

Drinking Water Sampling Instructions For Homeowners



Please read all instructions prior to sampling and contact laboratory for any questions.

The following procedure provides guidance on collecting samples for “General Water Quality” analysis including bacteriological testing of water. It is recommended to collect the samples in the order described below. Skip sections if you do not require all test parameters.

General instructions for labeling, collection and delivery.

- Use the containers provided by the laboratory to collect all samples. This ensures that water collected in clean uncontaminated containers are used in the analysis.
- It is recommended that the samples are labeled with pertinent information prior to collection.
- Record the date, time and location of sample on the labels provided and identify each sample with a name such as “kitchen sink”, “upstairs bathroom”, etc., and include initials of the sample collector.
- Place the samples in a small cooler or ice chest containing ice (do not sure Dry Ice as this will freeze the samples and render them useless for analysis). Keep samples on ice in order to cool them below a temperature of 6°C but DO NOT FREEZE the samples.
- If the samples are collected and brought to the laboratory the same day, the temperature may not reach less than 6°C. This is acceptable if the samples are kept on ice and brought to the laboratory the same day. If the samples cannot be hand delivered to the lab and need to be shipped to the laboratory use sufficient ice in the cooler to last at least a day after collection.
- Bacteriological testing must be initiated within 24 hours of sample collection. Some mineral analysis must begin within 48 hours of sample collection. Beyond these times, the samples analysis can only be initiated with the consent of the customer.

1] 1000mL – Containers for Metals and Minerals Analyses

- i. Sample for the inorganic analyses is recommended to be collected as “first draw”. This means the water should be collected from a tap that has not been used, preferably, overnight to assess the metal content in the water.
- ii. Slowly open the faucet and immediately collect the water into the container provided. You may adjust flow to avoid splashing of water. Collect water within the first 1minute after the tap is opened.
- iii. Collect about 1L [up to the neck of the sample bottle] from the tap into the sample container. DO NOT OVER FLOW THE CONTAINER.
- iv. Cap the container and place it in the cooler or ice chest.

!! SAMPLES FOR BACTERIA ANALYSIS ARE ACCEPTED ONLY MONDAY – THURSDAY!!

- ## **2] 100mL – Containers for Bacteriological Analyses - Use only the sterile containers provided to collect water. Results from non-sterile containers may not be accurate.**



- a. The containers provided are STERILE. Do not break the seal and open containers until you are ready to collect the samples.
- b. If the water being collected is from a faucet, unscrew the screen and aerator from the tap and allow water to flow for 10mins.
- c. Sterilize the faucet following one of the two options below, please read both options before proceeding with the sterilization process.

o Option # 1 – Use this procedure if the faucet/tap is made out of metal.

Safety Note: PLEASE NOTE ALCOHOL IS A FLAMMABLE LIQUID; DO NOT BEND OVER THE SINK/FAUCET WHILE FLAMING THE TAP, TO AVOID BURNS.

- Obtain Isopropyl Alcohol [available in grocery/pharmacy stores], open the container and pour approximately 3–4mL of alcohol on the faucet/tap so that the tip of tap is covered by it. Allow the excess alcohol to drip-off the tap. Do not use excess amounts of alcohol to being as it is not necessary and may delay sample collection.
- At this point using a lighter, flame the tap. USE CAUTION. Observe a blue colored flame, which may ALMOST be invisible. Do not try to put out the flame by blowing on it. It should take approximately 20-30 seconds for the flame to burn off on its own.
- Once the flame is burned-out on its own, open the tap/faucet and let the water flow. Adjust the flow to avoid splashing of water. Proceed to the step “d” below for collecting sample.

o Option # 2 – Use this procedure if the faucet/tap is made of material other than metal.

- Use commercially available Bleach solution into a container big enough to completely dip the faucet head into the container.
- Let the faucet head stand in the bleach solution for at least 15 minutes.
- After 15 minutes, remove the bleach solution and open the faucet to allow water to flow for at least 15mins. Adjust the flow to avoid splashing of water. Proceed to step “d” below for collecting sample.

- d. Break the seal of the sterile bacteriological sample container open and collect water without splashing. Do Not place the container cap on the counter top or any other surface to avoid contamination – another “helpful hand” is useful.
- e. You may notice either a white powdered residue or a small pellet inside the sample bottle. This is intentional and do not rinse the container to get rid of the powder or discard the pellet inside.
- f. Collect water to the Fill line (100mL mark) on the container, avoid overfilling. Small excess amount is acceptable as long as the water is not beyond the neck of the container.
- g. DO NOT OVER FLOW THE CONTAINER under any circumstance. If you overfill the container the sample becomes invalid for analysis. You will need to repeat the steps above using a fresh sterile bacteria container.
- h. Samples for Bacteriological testing have a holding time of 24 from this point onwards, within which sample analysis must begin. It highly recommended that samples be delivered to the laboratory in the shortest time possible after collection.

For any additional questions, please call the laboratory and speak to one of the staff at – **210.229.9920**