

Sampling Instructions for Arsenic Speciation

Please read all instructions thoroughly prior to sampling

Contents of Sample Kit:

- 1- Sample Syringe, 30mL, reusable
- 1- Filters, 0.45um Glass Membrane Filter (per sample site), non-reusable
- 1- Adapter, reusable
- 1- Cartridge, Strong Anion exchange cartridge (per sample site), non-reusable
- 2-120mL, plastic Sample Bottles (per sample site)

Sampling for Arsenic (III) (trivalent):

1. Remove the plunger from the sample syringe. Rinse the barrel three times with the sample.
2. Fill the syringe with sample to the 30mL mark and reinsert the plunger into the barrel.
3. Hold the syringe assembly with the tip in an upright position and force any air out of the syringe by pushing up on the plunger until the sample reaches the tip of the syringe.
4. Attach the filter to the tip of the syringe using a twisting motion to secure. Attach the adapter to the opposite side of the filter. Attach the cartridge to the opposite side of the adapter.
Use diagram of assembly.
5. Pre-condition the cartridge by expressing 2-5mL of sample through the cartridge assembly and discarding.
6. Filter the remaining sample through the assembly, and collect at least 20mL of the filtrate in one 120mL, plastic, sample bottle. The filtrate will contain only As (III) if present. Label the bottle containing the filtrate as "As (III)".
7. If collecting multiple samples, be sure to use a fresh filter-cartridge assembly for each sample site.

Sampling for Total Arsenic:

1. Collect a sample from the same location by collecting it directly from the source into the second 120mL, plastic, sample bottle. This sample is not filtered and the bottle should be labeled as "Total As".
2. Be sure that both sample bottles are labeled with the date and time of sample collection, and a sample location that matches the information included on your completed Chain of Custody.

Return all samples to the laboratory within 14 days of sampling. Samples should be kept at 4°C until transported to the laboratory.

