

## **Guidelines for taking a Drinking Water Sample**

Effective sampling is not possible without giving consideration to the various analyses to be carried out. While taking the sample may be quite straight forward practically there are a lot of things to take into consideration before you sample. The tap must be spotless to rule out any outside contamination, the well must be purged out so it is good flowing water (non-stagnant) and the sample must get to the lab as soon as possible after you take it. Please ensure you have the correct bottle requirements before commencing the sampling.

## **Bottles:**

For a typical drinking water sample, the following bottles are required:

- 500ml Plastic bottle (for chemical analysis)
- 100ml Sterile bottle (for microbiological analysis)

It is essential to sterilise the tap or source to ensure the integrity of the sample and that contamination during sampling does not occur. A butane gas burner/lighter is required for sterilisation of metal taps or a wipe of the tap with Milton or bleach is sufficient.

## **Procedure:**

- 1. Record the date, time and sampling location on each of the sampling containers.
- 2. The drinking water must be sampled at the point where it is made available to the consumer i.e. the tap. However, the tap outlet should be directly fed by the mains supply and not by a storage tank unless a sample from the tank supply is required.
- 3. Ensure your hands are clean and put on a sterile pair of gloves.
- 4. The water should be allowed run for a short period of time (approx. 2 minutes).
- 5. The mouth of metal taps should then be sterilised using a butane gas flame / lighter or sterile wipe. Taps composed of any other material should be sterilised using a sterile swab containing chlorine.
- 6. After sterilisation, run the tap once again for 2 minutes. Remove the cap from the sterile sampling bottle and retain in one hand. The bottle is held by the base in the other hand and held under the running tap to fill. **The sampling container is not to be rinsed.** Care should be taken to ensure that the running water does not come in contact with any object during sampling. An air space is left in the bottle to aid proper mixing prior to analysis whilst ensuring a minimum of 40ml of sample is taken. The cap is then placed on the bottle and care taken to ensure contamination by handling does not take place.
- 7. Sampling for the chemical analysis is then carried out using the 500ml container (large plastic water bottle). Firstly, the container is half filled and rinsed out with the water. The bottle is then refilled to the brim of the bottle and the screw cap replaced.
- 8. Please note after taking the sample it is imperative that it gets to the laboratory immediately. It may be stored in a cooled environment where possible (i.e. ideally at 2-8°C). This should be no longer thank 24 hours, 6 hours ideally. If time exceeds 30 hours, results for bacteria may be inaccurate.

Please submit full payment with the sample or samples will not be accepted to the Laboratory.

IAS Laboratories do not take responsibility for samples taken incorrectly or samples not submitted in time.

This is solely the responsibility of the sender.