

## Sampling Procedure

\* Please read the following before proceeding with sampling\*

### Disclaimer

- WSH Labs does not assume any responsibility for misuse, accidents or injuries caused from the chemicals that are provided strictly for laboratory use. If you have any questions related to this sampling procedure at any time, please call us at (403) 250-9164 for clarification.

### Precautionary Measures

- Sample bottles may contain a chemical preservative. Do not inhale, ingest or contact the substance.
- Typical chemical preservatives that come in containers include acids (corrosive), bases (caustic), powders & pellets.
- Keep bottles that contain chemical preservatives away from children.
- Garments such as protective eyewear and rubber gloves are recommended.
- Flush any exposed areas (skin, eyes, etc.) with large quantities of cold water for several minutes. In case of accidental ingestion, contact your local poison center for information. In Calgary, call the Poison Center at (403) 944-1414.

### Containers Used for Water Sampling

- Bottles marked as *Water Potability* or *General* is used for analyses that do not require a chemical preservative. Collect the sample using a 500 mL poly container.
- Bottles marked as *H<sub>2</sub>S* contain zinc acetate preservative for sulphide analysis. A 500 mL poly container is used for this analysis. Attached to this bottle is a separate small vial of 50% sodium hydroxide (CAUTION: STRONG CAUSTIC). Immediately add this solution to the H<sub>2</sub>S bottle after collecting the water sample and mix well.
- The 250 mL sealed pre-sterilized poly container contains sodium thiosulphate (white powder). This container is used only for microbiology tests.
- Bottles marked as *Trace Metals* contain concentrate nitric acid as a preservative (CAUTION: STRONG CORROSIVE). Collect the sample using a 250 mL cylindrical HDPE container. Direct the container away from you when sampling in order to avoid possible acid fumes. Cap the container immediately after sampling.
- Bottles marked for *NH<sub>3</sub>-N*, *TKN*, *TP*, *COD* and/or *Phenol* analyses contain 50% sulphuric acid (CAUTION: STRONG CORROSIVE). Collect the sample using a 500 mL poly container with phenol being the exception. For phenol analysis, collect the sample using a 1 liter amber bottle. Direct the container away from you when sampling in order to avoid possible acid fumes. Cap the container immediately after sampling.
- Bottles marked for *Cyanide* contain sodium hydroxide as a preservative (CAUTION: STRONG CAUSTIC). Collect the sample using a 500 mL poly container and mix well.
- Bottles marked for *Oil & Grease* contain 50% sulphuric acid preservative (CAUTION: STRONG ACID). Collect the sample using a 1 liter amber glass bottle. Direct the

container away from you when sampling in order to avoid possible acid fumes. Cap the container immediately after sampling.

- 40 mL glass vials are used for *TPH*, *BTEX*, *TOC/DOC*, *Dissolved Methane* and *THMs* analyses. All the analyses provided by this 40 mL vial do not require a chemical preservative with the exception of THMs which contains sodium thiosulphate in the vial.

### Procedure for Water Sampling

- Sampling from the source is preferable. For example, sampling at the well rather than the kitchen tap is recommended as some homes may use water treatment equipment which alters water chemistry.
- If you are sampling within your home, remove the aerator from the faucet. Next, open the cold water tap and allow the water to run until your well pump is engaged. At that point, allow the water to run five additional minutes before collecting the sample. At this point, the water temperature should be cool.
- If your home does not use a well system, allow the water to run five minutes before collecting the sample.
- Collecting a water sample for microbiology analyses requires that the source of where you are collecting is sterilized. This can be done by submerging the faucet in a chlorine/bleach solution or by using an open flame. Please be careful that the chlorine solution or open flame does not damage the faucet, depending on the material. Alcohol is a suitable substitute in circumstances where chlorine or an open flame cannot be used.
- When filling the containers, fill slowly to minimize any agitation. With the exception of the 40 mL glass vials, do not overfill the containers. Also, do not rinse any containers as it will result in a loss of the preservative.
- With the exception of sampling for *Dissolved Methane*, the 40 mL glass vials requires that you slowly fill the container up to the lip and when the cap is screwed on to the vial, that no air gap or bubble is visible. When sampling for *Dissolved Methane*, fill the 40 mL glass vial to no more than 2/3 full and cap tightly.
- Microbiology samples must be submitted within 24 hours of sampling. Do not subject the sample to extreme temperatures. Ensure the sample is kept cool with frozen ice/gel packs or crushed ice in a cooler.
- For non-microbiological samples, please submit the samples as soon as possible.
- Ensure all information is recorded on the labels that are on the containers as this will appear on the final report. Adding any additional information after generation of the final report will be subject to a surcharge.
- Please note that if you do not have a credit account, we require immediate payment at the time of sample submission.

If you have any questions at any time, please contact us at (403) 250-9164 or toll-free at 1-800-449-6544.