



DRINKING WATER SAMPLE COLLECTION GUIDANCE FOR PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS) **Method 533**

Method 533 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) in drinking water

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.

Step-by-Step Instructions

Field Blank (Required per sample set. A Sample set is defined as samples collected from the same site at the same time.)

1. Put on a fresh pair of **powder-free nitrile gloves**.
 2. Open the **Field Blank Bag** and remove both the PFAS Lab Water and PFAS Field Blank bottle(s).
 3. Unscrew the caps, touching only the **outside edges**, and place the caps face-up on a clean surface.
 4. Carefully **transfer all field blank water** into the empty sample bottles. Avoid spills.
 5. Return bottles to the Field Blank Bag, **seal** the bag, and place it back into the foam cooler.
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Water Samples

7. Open the **Cold Tap** and allow the system to flush until the **water temperature has stabilized**.
8. Take out the PFAS free bottles from their bag.
9. Open the cap carefully (touch only the outer edge), and set it face-up on a clean surface.
10. **Fill the bottle slowly** with cold tap water to just **below the neck**. Avoid overfilling as this may dilute the preservative.
11. Replace the cap securely. **Gently invert** the bottle three times to help dissolve the preservative. Return the bottle to the bag.
12. Repeat steps 7–11 for **remaining containers from same kit**.



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)**.

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. Please provide 5 days' notice when requesting sample container kits. Non-drinking water samples may require modification to the method.

Matrix	Analysis	Lab-Certified HDPE Container	Count	Field Blank
Drinking Water	PFAS 533	250mL with 1g/L Ammonium Acetate	2	Required (2 Additional Containers)
Drinking Water	PFAS 537.1	250mL with 5g/L Trizma	2	Required (2 Additional Containers)
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 your project manager know if the sample will have suspended solids greater than 10%.

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 reextractions and additional dilutions at the extra charge.

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