

Drinking Water Sampling Instructions

The following procedure is a guide to collecting samples for routine mineral analysis and bacteriological testing of water for water quality. Collect the samples in the following order. Skip sections you are not interested in getting the water tested.

- 1] Metals
- 2] Minerals
- 3] Bacteria

1] 250mL – Containers for Metals Analyses

Note: Use the containers provided to collect water. Use caution while handling the container provided, as it contains concentrated acid as preservative.

- Open the faucet and adjust flow to avoid splashing of water. Collect water within the first 1minute after the tap is opened. Collect approximately 250 mLs [up to the neck of the bottle] from the tap into the sample container, cap and store in the cooler. DO NOT OVER FLOW THE CONTAINER.
- After collection record the date, time and location of sample on the labels provided and identify sample with initials of the sample collector.
- Place the samples in the ice chest provided containing ICE* to maintain the temperature at or below 4⁰C and ship the samples back to the laboratory.

2] 500mL – Containers for Minerals Analyses

Note: Use the containers provided to collect water.

- Open the faucet and adjust flow to avoid splashing of water. Collect water within the first 1minute after the tap is opened. Collect approximately 500 mLs [up to the neck of the bottle] from the tap into the sample container. DO NOT OVER FLOW THE CONTAINER.
- After collection record the date, time and location of sample on the labels provided and identify sample with initials of the sample collector.
- Place the samples in the ice chest provided containing ICE* to maintain the temperature at or below 4⁰C and ship the samples back to the laboratory within a day or two because of holding time requirements for certain analysis.

3] 100mL – Containers for Bacteriological Analyses

Note: Use the containers provided to collect water.

- The containers are STERILE, do not break seal and open containers until you are ready to collect the samples. DO NOT OVER FILL THE CONTAINER ABOVE THE 100mL MARKED LINE. Sample bottle contains Sodium thiosulfate as preservative.
- If the water being collected is from a faucet, unscrew the screen and aerator from the tap and allow water to flow for 10mins.



- Sterilize the faucet following one of the two options below, please read both options before proceeding with the sterilization process.
 - **Option # 1 – Use this procedure if the faucet/tap is made out of metal.**
 - Use Isopropyl Alcohol [rubbing alcohol, available in grocery stores] from the container and pour approximately 3–4mL of alcohol on the tap and allow excess alcohol to drip-off the tap.
 - **Note: PLEASE NOTE ALCOHOL IS A FLAMMABLE LIQUID; DO NOT BEND OVER THE SINK/FAUCET WHILE FLAMING THE TAP, TO AVOID BURNS.**
 - At this point using a lighter, flame the tap. Observe a blue colored flame, which is ALMOST invisible. Do not try to put out the flame by blowing on it. It will take approximately 20-30 seconds for the flame to burn off on its own.
 - Once the flame is burned-out on its own, adjust the flow to avoid splashing of water. Proceed to the next step for collecting sample.
 - **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 the next step for collecting sample.
- Break the seal of the sterile bacteriological sample container open and collect water without splashing.
- Fill to the 100mL mark on the container, avoiding overfilling [the preservative is only good for 100mL of water]. **DO NOT OVER FLOW THE CONTAINER.** If you overfill the container, the sample is invalid. Repeat steps above using a fresh sterile bacteria container.
- After collection record the date, time and location of sample on the labels provided and identify sample with initials of the sample collector.
- Sample for Bacteriological testing has a holding time of **6 hours** [24 hours for State compliant samples] from this point onwards, within which sample analysis must begin.
- Place the samples in the ice chest [our lab can provide you with one if requested, at the time of sample container pick up] containing ICE* to maintain the temperature at or below 4⁰C and ship the samples back to the laboratory.

*** Do not use Dry Ice to cool the samples.**