

SAMPLING PROCEDURE

PLEASE READ THE FOLLOWING BEFORE COLLECTING ANY SAMPLES

Disclaimer

- WSH Labs (1992) Ltd. 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 nitrile/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 centre for information. In Calgary, call the Poison Centre 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 PETE container.
- Bottles marked as H_2S contain zinc acetate as a preservative for hydrogen sulphide analysis. A 500 mL PETE 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_2S bottle after collecting the water sample, cap the container, and then mix well.
- The 250 mL security sealed pre-sterilized HDPE container contains sodium thiosulphate (white powder). This container is used only for microbiological tests.
- Bottles marked as *Trace Metals* contain concentrate nitric acid and/or hydrochloric acid as a preservative (CAUTION: STRONG CORROSIVE). Collect the sample using a 125 mL cylindrical HDPE container. Direct the container away from you when sampling in order to avoid inhaling any chemical fumes. Cap the container immediately after sampling.
- Bottles marked for NH_3-N , *TKN*, *TP*, *COD* and/or *Phenol* analyses contain 50% sulphuric acid (CAUTION: STRONG CORROSIVE). Collect the sample using a 500 mL PETE container with phenol being the exception. For phenol analysis, collect the sample using a 125 mL HDPE container. Direct the container away from you when sampling in order to avoid inhaling any chemical 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 125 mL PP container and mix well.



- Bottles marked for *Oil & Grease* contain 50% sulphuric acid preservative (CAUTION: STRONG CAUSTIC). Collect the sample using a 250 mL amber glass bottle. Direct the container away from you when sampling in order to avoid inhaling any chemical fumes. Cap the container immediately after sampling.
- 40 mL glass VOC 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 (i.e. your water comes from a municipal source), allow the water to run five minutes before collecting the sample.
- Collecting a water sample for microbiological analyses require 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. Depending on the material composition of the faucet, please be aware that a chlorine solution or open flame can damage or discolor the faucet. 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 VOC vials, please do not overfill the containers. Also, do not pre-rinse any containers as it will result in a loss of the chemical preservative (if any).
- With the exception of sampling for *Dissolved Methane*, the 40 mL glass VOC vials require that you slowly overfill the container. When the cap is screwed on to the vial, ensure that no air gap or bubbles are visible by inverting the container. When sampling for *Dissolved Methane*, fill the 40 mL VOC glass vial to no more than 2/3 full and cap tightly.
- Microbiological samples must be submitted within 24 hours after sampling. For non-microbiological samples, please submit the samples as soon as possible. Do not subject the samples to extreme temperatures (keep away from the sun and avoid freezing). Ensure the sample is kept cool with frozen ice (preferably crushed) or reusable gel packs in a cooler.
- Ensure all information is recorded on the labels that are on the containers as this will appear on the final report. We encourage the use of a Chain of Custody (Analytical Request Form) that can be found on our website (wshlabs.com) in order to ensure accuracy of required tests and client information. Any amendments after generation of the final report will be subject to a surcharge.
- Please note that if you do not have a credit account, we will 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.