



# Hallmark laboratories

## Water Products & Testing Facility

265-12318 Barlow Trail NE, Calgary T4B 0M2

Tel: (587) 703 9555. Email: [info@hallmarklaboratories.ca](mailto:info@hallmarklaboratories.ca)

Website: [www.hallmarklaboratories.ca](http://www.hallmarklaboratories.ca)

### SAMPLING PROCEDURE

*PLEASE READ THE FOLLOWING BEFORE COLLECTING ANY SAMPLES*

#### Disclaimer

Hallmark Laboratories Inc. does not assume any responsibility for misuse, accidents, or injuries caused by the chemicals provided strictly for laboratory use. If you have any questions related to this sampling procedure at any time, please call us at (587) 703-9555 for clarification.

#### Precautionary Measures

- Sample bottles may contain a chemical preservative. Never inhale, ingest, or contact the substance.
- Typical chemical preservatives that come in containers include acids (corrosive), bases (caustic), powders, and pellets.
- Keep bottles containing chemical preservatives away from children
- Protective eyewear and nitrile or rubber gloves are recommended when handling chemicals.
- 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.

#### Containers Used for Water Sampling

- **Water Potability or General Analysis:** Use a 500 mL PETE container. No chemical preservative is required.
- **Hydrogen Sulphide (H<sub>2</sub>S) Analysis:** Use a 500 mL PETE container with zinc acetate as a preservative. Add the provided sodium hydroxide (CAUTION: STRONG CAUSTIC) after collecting the sample, cap the bottle, and mix well.
- **Microbiological Tests:** Use the 250 mL security-sealed pre-sterilized HDPE container with sodium thiosulphate (white powder) preservative.
- **Trace Metals Analysis:** Use a 125 mL cylindrical HDPE container with concentrated nitric or hydrochloric acid (CAUTION: STRONG CORROSIVE). Avoid inhaling fumes.
- **Ammonia, TKN, TP, COD, and Phenol Analysis:** Use a 500 mL PETE container with 50% sulphuric acid preservative (CAUTION: STRONG CORROSIVE). Use a 125 mL HDPE container for phenol analysis.
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- **Cyanide Analysis:** Use a 125 mL PP container with sodium hydroxide (CAUTION: STRONG CAUSTIC). Mix well after collection.
- **Oil & Grease Analysis:** Use a 250 mL amber glass bottle with 50% sulphuric acid (CAUTION: STRONG CORROSIVE).
- **TPH, BTEX, TOC/DOC, Dissolved Methane, and THMs Analysis:** Use a 40 mL glass VOC vial. No preservative is required, except for THMs, which contains sodium thiosulphate.

### Procedure for Water Sampling

- **Sampling Location:** Sample from the source when possible (e.g., well, not kitchen tap) to avoid water treatment interference.
- **Running Water:** If sampling from a faucet, remove the aerator, run the cold water until the well pump engages, and let it run for an additional five minutes before collecting the sample.
- **Sterilization for Microbiological Sampling:** Sterilize the faucet by submerging it in chlorine solution or using an open flame. Alcohol can be used as an alternative.
- **Filling Containers:** Fill containers slowly to minimize agitation, but do not overfill, except for the 40 mL VOC vials (fill to the top).
- **VOC Vials (except Dissolved Methane):** Ensure no air bubbles by overfilling the vial and inverting it after capping. For Dissolved Methane, fill only 2/3 of the vial.
- **Submission Timeframe:** Submit microbiological samples within 24 hours. Non-microbiological samples should be submitted as soon as possible. Keep all samples cool using ice or gel packs in a cooler, avoiding exposure to extreme temperatures.
- **Sample Labels:** Ensure all information is correctly recorded on container labels as it will appear on the final report. Use a Chain of Custody form to ensure accuracy.

If you have any questions at any time, please contact Hallmark Laboratories at (587) 703-9555.