



# **PFAS EPA Draft Method 1633**

## **Laboratory Challenges**

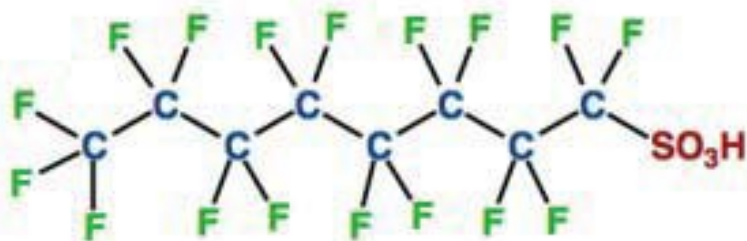
**Jannie Shaw-Busby  
Senior Chemist**

**GEL Laboratories, LLC  
2040 Savage Road  
Charleston, SC 29407**

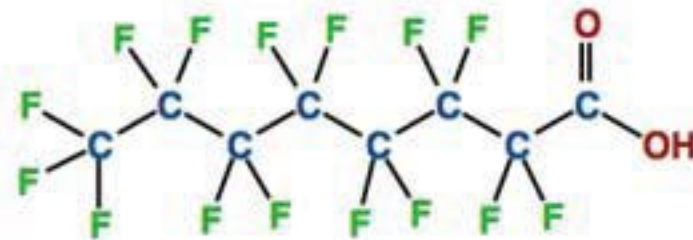
**DOECAP ASP Workshop 2022**

# Overview

- GEL's PFAS Experience and Capacity
- GEL's Accreditations and Licenses
- EPA Draft 1633 Laboratory Challenges



PFOS - perfluorooctanesulfonic acid



PFOA - perfluorooctanoic acid

# GEL's Experience and Capacity

- Over 20 years of experience with LC/MS/MS technologies for DOE
- Multiple matrices: drinking water, stormwater, groundwater, wastewater, leachates, biosolids, tissue, soil, AFFF, and consumer products
- Subcontracts with all major DOE sites. Multiple DOE sites have submitted samples for PFAS analysis.
- Dedicated PFAS preparation and instrument laboratories
- Five dedicated LC/MS/MS instruments
- Expanding laboratory space and adding two more LC/MS/MS instruments in Q1 2023



problem solved



## GEL's Accreditations and Licenses

- Extensive state and federal PFAS accreditations
  - DOE/DoD ELAP ISO 17025:2017 and numerous state certifications for EPA 533, EPA 537.1 and EPA 537.1 Modified
  - NELAC certification for EPA Draft Method 1633
  - Pending DOE/DoD ELAP ISO 17025:2017 for EPA Draft Method 1633
- Radioactive Materials License

# EPA Draft 1633 Laboratory Challenges

- Sample storage
- Sample screening to prevent contamination
- Requirement to determine percent solids for water samples
- Maximum allowable sample dilution of 10x
- Dual extraction for solid and tissue samples
- Current method includes 40 compounds, potential for more

The image features five test tubes arranged horizontally against a teal background with a faint grid pattern. Each test tube contains a green liquid with several white bubbles. From left to right, the liquid levels are approximately: 75%, 25%, 70%, 85%, and 50%. A pipette is positioned above the fourth test tube, with a single drop of green liquid falling into it. The word "Questions?" is written in a bold, black, serif font across the center of the test tubes.

**Questions?**



## Contacts

**Bob Seyer – DOE Program Manager**

**865-599-1175**

**[Bob.Seyer@gel.com](mailto:Bob.Seyer@gel.com)**

**Larry Taake – DOE Program Manager**

**618-939-1306**

**[Larry.Taake@gel.com](mailto:Larry.Taake@gel.com)**