

DIC, δD , and ^{18}O Sampling Kit

Contains: 1 Cooler, 2 gel packs, 4 bottles, 4 syringes, and 4 filters

When the kit first arrives remove gel packs from kit and put them into a freezer so it is ready at the time of shipment. If you do not have adequate time to allow for the gel pack to cool ship samples back with ice. Stacking the packs will slow their cool down.

Collecting Sample:

- I. Rinse syringe
 - a. Pull up fresh sample into the syringe 2-3 to rise the syringe
- II. Fill syringe with sample avoiding sediment and air
- III. Remove bubbles/headspace from syringe by tilting syringe upward and expelling excess air
- IV. Attach filter to the syringe and expel approximately 5 mL into the bottle to rinse the bottle. Discard rinse water.
- V. SLOWLY push sample water into the bottle. Bottles need to be COMPLETELY FULL—fill until a positive (convex, upward) meniscus forms over the bottle opening.
- VI. Screw the cap on firmly (some spillage will occur)
- VII. Keep the bottles chilled until analysis. Do not hold samples longer than 1 week before shipping to Isotech for analysis

Place up to 4 bottles into the cooler with 2 chilled gel packs for shipment to Isotech. Shipments should be made overnight and not on Fridays as no one is at Isotech to receive samples on the weekend. Filtration provides the primary protection against bacterial action and keeping the sample cool is a secondary measure in case filtration was inadequate. The gel packs should keep the samples cool for 24 hours.

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Instructions adapted from

COLLECTING SAMPLES of DISSOLVED INORGANIC CARBON (DIC) for ISOTOPIC ANALYSIS ($\delta^{13}C$): by Dan Doctor, USGS