

City of Whitehorse Water Quality Report Card

The City does weekly collection and independent testing of the drinking water, at approximately 20 locations around Whitehorse. Below are the average results for last year:



Substance	2013 Average (mg/L)	Canadian Drinking Water Guideline Maximum
MINERALS		
Calcium (Ca)	26.23	N/A
Magnesium (Mg)	19.47	N/A
Sodium (Na)	8.61	<200
Sulphate (SO ₄)	45.07	<500
Total Hardness (CaCO ₃)	145.67	see over
TRACE METALS		
Arsenic (As)	0.00	0.01
Copper (Cu)	0.01	1
Fluoride (F)	0.17	1.5
Lead (Pb)	0.00	0.01
Manganese (Mn)	0.00	0.05
Zinc (Zn)	0.01	<5.0

Most substances are measured in milligrams per Litre (mg/L), which is sometimes referred to as 'parts per million'. One part per million is equivalent to one drop in a bathtub 1/2 full of water.



Water Hardness

Water hardness usually refers to the amount of calcium and magnesium in the water.

Government of Canada Water Hardness Classifications	
Classification	Water Hardness
Soft	below 60 mg/litre or ppm (0 – 3.5 gpg)
Moderately hard	61 – 120 mg/litre or ppm (3.6 – 7 gpg)
Hard	121 – 180 mg/litre or ppm (7.1 – 10.5 gpg)
Very hard	over 180 mg/litre or ppm (over 10.5 gpg)

VERY HARD water can be unpleasant due to the taste the high concentrations of ions, and it reduces soap lather and can cause scale formation in pipes (and kettles!)

SOFT water can corrode pipes, and can feel more soapy - a little detergent or shampoo makes more lather in soft water.

**Whitehorse water is in the moderate range,
which is a balance between VERY HARD and SOFT**

Whitehorse has five (5) water wells ranging in hardness from 80 to 250 mg/L.
The City mixes water from the wells at the Selkirk Pumphouse to maintain a hardness rating near the Moderate Range.