

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 sample bottles depending on the type of test. Bottles, volumes, and preservatives required per test are as follows:

TEST NAME	BOTTLES AND PRESERVATIVE	HOLD TIME
504.1 (un-Chlorinated)	(3) 40 mL amber glass vials (no preservation)	14 days
504.1 (un-Chlorinated)	(3) 40 mL amber glass vials with 1 drop of 8% Sodium thiosulfate	14 days
524.2 (Chlorinated)	(4) 40 mL amber glass vials with 25 mg ascorbic acid (1) plastic dropper bottle with 2 mL 1:1 HCl	14 days
524.2 (un-Chlorinated)	(4) 40 mL amber glass vials with 1 drop of 8% Sodium thiosulfate (1) plastic dropper bottle with 2 mL 1:1 HCl	14 days
524.2 – EPICHLR only	(3) 40 mL amber glass vials (no preservation)	7 days
524.3	(3) 40mL amber glass vials with 25 mg Ascorbic Acid and 200 mg of maleic acid.	14 Days
624 (un-Chlorinated)	(4) 40mL amber glass vials, containing 4 drops 6N HCl (4) 40mL amber glass vials, no preservative	14 Days
624 (Chlorinated)	(8) 40 mL amber glass vials with 1 drop of 8% Sodium thiosulfate (1) plastic dropper bottle with 2 mL 1:1 HCl Note: <u>HCl is only to be added to (4) of the 40mL amber glass vials</u>	14 Days
8260 (un-Chlorinated)	(3) 40mL amber glass vials with 4 drops 6N HCL 1:1	14 days

**CAUTION:** Handle the dropper bottle with care: HCl is a very strong acid.

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. If you are sampling from un-Chlorinated source or for 524.3, please go directly to step no. 9.

**Chlorinated source:**

Fill sample vials to the bottom of the neck. Let sample sit one minute to allow the dechlorinator to take effect. LEAVE THE SAMPLE TAP WATER FLOWING DURING THIS WAIT PERIOD. Make sure the mouth of the bottle does not come in contact with anything other than the sample water. Collect the sample directly from the source and not through any plastic or rubber hose or tubing. **DO NOT RINSE OUT PRESERVATIVE.**

After the wait, add **10** drops of acid, or enough to bring the sample pH to less than 2, to each vial from the dropper bottle for final preservation. Using a very slow flow speed, VERY SLIGHTLY over-fill each vial with additional sample water. (If the vial is overfilled excessively, the preservatives will be diluted and may not be effective.)

Chlorinated sources for 624 will be sent with 8 glass vials with liquid sodium thiosulfate. Only 4 of these vials will need adjustment with HCl, the other 4 are filled as below in step 9.

Go to step 10

**9. Un-Chlorinated source:**

Fill sample vials to the bottom of the neck. Using a very slow flow speed, VERY SLIGHTLY over-fill each vial with additional sample water. (If the vial is overfilled excessively, the preservatives will be diluted and may not be effective.) Make sure the mouth of the bottle does not come in contact with anything other than the sample water. Collect the sample directly from the source and not through any plastic or rubber hose or tubing. **DO NOT RINSE OUT PRESERVATIVE.**

10. Cap and invert the bottles at least 5 times to mix the sample and preservative. Invert each sample vial and tap it to check for trapped air bubbles. If air bubbles are detected, carefully open the vial (right side up), and add more sample.

11. Store at  $\leq 6^{\circ}\text{C}$  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  $\leq 6^{\circ}\text{C}$  by exchanging the wet ice used during sampling with **FRESH** wet ice.
2. **Pack chilled samples** in a cooler and add enough **FRESH** 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.”**
3. 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
4. **Ship via overnight service such as FEDEX, UPS, or DHL, etc.** Maintain an environment at  $\leq 6^{\circ}\text{C}$  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  $>10^{\circ}\text{C}$  with evidence of cooling.
6. Maximum **HOLDING TIME FOR SAMPLES** is **14 days** from time of collection.
7. Alternatively, cool the samples down by placing them **overnight** 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 **NOT** 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 **frozen gel packs** rather than wet ice, please be sure that the gel packs have **been frozen for at least 48 hours** prior to the shipment time.