www.teklabinc.com

AQUEOUS SAMPLE COLLECTION GUIDANCE FOR PER-AND POLY-FLUOROALKYL SUBSTANCES (PFAS) **METHOD 1633**

Method 1633 is a solid phase extraction (SPE) liquid chromatography/tandem mass spectrometry (LC/MS/MS) method for the determination of selected per- and polyfluorinated alkyl substances (PFAS) for Aqueous, Solid & Biosolid samples.

Sample Collection, Preservation and Storage

- Bottle preparation
  - Samples must be collected in an unpreserved certified polypropylene bottle fitted with a polypropylene screw-cap or polyethylene bottles with polypropylene screw caps. Sample containers are tested by Lot# to be certified free of PFAS of interest. In the absence of historical data multiple container sizes will be sent until a baseline is established as the entire sample container will need be analyzed. Leachate samples will collect 2 - 100mL aliquots due to the significant matrix challenges that exist.
- Sample Collection
  - The sample handler must wash their hands before sampling and wear clean nitrile gloves while filling and sealing the sample bottles. PFAS contamination during sampling can occur from a number of common sources, such as food packaging and certain foods and beverages. Proper hand washing and wearing nitrile gloves will aid in minimizing this type of accidental contamination of the samples. Field blanks can help identify and help prevent field contamination.
  - Allow the system to flush until the water temperature has stabilized if possible. Collect samples from the flowing system.
  - A separate container is supplied for TSS analysis. Fill all containers provided with sample as representatively as possible as extraction takes into account TSS.
  - Fill sample bottles close to the mark on the container below the shoulder of the bottle. Samples do not need to be collected headspace free. Fill PFAS containers first and additional containers per your project.
  - After collecting the sample, place back in baggie and put into cooler of regular ice.

- Sample shipment
  - Maintain all aqueous samples protected from light and at 0 - 6 °C from the time of collection until shipped to the laboratory. Samples must be shipped with sufficient ice to maintain the sample temperature below 6 °C during transport for a period of at least 48 hours to allow for shipping delays. The laboratory must confirm that the sample temperature is 0 - 6 °C upon receipt. Allowable holding time for samples maximum is 28 days however samples should be shipped to the laboratory as soon as practical.

Please inform your project manager or account manager of samples with known or expected high PFAS values. This enables us to avoid possible instrument downtime due to carryover. If samples with high PFAS levels results in the need for extensive instrument cleanup a charge of $250 will be incurred.

If analysis of the extract demonstrates that PFAS target analytes have exceeded the calibration range for the analytical method or the analysis demonstrates that interference have compromised the accuracy of reported results, the extract can be diluted appropriately and reanalyzed. If the sample requires re-extraction using a reduced volume, a surcharge of 60% of the analytical cost will apply. You will be given the option of reporting wit "E" flags (concentration exceeds the calibration range) or continuing with re-extractions and additional dilutions at the extra charge.

Non-routine matrices such as high impacted samples, dispersions, pure products, landfill leachates, solvent waste and non-environmental samples will be charges at a higher rate and may have an extended turnaround time.

Sample containers, coolers and chain of custody forms will be provided at no additional cost. We will provide PFAS-free plastic (HDPE) containers. We will provide PFAS free deionized laboratory water for field and equipment blanks when requested. Please provide 5 days' notice when requesting sample container kits.

Matrix	Analysis	Lab-Certified HDPE Container	Count	
Drinking Water	PFAS 533	250mL with 1g/L Ammonium Acetate	2	Field blank per method
Drinking Water	PFAS 537.1	250mL with 5g/L Trizma	2	Field blank per method
Wastewater*	PFAS 1633	250mL Plastic, Unpreserved 500mL Plastic, Unpreserved	2 2	
Ground Water*	PFAS 1633	250mL Plastic, Unpreserved 500mL Plastic Unpreserved	2 2	
Leachate*	PFAS 1633	100mL Plastic, Unpreserved	2	

- ∗An additional 125 ml plastic bottle will be supplied for TSS analysis per method 1633
- ∗Let you project manager know if the sample will have suspended solids greater than 10%.

Instrumentation:

Solid Phase Extraction (SPE) and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)