

### CALTEST SAMPLING INSTRUCTIONS-CYANIDE

#### Analyses and holding times- Cyanide

Analysis	Method	Container/Preservation	Holding time
Cyanide, standard (RL= 3 ug/L)	SM 4500 – CN C/E	Amber Plastic or Glass with Sodium Hydroxide (NaOH) pH >10+0-6°C	14 days
Cyanide, low-level (RL= 1 ug/L)	SM 4500 – CN C/E		14 days
Cyanide, WAD	SM 4500 – CN I/E		14 days

**Note:** Pretreatment for Total Cyanide samples with chlorine or  $\text{NO}_3/\text{NO}_2$  should be done prior to preservation—request needed kit and see notes below.

#### Special handling instructions for containers with preservatives

1. Use gloves and safety glasses whenever handling bottles.
2. Inspect containers to confirm that they are intact, with lids secured.
3. With lid secured, inspect that there is preservative in the containers (pellets, powder, and/or liquid).

#### Sampling instructions- General

1. When sampling, use gloves and safety glasses. Open the lid carefully and away from face. Use care not to spill and avoid inhaling. Fill to allow a little headspace at the top of the bottle. Do not overflow.
2. Fill in Chain of Custody (COC) form and sample bottle label with dates, times, and locations of sampling.

#### Sampling instructions (for Sources with Nitrate/Nitrite)

Treat for nitrate/nitrite per the instructions below at the time of sample collection (i.e. within 15 minutes of sample collection).

1. Nitrate/nitrite treatment: Fill amber pint bottle labeled for 2x sulfamic acid with source water—**do not overfill**. Allow sulfamic acid to dissolve.
2. Pour water from the bottle labeled for 2x sulfamic acid (pretreatment for nitrate/nitrite) into the amber pint bottle with 6x NaOH, the final sample container.
  - o For samples that are treated with 2x sulfamic acid, 6x the standard amount of NaOH is needed.
3. Samples must be placed on ice or refrigerated at 0–6°C/32–43°F immediately after collection and must be on ice upon receipt at the lab. The 0–6°C/32–43°F temperature criteria must be met if samples are received a day or more after collection.

#### Sampling instructions (for Sources with Chlorine)

Treat for chlorine per the instructions below at the time of sample collection (i.e. within 15 minutes of sample collection).

1. De-chlorination: Collect sample into the amber pint bottle labeled for sodium thiosulfate. Allow sodium thiosulfate to dissolve.
2. Pour water from the bottle labeled for sodium thiosulfate into the amber pint bottle with NaOH, the final sample container.

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3. Samples must be placed on ice or refrigerated at 0–6°C/32–43°F immediately after collection and must be on ice upon receipt at the lab. The 0–6°C/32–43°F temperature criteria must be met if samples are received a day or more after collection.

### **Sampling instructions (for Sources with Nitrate/Nitrite and Chlorine)**

Treat for nitrate/nitrite and chlorine per the instructions below at the time of sample collection (i.e. within 15 minutes of sample collection).

1. Nitrate/nitrite treatment: Fill amber pint bottle labeled for 2x sulfamic acid with source water, **do not overfill**. Allow sulfamic acid to dissolve.
2. De-chlorination: Pour water from the bottle with 2x sulfamic acid into the amber pint bottle labeled for sodium thiosulfate. Allow sodium thiosulfate to dissolve.
3. Pour water from the bottle labeled for sodium thiosulfate into the amber pint bottle with 6x NaOH, the final sample container.
  - For samples that are treated with sulfamic acid, 6x the standard amount of NaOH is needed.
4. Samples must be placed on ice or refrigerated at 0–6°C/32–43°F immediately after collection and must be on ice upon receipt at the lab. The 0–6°C/32–43°F temperature criteria must be met if samples are received a day or more after collection.

### **Shipping instructions**

1. Please ship samples **overnight** to arrive to the lab Monday- Friday, as soon as possible after sample collection.
2. Place containers in plastic bags (secondary containment due to NaOH).
3. Fill cooler with ice and put sample upright in the middle of the ice.
4. Ensure that the cooler is completely full so that the sample won't move around during shipping.
5. Put completed Chain of Custody (COC) form in a Ziplock bag and place on top of ice, inside cooler.
6. Ship **overnight** to:

Caltest Analytical Laboratory  
Sample Receiving  
1885 North Kelly Road  
Napa, CA 94558

**Note on outside of cooler: "Sample Enclosed, Open Upon Receipt"**

Please contact Caltest Client Services with any questions: 707/258-4000 or [pmgr@caltestlabs.com](mailto:pmgr@caltestlabs.com)

