFDoDS	PFTrDS	HFPO-DA (Ge	HFPO-TA	DONA	PFMOPrA	NFDHA	PFMOBA	PFECHS	3:3 FTCA	5:3 FTCA	7:3 FTCA	PFEESA	9Cl-PF3ON	11Cl-PF3O	4:2 FTS	6:2 FTS	8:2 FTS	FBSA	FHxSA	FOSA	N-MeFOSA	N-EtFOSA	Me-FOSE	Et-FOSE	N-MeFOSA	N-EtFOSA	8:2diPAP	FOUEA
BH06	29.02.2024	<0.05	<0.05	0.09	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BH107	29.02.2024	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BH206	29.02.2024	<0.05	<0.05	0.06	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BH207	29.02.2024	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BH213	29.02.2024	<0.05	0.11	0.28	0.07	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BH215	29.02.2024	<0.05	<0.05	0.09	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BHW1	29.02.2024	<0.05	0.05	0.07	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
SW6	29.02.2024	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
SW8	29.02.2024	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
Cloghole	29.02.2024	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BH403	29.02.2024	<0.05	<0.05	0.14	0.1	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	0.6	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BH441	29.02.2024	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1
BH6513D	29.02.2024	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.1	<0.5	<0.1	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.05	<0.05	<1	<1	<1	<0.1	<0.1	<1	<1	<0.2	<1

All results are in µg/L

Location	Sample Date	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFTrDA	PFTeDA	PFHxDA	PFODA	PFBS	PFPeS	PFHxS	PFHpS	PFOS	PFNS	PFDS	PFUnDS	PFDoDS	PFTrDS	HFPO-DA	HFPO-TA	DONA	PFMOPrA	NFDHA	PFMOBA	PFECHS	3:3 FTCA	5:3 FTCA	7:3 FTCA	PFEESA	9Cl-PF3ON	11Cl-PF3O	4:2 FTS	6:2 FTS	8:2 FTS	FBSA	FHxSA	FOSA	N-MeFOSA	N-EtFOSA	Me-FOSE	Et-FOSE	N-MeFOSA	N-EtFOSAA	8:2diPAP	FOUEA
BH06	10.06.2024	0.08	<0.005	0.13	0.022	0.0661	0.006	<0.005	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.08	0.006	0.02	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	<0.005	0.025	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005
SW6	10.06.2024	0.006	<0.001	<0.005	<0.001	<0.00065	<0.001	<0.001	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.011	<0.001	<0.001	<0.001	<0.00065	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	NDP	<0.001	<0.005	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005
SW8	10.06.2024	0.01	<0.001	<0.005	<0.001	<0.00065	<0.001	<0.001	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.01	<0.001	<0.001	<0.001	<0.00065	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	NDP	<0.001	<0.005	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005
BH411	10.06.2024	0.036	0.043	0.091	0.03	0.0672	0.012	0.001	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.023	0.003	0.024	0.002	0.0959	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005
BH637	10.06.2024	0.022	0.007	0.016	0.004	0.0156	0.002	0.003	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.008	<0.001	0.003	<0.001	0.0071	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005

All results are in µg/L

Location	Sample Date	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFTrDA	PFTeDA	PFHxDA	PFODA	PFBS	PFPeS	PFHxS	PFHpS	PFOS	PFNS	PFDS	PFUnDS	PFDoDS	PFTrDS	HFPO-DA	HFPO-TA	DONA	PFMOPrA	NFDHA	PFMOBA	PFECHS	3:3 FTCA	5:3 FTCA	7:3 FTCA	PFBESA	9Cl-PF3ONS	11Cl-PF3	4:2 FTS	6:2 FTS	8:2 FTS	FBSA	PFeSA	FOSA	N-MeFOSA	N-EtFOSA	Me-FOSE	Et-FOSE	N-MeFOSE	N-EtFOSE	8:2diPAP	FOUEA
Blfish	02.09.2024	0.214	0.0110	0.213	0.031	0.0711	0.006	<0.001	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.093	0.007	0.028	<0.001	0.0018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.005	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	0.221	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005
Blfish1	02.09.2024	0.04	0.06	0.106	0.048	0.1191	0.044	0.004	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.035	0.003	0.017	0.004	0.1634	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.005	<0.001	<0.001	0.006	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	0.059	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005
Blfish2	02.09.2024	0.005	0.004	0.007	0.002	0.0056	<0.005	0.001	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.004	<0.001	0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.005	<0.001	<0.001	0.006	<0.001	0.005	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	0.008	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005
SNfish	02.09.2024	<0.005	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.001	<0.001	<0.001	<0.001	<0.000615	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.005	<0.001	<0.001	0.005	<0.001	0.008	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	0.013	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005
SNfish	02.09.2024	<0.005	<0.001	<0.001	<0.001	0.0038	<0.005	<0.001	<0.001	<0.001	<0.006	<0.001	<0.01	<0.025	0.001	<0.001	<0.001	<0.001	<0.000615	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.005	<0.001	<0.001	0.007	<0.001	<0.02	<0.01	<0.02	<0.001	<0.001	<0.001	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.02	<0.02	<0.005	<0.005	<0.005	<0.005

All results are in µg/L