

## TOC & TOX Sampling Instructions

Sampling Instruction No. 16 Revision Date: 03/31/14 Page 1 of 2

- 1. The sampler will receive a sample kit from our lab.
- 2. WHEN SAMPLING, BRING ICE IN SEALED BAGS TO CHILL SAMPLES DURING SAMPLE COLLECTION.
- 3. Put on nitrile gloves. If sampling from faucet, remove the aerator and screen.
- 4. Open the tap and let the water of the sample source run at fast flow for approximately 5 minutes.
- 5. The sample kit will include bottles depending on the type of test. Bottles, volumes, and preservatives required per test are as follows:

Test Name	<u>Bottles</u>	<u>Preservative</u>	Sample Type	<u>Hold Time</u>
5310 – TOC	125 mL amber glass	0.5 mL H <sub>2</sub> SO <sub>4</sub> (50%)	Raw or chlorinated	28 days
5320/9020- TOX	(2) 250 mL amber glass	Sulfite crystals + dropper w H <sub>2</sub> SO <sub>4</sub>	Chlorinated	14 days
5320/9020- TOX	(2) 250 mL amber glass	1 mL H <sub>2</sub> SO <sub>4</sub> (50%)	Raw	14 days

- 6. Use indelible ink (i.e. Sharpie pens) to clearly identify the sample bottles with the information listed below (if not already on the label).
  - Client Name Analysis required Preservative used
  - Sample ID Date and Time of collection
- 7. Slow water flow to thickness of a pencil (to minimize splashing) and fill bottle.
- 8. Fill sample bottles, slightly <u>under filling</u> them. Make sure the mouth of the bottle does not come in contact with anything other than the sample water. **DO NOT RINSE OUT PRESERVATIVE.**

For TOX with chlorinated samples only, within 4 hours after collection, sample must be acidified with sulfuric acid to pH less than 2. After acidification, there should be no headspace in the sample bottle. Use a dropper bottle and add 20 drops of acid to each bottle. Carefully rinse out dropper bottle with water and discard. CAUTION: Handle the dropper bottle with care.

- 9. Cap and invert the bottles at least 5 times to mix the sample and preservative.
- 10. Store at  $\leq 6^{\circ}$ C but above the freezing point of water until transported to the lab.

## **SAMPLE SHIPPING AND STORAGE**

- 1. If shipping samples on the same day of sampling, chill samples until ≤6°C by exchanging the wet ice used during sampling with FRESH wet ice.
- 2. <u>Pack chilled samples</u> in a cooler and add enough <u>FRESH</u> wet ice to take up 30-50% of the cooler (e.g. most of the remaining space) inside two large plastic bags as recommended in our "*Wet Ice Packing Instructions*."
- Complete the Chain of Custody during sample collection. Place Kit Order and completed Chain of Custody in a Ziploc style bag in the cooler on top of packing material. The following information is required on the completed Chain of Custody.
  - Collector's name Sample site -Comments about the sample (if applicable)
  - Client Name -Date and time of collection -Sample type



## TOC & TOX Sampling Instructions

Sampling Instruction No. 16 Revision Date: 03/31/14 Page 2 of 2

- 4. Ship via overnight service such as FEDEX, UPS, or DHL, etc. Maintain an environment at ≤6°C but above the freezing point of water during transit. It is recommended that samples arrive within 48 hours of sampling, with no more than 40 hours for transit.
- 5. If samples are received on the same day as collection, temperature may be  $>10^{\circ}$ C with evidence of cooling.
- 6. Maximum **HOLDING TIME FOR SAMPLES** is **14 days** from time of collection.
- Alternatively, cool the samples down by placing them <u>overnight</u> in a cooler with wet ice, or in a refrigerator (store chilled for at least 12 hours before packing for shipment). Maintain the cold samples until repacked in the cooler for shipment to the lab.

## **ADDITIONAL NOTES**

- Try to collect only on a Monday, Tuesday or Wednesday and ship no later than Thursday of each week, and try to <a href="NOT">NOT</a> collect samples on Friday, Saturday, or Sunday unless special arrangements have been made for the receipt of samples at the laboratory within 48-hours of collection.
- If shipping to the laboratory with <u>frozen gel packs</u> rather than wet ice, please be sure that the gel packs have <u>been</u> frozen for at least 48 hours prior to the shipment time.