



## PRIVATE WATER WELL SAMPLING – INFORMATION SHEET

### General Information

Our water sampling services are only for private water wells located within the Calgary Health Region. This includes water wells located within the city of Calgary and surrounding area.

Water wells may contain numerous bacteriological and chemical impurities from both natural and man-made sources. Such impurities may cause a variety of health problems as well as damage equipment, stain fixtures and emit odours.

If the intended use of the water well is for human consumption, there are two types of tests that may be done by the homeowner. Currently there is no fee for these tests.

### 1. Bacteriological Samples

It is recommended that bacteriological samples of well water be taken in the Spring of each year, or according to current Calgary Health Region Policy. The results of the testing will indicate if unacceptable levels of harmful bacteria are present.

The Provincial Laboratory of Public Health performs laboratory tests on well water samples. Initially the laboratory looks for whether bacteria are present or absent in a sample. The presence of certain types of bacterial indicators such as *E-coli* or Total Coliforms can be an indication that your water is unsafe to drink.

#### ***E-coli:***

The presence of *E-coli* in a well water system indicates it has recently been impacted by fecal contamination and **should not be considered safe to drink**. This situation should be discussed with the Health Inspector who can make recommendations about boiling your water or other treatment methods.

#### **Total Coliforms:**

The presence of Total Coliforms in a well water system are indications of possible surface contamination of the water supply. Total Coliforms may also indicate inadequate water treatment practices. This situation should be discussed with the Health Inspector who can make recommendations on what further action you should take.

## 2. Chemical Samples

Homeowners should also have their water wells tested for chemical parameters, if:

- ♦ the water well has just been drilled or completed
- ♦ the water well is used by a family with or expecting a new-born child
- ♦ the water well has not been tested in the past 5 years

Routine chemical parameters of public health concern include:

<u>Chemical</u>	<u>Health Concern</u>	<u>Common Sources</u>
Nitrates	“blue-baby” syndrome	fertilizer run-off
Fluoride	mottling of teeth	occurs naturally

Please contact the Public Health Inspector in your area to discuss chemical testing of other water contaminants such as heavy metals, pesticides, or hydrocarbons.

### **WATER SAMPLING PROCEDURE**

- Phone the Environmental Health office at 943-8095 for information on how to obtain water sample bottles and associated laboratory forms. The laboratory will only accept samples submitted in these bottles.
- The Environmental Health office will also provide the following documents:
  - ➔ “Instructions for Taking Water Samples for Bacteriological Analysis”, and/or
  - ➔ “Instructions for Taking Water Samples for Chemical Analysis”.

*Instructions must be followed **exactly** or the laboratory will not process the sample.*
- All results will be mailed. Water results will not be faxed or given out over the phone.
- If your sample result shows the presence of bacteria, or a chemical parameter of health significance that exceeds the Guidelines for Canadian Drinking Water Quality, a Public Health Inspector will contact the person on the requisition to discuss this result.
- This public service is for homeowners and is not available for mortgage/real estate purposes or the testing of water treatment devices.

***If these procedures are not acceptable,  
you must go through a private laboratory at your own expense.***

**If you have any questions regarding the sampling procedures or drop-off locations, please contact Environmental Health at 943-8095, Monday to Friday - 8:00 am - 4:30 pm.**