

MINIMUM WATER QUALITY PARAMETERS TO BE ANALYZED

SHALLOW WELLS, DEEP WELLS, and SPRINGS

MICROBIOLOGICAL¹

Escherichia coli

Total coliform

Non-coliform bacteria

Iron and sulphur Bacteria (deep wells)

Heterotrophic Plate Counts

PHYSICAL/CHEMICAL

Alkalinity

Ammonia

Arsenic

Chloride

Colour

Conductivity²

Corrosiveness³

Fluoride

Hardness

Metals Scan⁶

Nitrite

Nitrate

Organic Nitrogen

pH

Selenium

Sulphate

Sulphide (as hydrogen sulphide)⁴

Total Dissolved Solids

Total Organic Carbon⁴⁵

Turbidity

UVT⁷

1. Analysis of additional parameters may be required based on the results of initial analysis and on potential impact by nearby sources of contamination or polluting sources. If industrial, agricultural or pesticide pollution is suspected, identify what chemicals may have been used and analyze for most likely indicator parameters. If petroleum pollution is suspected (underground fuel storage) analyze for alkyl benzene compounds. If parasitic pollution is suspected, *Giardia lamblia* and/or *cryptosporidium* analysis may be required.
2. Analyses must be sufficiently accurate so that the minimum detectable concentration is less than 10% of Guidelines for Canadian Drinking Water Quality, the **Drinking Water Protection Act** or the **Drinking Water Protection Regulation** where applicable. Other analysis must provide sufficient information to reasonably assess the water suitability for drinking purposes and to determine what, if any, treatment might be needed. Analyses must be conducted in accordance with methods prescribed in "Standard Methods for the Examination of Water and Wastewater" (latest edition) or other acceptable procedure.

¹ Bacterial analysis must be conducted at an approved laboratory (<http://lmlabs.phsa.ca/about-us/who-we-are/bc-centre-for-disease-control-public-health-laboratory>)

² Conductance/Specific Conductance

³ Calcium Carbonate saturation/Langelier's index

⁴ For deep wells: On site or preserve sample, or use alternative method of confirming that water has satisfactory odour

⁵ If Turbidity is less than 1.0 mg/L, Dissolved Organic Carbon may be used as an alternative to Total Organic Carbon.

⁶ At least: aluminum, barium, boron, cadmium, calcium, chromium, copper, iron, lead, magnesium, manganese, molybdenum, nickel, phosphorous, potassium, silver, sodium, zinc (expand if mineralized to include mercury).

⁷ Where UV is being considered as part of the water treatment process, %UVT, calculated from UVA.