

## SOIL 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.

#### **Important Precautions Before Sampling**

To ensure sample integrity, avoid the following prior to and during sample collection:

- Personal care products such as lotions, sunscreens, cosmetics, perfumes, insect repellents, and hair products
- Contact with packaging materials like aluminum foil, fast food wrappers, adhesive labels, plastic bags (unless provided), or new synthetic clothing
- Handling waterproof items, dryer sheets, fabric softeners, markers, fuel, or gasoline

Only use the collection materials provided. **Do not open the sample bottles** until you are ready to collect the sample.

### **Required Shipping Preparation**

In addition to the included sampling containers, you must provide **loose ice** to maintain temperature control during shipping.

### **Step-by-Step Soil Sampling Instructions**

- 1. Retrieve the soil sample bottle lab-certified, Unpreserved.
  - You will have an additional container for PMOIST that should be filled like any standard soil sample.
- 2. Carefully unscrew the cap, making sure to touch **only the outer edge**. Set the cap face-up on a clean surface to avoid contamination.
- 3. Using the appropriate sampling tool (e.g., a clean scoop or trowel), collect the soil and **fill the bottle slightly more than halfway**.
- 4. Replace the cap securely on the bottle.



- 5. Place the sealed bottle back into the Sample Bag and seal the bag.
- 6. Place the sealed sample bag into a cooler.
- 7. Fill with loose ice to maintain temperature during transit.
  - Avoid using ice packs.

### **Ready for Shipment**

Ensure the bottle is:

- Properly sealed
- Packed in the cooler with sufficient loose ice.
- Accompanied by the completed Chain of Custody (COC).

Please inform your project manager or account manager of samples with known or expected high PFAS values, as you may need to collect less sample to avoid possible sub-sampling. If samples with high PFAS levels results in the need for extensive instrument cleanup a charge of \$250 will be incurred.

If the analysis demonstrates that any target PFAS compounds exceed the calibration range for the analytical method or matrix interferences have compromised the accuracy of reported results for any PFAS target compounds the extract will be diluted and re-analyzed. If the sample requires re-extraction using a reduced volume there will be a surcharge of 60% of the analytical cost applied. (Method 533 requires re-extraction at a less volume for any PFAS compounds that exceed the calibration range.)You will be given the option of reporting with "E" flags (concentration exceeds the calibration range) or continuing with re-extractions and additional dilutions at the extra charge.

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