

Water Sampling Procedure

For **Chemical analysis**, the sample may be collected in any clean, sample rinsed 1 litre Container (Volume as required on quotation).

For **Microbiological analysis**, (*E.coli*, Total Coliforms) the sample must be collected in a sterile container, (available from Set Point Labs). If this is not available, boil a glass bottle ($\pm 500\text{mL}$) for 10-15min (covered completely in the water). Remove from water once cooled. Collect sample.

For viruses, yeasts, molds and protozoa, approximately 10 litres of sample is required (contact a Set Point Laboratories Representative should you require assistance splinfo@setpoint.co.za)

1. **Do in- field testing of Temperature and/or Dissolved Oxygen**, where applicable, using calibrated portable instruments.
2. It is **important** to ensure that no contamination from the hands, air or tap will take place while taking the sample. **Do not touch the inside of the cap or the exposed neck of the bottle.**
3. Inclusion of *sediment or suspended solids* must be *avoided*.

Bodies of water (dams, lakes, pools etc.): Take samples by holding the bottle with hand near the base and plunge the sample bottle, neck downward, below the water surface (*wear gloves to protect your hands from contact with the water*)

Metal taps: must be flamed for a couple of seconds with a spirits lamp/lighter. In the case of plastic pipes/taps, clean it with a cloth dampened with chlorine solution (household bleach).

- a. Open the tap fully and allow water to run for at least 1 minutes before sampling. If sampling from a borehole allow water to run for at least 10 minutes before sampling. (To remove possible stagnant water in the pipes.)
- b. Reduce water flow to permit filling bottle without splashing.

Borehole: New or stagnant boreholes must be purged for a minimum of 6 hours before sampling. *Purging of a borehole is essential if the water sample is to be representative of the groundwater present.*

Stream, River or Reservoir: turn the bottle until neck points slightly upward and mouth is directed toward the current (can also be created artificially by pushing bottle forward horizontally in a direction away from the hand).

4. Fill the sample bottle and replace cap immediately. Before closing the sample bottle, leave at least 2.5 cm air space to facilitate mixing before testing.
5. **If Dissolved Oxygen cannot be done on site**, fill another clean sample bottle (plastic, 500mL) to the brim, seal immediately and seal the cap with tape to ensure oxygen does not escape or enter the sample after sampling.
6. Label the sample with the sample name, sample point and sampling date.
7. **Samples must be transported to the laboratory (on ice or with ice packs- temperature to be kept at $\pm 1 - 4^{\circ}\text{C}$, not frozen) within 24 hours of sampling.**

Samples to be delivered to:

Set Point Laboratories Johannesburg

52 Electron Avenue
Isando
Kempton Park
Gauteng
South Africa
1601

Set Point Laboratories Cape Town

Unit G9, Centurion Business Park
13 Bosmansdam Rd
Milnerton
Cape Town
South Africa
7441

Office hours: 07h00-15h30.

*If **microbiological analysis** (E.coli, Total Coliforms) is required, samples should be delivered, **no later than 15h00 on Thursdays** to allow for incubation periods.*