

**CALTEST SAMPLING INSTRUCTIONS- For EPA 1630, 1631, and 1638**

**Analyses and holding times**

Analysis	Container type	Holding time
Mercury, Total (Hg) EPA 1631	500 mL glass preserved with hydrochloric acid (HCl), double-bagged	90 days
Mercury Methyl, Total (Hg) EPA 1630	500 mL amber glass preserved with hydrochloric acid (HCl), double-bagged	6 months (cold storage required)
Mercury, Dissolved (Hg) EPA 1631	500 mL glass, Unpreserved, double-bagged	Filter within 24 hours, preserve within 48 hours. 90 days once preserved.
Mercury, Methyl, Dissolved (Hg) EPA 1630	500 mL amber glass, Unpreserved, double-bagged	Filter and preserve within 48 hours. 6 months once preserved. (cold storage required)
Field Blank for 1630 and 1631 —see <i>sampling instructions below</i>	(1) HCl-preserved glass container (amber if 1630), double-bagged plus (1) unpreserved glass container with mercury-free blank water. (cold storage required for 1630)	
Travel Blank for EPA 1630 and 1631 —see <i>sampling instructions below</i>	(1) HCl-preserved glass container (amber if 1630) filled with mercury-free water double-bagged. (cold storage required for 1630)	
Metals by EPA 1638	500 mL Poly with nitric acid (HNO <sub>3</sub> ), double-bagged	6 months (cold storage required, 0-6°C)
Field Blank for 1638—see <i>sampling instructions below</i>	(1) HNO <sub>3</sub> -preserved poly container, double-bagged plus (1) unpreserved container with metals-free blank water. (cold storage required, 0-6°C)	

**Special handling instructions for containers with HCl or HNO<sub>3</sub>:**

1. Without opening bags, inspect containers to confirm that they are intact, with lids secured and that there is liquid preservative in the bottle. You should see an approximately nickel to quarter size drop in the bottom of the HCl-preserved containers and in the HNO<sub>3</sub> container.
2. When sampling, use mercury-free gloves and safety glasses. Open the lid carefully and away from face. Use care not to spill and avoid inhaling fumes. Try not to overfill as that will deplete the preservative. Fill to allow a little headspace at the top of the bottle using the “Clean Hands-Dirty Hands” technique noted below.

**Sampling technique utilizing “Clean Hands-Dirty Hands” sampling protocol:**

(Excerpt from EPA Method 1669 - [see page 17 here](#))

To avoid sample contamination, we recommend using the set of gloves provided by the laboratory.

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If only one person is sampling, two pairs of gloves should be worn. The outer pair of gloves (“dirty hands”) are used to open the cooler, operate sampling equipment, etc., and then to open the outer bag on the glass container.

The inner gloves (“clean hands”) are used to open the inner bag, open the lid, fill the sample bottle, replace lid, and reseal both bags.

If there are two samplers, one person is designated “clean hands” and the other person is designated “dirty hands.”

#### **Field Blank Preparation (Clean Hands/Dirty Hands Method):**

1. While at the site, before collecting samples, the “dirty hands” opens both the outer bags of the empty bottle and the mercury-free water bottle.
2. The “clean hands” opens the inner bags and lids and pours the mercury-free water into the empty HCl-preserved bottle labeled "Field Blank." Replace lids on bottles and reseal both bags around field blank. Discard or return emptied blank water bottle to lab.

Keep samples refrigerated or on ice (not required for EPA 1631 analysis). EPA 1638 analysis requires 0–6°C; 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.

#### **Travel Blank:**

Please keep the Travel Blank with the other sample containers. Do not open bags or bottle.

Keep samples refrigerated or on ice (not required for EPA 1631 analysis). EPA 1638 analysis requires 0–6°C; 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
2. Wrap samples thoroughly with bubble wrap.
3. Fill cooler with ice and put sample upright in the middle of the ice. Ice and overnight delivery not required if only testing needed is EPA 1631, however cooler is still needed due to HCl preservative.
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.

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6. Ship **overnight** to:

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

**Note on outside of cooler: "Sample Enclosed"**

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

