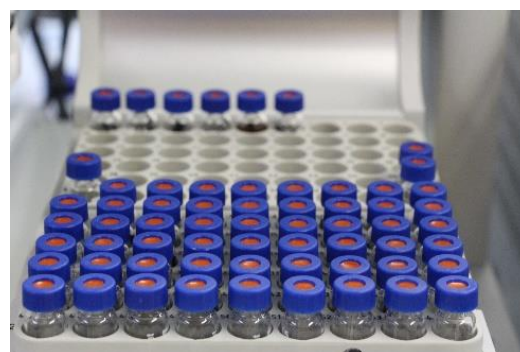


## PFAS analysis at AST

Analytical Services Tasmania has recently gained NATA accreditation for analysis of the group of Perfluorinated Compounds, commonly known as PFAS, in water at Trace and Ultra-Trace levels.

This group of chemicals includes PFOS which has been widely used in fire-fighting foams and electronics, and PFOA (and related compounds) used in the manufacture of non-stick materials such as kitchen-ware, textiles, paints, carpets and Teflon. These chemicals are a concern in the environment due to their persistence, bio-accumulative effects and related toxicity. A restriction on the production of PFOS has been in place since it was listed in the Stockholm Convention on Persistent Organic Pollutants in 2009; PFOA and PFHxS are being considered for future listing.

AST's analytical testing methodology targets a total of 34 perfluorinated compounds, with limits of reporting down to 0.1ng/L for water (from 250mL sample) and 0.5µg/kg for soil and biota. These ultra-trace reporting limits are able to meet the 99% protection level (0.23ng/L) as included in the draft Australian and New Zealand Water Quality Guidelines (2016), and are well below the draft guideline for PFOS in drinking water announced by the US EPA of 0.2µg/L. Our Trace-level method is capable of detecting below the 0.07µg/L limit for PFOS+PFHxS in drinking water.



Suites of analysis include the basic suite (see table below) and extended suite, or any other combination of analytes as required. If we currently do not offer a target chemical of interest to you, please let us know as we are continually increasing the scope of our methods.

**Please take note of the sample container requirements, as PFAS chemicals are known to adhere to glass and samples collected in glass are not suitable for analysis.**

### Water

250mL Polypropylene bottle



### Soil, Solids and Biota

Zip-lock bag



If you would like more information regarding PFAS testing, please contact:  
Tim Jordan  
Section Head – Organic Chemistry  
03 6165 3314, [tim.jordan@ast.tas.gov.au](mailto:tim.jordan@ast.tas.gov.au)

# Department of Primary Industries, Parks, Water and Environment

## Analytical Services Tasmania

Limit of Reporting	Water - Trace µg/L	Water - Ultra-Trace ng/L	Soil & Sediment, Fish & Biota - µg/kg <sup>c</sup>
<b>Perfluoroalkylcarboxylic acids (PFOA group)</b>			
PFBA <sup>a</sup>	0.1	0.5	1
PFPeA <sup>a</sup>	0.02	0.2	1
PFHxA <sup>a</sup>	0.01	0.1	0.5
PFHpA <sup>a</sup>	0.01	0.1	0.5
PFOA <sup>a</sup>	0.01	0.1	0.5
PFNA <sup>a</sup>	0.02	0.2	0.5
PFDA <sup>a</sup>	0.02	0.2	0.5
PFUnDA <sup>a</sup>	0.05	0.5	2
PFDoDA <sup>a</sup>	0.05	0.5	2
PFTTrDA <sup>a</sup>	0.05	0.5	5
PFTeDA <sup>a</sup>	0.05	0.5	5
PFHxDA <sup>a</sup>	0.1	1	5
PFODA <sup>a</sup>	0.1	1	5

<b>Perfluorinated Sulfonates (PFOS group)</b>			
PFBS <sup>a</sup>	0.02	0.2	0.5
PFPeS <sup>a</sup>	0.02	0.2	0.5
PFHxS <sup>a</sup>	0.02	0.2	0.5
PFHpS <sup>b</sup>	0.01	0.1	0.5
PFOS <sup>a</sup>	0.01	0.1	0.5
PFDS <sup>b</sup>	0.02	0.2	0.5

<b>Other Compounds (Extended suite)</b>			
6:2 FTA <sup>b</sup>	0.05	0.5	2
8:2 FTA <sup>b</sup>	0.1	1	2
10:2 FTA <sup>b</sup>	0.1	1	2
4:2 FTS <sup>b</sup>	0.05	0.5	2
6:2 FTS <sup>b</sup>	0.05	0.5	2
8:2 FTS <sup>b</sup>	0.1	1	2
10:2 FTS <sup>b</sup>	0.1	1	2
FOSA <sup>b</sup>	0.05	0.5	2
N-MeFOSA <sup>b</sup>	0.05	0.5	2
N-EtFOSA <sup>b</sup>	0.05	0.5	2
FOSAA <sup>b</sup>	0.02	1	2
N-MeFOSAA <sup>b</sup>	0.05	0.5	2
N-EtFOSAA <sup>b</sup>	0.05	0.5	2
N-MeFOSE <sup>b</sup>	2	5	5
N-EtFOSE <sup>b</sup>	2	2	5

<sup>a</sup> included in the standard suite

<sup>b</sup> included in the extended suite

<sup>c</sup> solids are currently not NATA accredited  
Please discuss your testing requirements with  
your regulator or the laboratory.

If your analyte of interest is not listed, please contact  
us as we are always looking to increase the scope of  
our methods to meet our client's requirements.