

# PER-AND POLYFLUOROALKYL SUBSTANCES

PFAS STATEMENT



Advanced Environmental Laboratories, Inc.

WHAT IS IT?

**PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS) ARE COMPOUNDS CLASSIFIED AS CONTAMINANTS OF EMERGING CONCERN (CEC'S).**

They are sometimes referred to as "Forever Chemicals" due to their persistence and bioaccumulative properties. Since their development in the 1950's, PFAS has been widely integrated into an array of manufactured products to reduce friction or as a protective coating. It is also an extremely effective component of fire-fighting foams.

## WHO CAN YOU TRUST TO TEST FOR PFAS?

### ADVANCED ENVIRONMENTAL LABORATORIES

(AEL) AEL is headquartered in Jacksonville, FL and is the largest laboratory network in the state of Florida. We are also the largest small business environmental testing laboratory in the nation. In addition to PFAS testing, AEL has an expansive portfolio of analytical and data management capabilities. Privately owned, AEL has supported the environmental community with service excellence and technical expertise for more than 25 years.

### CONTACT

904.363.9350 OR [sales@aellab.com](mailto:sales@aellab.com)

### LOCATIONS

FL - JACKSONVILLE, TAMPA, GAINESVILLE, ORLANDO, MIAMI, FORT MYERS, TALLAHASSEE

### CERTIFICATIONS

FOOH/TNI/DoD-ELAP/ISO 17025

WHY ARE WE WORRIED?

**RESEARCH SUGGESTS THAT THE MOST COMMON ROUTE OF EXPOSURE TO PFAS IS THROUGH DRINKING WATER.**

Currently, there are no federal drinking water standards in place for PFAS compounds. In 2016, the USEPA did establish drinking water Health Advisory Limits (HAL's) of 70 parts per trillion for PFOS and PFOA in total. This limit has been widely adopted by individual states; however, some states have implemented stricter criteria. Regulations surrounding PFAS, both state and federal, continue to evolve to address concerns for the environment and public health.

In December 2019, the USEPA published Method 533 for Drinking Water. The method includes 25 PFAS compounds, including eleven (11) "short chain" compounds, and specifies isotope dilution quantitation. AEL is certified to perform method 533 and UMCR 5 PFAS analytes to supplement our expansive Drinking Water capabilities.

WHERE DO WE START?

**NEW PFAS METHODS CONTINUE IN DEVELOPMENT: DRINKING WATER SAMPLES HAVE USEPA-APPROVED PUBLISHED METHODS AND NON-POTABLE WATERS AND SOLIDS SAMPLE ANALYSIS CAN BE PERFORMED BY EPA DRAFT METHOD 1633 (EFF 08/2021).**

Currently, non-potable water and solids samples can be analyzed by LC/MS/MS as either SOP-041 LC/MS-MS or PFAS by LC/MS/MS Compliant with Table B-15 of the DoDQSM 5.3. **Additionally, AEL is in the certification process for Draft Method 1633.** AEL offers these options to support investigation, remediation and compliance initiatives from coast to coast, providing Level IV data packages and an array of electronic data management configurations.



# AEL IN-HOUSE PFAS TESTING

AEL already tests more drinking water sites in Florida than any other laboratory, and we are ready to test PFAS for you as well. We perform our PFAS analysis in our Jacksonville laboratory using a brand-new state of the art LC/MS/MS. And of course, we have certifications for the Florida Department of Health, TNI/NELAC, DoD-ELAP, and ISO-17025.

To set up testing, please contact your local AEL representative, email us at [sales@aellab.com](mailto:sales@aellab.com), or call us at 904-363-9350.

## PERFLUORINATED COMPOUND LISTS

Analyte	CAS Number	PFAS BY LC/MS-MS Compliant with Table B-15 of QSM 5.3 or Latest Version			
		EPA 533 Drinking Water	AEL SOP-041 LC/MS-MS Non-potable Water Soil	Non-potable Water Soil	UCMR5 Drinking Water
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11C1-PF3OUdS)	763051-92-9	X	X	X	X
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9C1-PF3ONS)	7569426-58-1	X	X	X	X
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	X	X	X	X
Hexafluoropropylene oxide dimer acid (HFPO-DA) – GenX or Propanoic acid (PFPrOPrA)	13252-13-6	X	X	X	X
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	X	X	X	X
Perfluorobutanoic acid (PFBA)	375-22-4	X	X	X	X
Perfluorobutanesulfonic acid (PFBS)	375-73-5	X	X	X	X
1H,1H,2H,2H-Perfluorodecane Sulfonic acid (8:2FTS)	39108-34-4	X	X	X	X
Perfluorodecanoic acid (PFDA)	335-76-2	X	X	X	X
Perfluorododecanoic acid (PFDoA)	307-55-1	X	X	X	X
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	113507-82-7	X	X	X	X
Perfluoroheptanesulfonate (PFHpS)	375-92-8	X	X	X	X
Perfluoroheptanoic acid (PFHpA)	375-85-9	X	X	X	X
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	X	X	X	X
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	X	X	X	X
Perfluorohexanoic acid (PFHxA)	307-24-4	X	X	X	X
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	X	X	X	X
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	X	X	X	X
Perfluorononanoic acid (PFNA)	375-95-1	X	X	X	X
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	X	X	X	X
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	X	X	X	X
Perfluorooctanoic acid (PFOA)	335-67-1	X	X	X	X
Perfluoropentanoic acid (PFPeA)	2706-90-3	X	X	X	X
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	X	X	X	X
Perfluoroundecanoic acid (PFUnA)	2058-94-8	X	X	X	X
Perfluorotridecanoic acid (PFTrDA)	72629-94-8		X	X	X
Perfluorotetradecanoic acid (PFTeDA / PFTA)	376-06-7		X	X	X
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6		X	X	
N-Methyl perfluoro-1-octanesulfonamidoacetic acid (N-MeFOSAA)	2355-31-9		X	X	X
N-Ethyl perfluoro-1-octanesulfonamidoacetic acid (N-EtFOSAA)	2991-50-6		X	X	X
Perfluorononanesulfonate (PFNS, Perfluorononane sulfonic acid)	98789-57-2		X	X	
Perfluorodecane sulfonate (PFDS, perfluorodecane sulfonic acid)	2806-15-7		X	X	

