



PFAS Analytical Services

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

1633 low volume initiative

Ultra short chain analysis

48 hr to 21 day turnaround
times *consistently met*

The
Battelle
Difference

Expanded 1633 analytes

Challenging and unique matrices

Total, extractable &
absorbable organic Fluorine

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 in consumer, commercial and industrial products and applications, including fire-fighting foams (AFFF), metal plating, plastic molding, and semiconductor and textile manufacturing. Battelle offers world-class expertise in science and engineering, including technology development and enablement, advanced analytical testing, and comprehensive consulting services. Our experience with emerging chemicals like PFAS enables us to assist clients in making informed, data-driven decisions on liability and risk—from chemical and product formulation to alternatives assessment, environmental investigation and remediation, and destruction.

Our Value to Clients

Our highly trained chemists possess a critical understanding of fluorochemistry and forensic analysis to ensure defensible data generation. Given continuity of operations, the average tenure of a Battelle chemist is 10 years and allows us to offer routine to complex analysis services based on a specific need. We provide transparent data reporting that can be used confidently and efficiently, while our high quality data packages reduce the need to interpret complicated results and save you time.

Specialized PFAS Forensics Analysis Methods

Battelle has advanced analytical tools that can assess samples for PFAS sources and differentiate between multiple sources. Three types of non-targeted analysis methods, utilizing high-resolution mass spectrometry, are available based on need.

Suspect Screening – used to identify up to ~600 compounds compiled in Battelle's library.

PFAS Signature® – utilizes Suspect Screening results combined with artificial intelligence/machine learning tools to allow for distinction and discrimination between sources.

Fully Non-Targeted Analysis – used to identify truly unknown compounds present in the sample.

OUR TEST METHODS

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
EPA Method 1633	Up to 49	Single ppt	48 business hrs. to 21 calendar days	Yes	Solid, Vapor, Non-Potable Water, Tissue	Most extensive data quality and reporting requirements. Most widely accepted method for PFAS in nondrinking water matrices. Low-volume approaches are utilized for aqueous samples. Expanded lists of analytes, beyond 40, can be reported upon request.	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 business hours to 21 calendar 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 business hours to 21 calendar days	Yes	Drinking Water	Drinking water method that expands the analyte list 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 49	Low ppt	48 business hours to 7 calendar days	No	Non-Potable Water	Presence/absence of target PFAS	Range finding; process monitoring; research studies
Non-targeted/ Suspect screening	Up to 600	Qualitative	90 calendar 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
PFAS Signature	Up to 600	Qualitative	120 calendar 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
Total Oxidizable Precursor (TOP) Assay	Up to 49	Single ppt	21 calendar days	1633 Portion	Solid, Vapor, Non-Potable Water, Tissue	Standard method; recognized tool for assessing total PFAS	Drive PFAS to terminal end products
Modified ASTM D7359-08 Total Organic Fluorine (TOF) Extractable Organic Fluorine (EOF)	Total F	20-50 ppb	48 business hours to 21 calendar days	No	Solid, Tissue, Liquid	Robust data quality and reporting requirements. The most widely accepted method for extractable organic F in solid matrices	Assess product compliance and mass balance studies
EPA Method 1621 Absorbable Organic Fluorine (AOF)	Total F	1-20 ppb	48 business hours to 21 calendar days	No	Water/ Aqueous	Robust data quality and reporting requirements. The most widely accepted method for adsorbable organic F in water matrices	Nontarget organic Fluorine content and mass balance studies
Ultra Short Chain Incorporated Method or Incorporated In 1633	6	Single ppt	48 business hours to 21 calendar days	No	Solid, Non-Potable Water, Tissue	Pre-concentration by SPE prior to analysis compared to the direct injection method proposed by EPA	USC-PFAS are a class of pollutants of emerging interest

We offer complimentary tools to support 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 partner with you to develop right-sized analytical solutions, committed to providing the highest quality data and insights to meet your business needs.

Contact us today to discuss your PFAS testing goals.