PFAS Analytical Services

As the first-ever analytical laboratory accredited to test PFAS, Battelle has been serving clients since 2016.

The Battelle Difference

- DOD and DOE accredited
- Provides EPA 537.1 and EPA 533 for drinking water
- EPA 1633 in all matrices including tissues
- Expedited service: 72 hr - 28 day turnaround time
- Accreditation laboratory assessments with no findings
- Challenging or unique matrices

Standard Analytical Methods | Method Development | Specialized Forensics
Passive Samplers | High Resolution Mass Spec

Per- and polyfluoroalkyl substances (PFAS) are a large class of chemicals widely used for many commercial and industrial applications, including aqueous film forming foams (AFFF), metal plating, plastic molds, photographic films, semiconductors and textile manufacturing. Many of these substances end up in the wastewater treatment plants (WWTPs) and landfills, which means these facilities also serve as passive receivers of PFAS. To tackle this emerging contaminant head on, experts at Battelle have been studying PFAS for nearly two decades.

Our Value to Clients

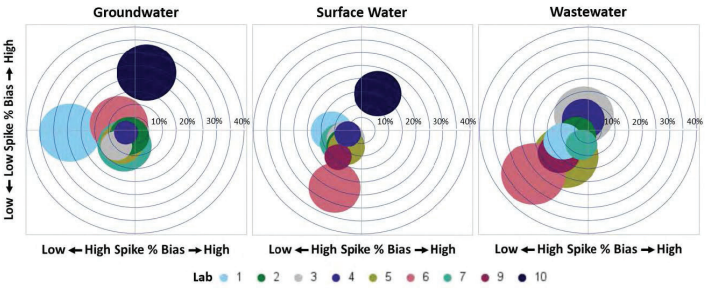
At Battelle, we have highly trained expert chemists with a critical understanding of fluorochemistry concepts and forensic analysis to ensure defensible data generation. Given continuity of operations, the average tenure of a chemist at Battelle is 10 years.

We provide transparent data reporting to ensure supplied information can be used confidently and efficiently without issue. High quality data packages reduce the need to interpret complicated results.

Laboratory Quality and Assurance

Battelle offers precision and accuracy of quantification to confidently measure concentrations to PPT levels to eliminate over/under representation.

Follow On Quality Work



*Graph is from a publicly available report (study by SERDP)

Source Discrimination and Establishing Background Using HRMS Analysis

Our Solution - PFAS Signature®

The Battelle-developed PFAS Signature® advanced analytical tool offers PFAS source differentiation and tracking using high-resolution mass spectrometry (HRMS) techniques, in combination with PFAS targeted analysis and advanced statistical analysis. The identification of sources of contamination is based on:

- Chemical signature
- Isomeric profiles
- Manufacturing
- Age of release
- Fate and transport
- Transformation products

BATTELLE

OUR OFFERINGS

Holds national accreditations through DOD, DOECAP, NELAP, ELAP and several state level. Certified in AFFF.

Method	# of PFAS Analytes	Reporting Limit	Turnaround Time	Accredited	Matrices	Distinguishing Factors	When to chose this method
PFAS Signature®	Up to 520	Qualitative	120 days	1633 portion	Solid, vapor, non-potable water, tissue	First of its kind commercial analytical tool which incorporate suspect screening and machine learning	Assess PFAS background and sources; fill data gaps in conceptual site model
EPA Method 1633	Up to 40	Single ppt	72 hours to 28 days	Yes	Solid, vapor, non-potable water, tissue	Most extensive data quality and reporting requirements. Most widely accepted method for PFAS in non-drinking water matrices	When you want the highest fidelity data suitable for independent validation; when required for use
EPA Method 537.1	Up to 18	Single ppt	48 hours to 28 days	Yes	Drinking Water	Standard list of PFAS analytes for PFAS. Most established method	When you need to test drinking water; analyte list drives selection between 537.1 and 533
EPA Method 533	Up to 24	Single ppt	48 hours to 28 days	Yes	Drinking water	New method for drinking water that expand list of analytes which couldn't be accomplished by 537.1	When you need to test drinking water; analyte list drives selection between 537.1 and 533
Battelle Screening Method	Up to 40	Low ppt	48 hours to 7 days	No	Non-potable water	Presence/absence of target PFAS	Range finding; process monitoring; research studies
Total Oxidizable Precursor (TOP) Assay	Up to 40	Single ppt	21 to 28 days	1633 portion	Solid, vapor, non-potable water, tissue	Standard method; recognized tool for assessing total PFAS	Drive PFAS to terminal end products
Non-targeted/ suspect screening	Up to 520	Qualitative	90 days	1633 portion	Solid, vapor, non-potable water, tissue	Commercial analytical services to expand monitoring for less common PFAS	Assess for products of incomplete combustion; mass balance studies
B-15 Compliant Method	Up to 40	Single ppt	72 hours to 28 days	Yes	Solid, vapor, non-potable water, tissue	Predecessor method to 1633; similar approach but does not have QC and reporting requirements	When you would like 1633 data but don't have the requirement to use it

We also offer complimentary tools to support your PFAS evaluation/investigation: **PFAS Air Insight™ Ambient Sampling Tool** - measures the amount of PFAS ambient air; **PFAS Insight® Passive Sampler** - an equilibrium regiment passive sampler used to measure select PFAS compounds in surface water (including seawater), sediment porewater, and groundwater.

Battelle experts will be your partner in developing analytical solutions and help you select a method at the lowest cost.

Contact us today to discuss PFAS methods and our full list of offerings.

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ID 887 04/24

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It can be done