

Water Sample Results - General Chemistry and Metals

Parameter	Units	Canadian Drinking Water Guideline	Detection Limit	Durham (045)	
				5-Oct-2005	21-Jan-2009
General Chemistry					
Total Alkalinity (Total as CaCO ₃)	mg/L	-	5	140	110
Chloride (Cl)	mg/L	250 AO	1	44	19
Colour	TCU	15 AO	5	ND	ND
Hardness (CaCO ₃)	mg/L	-	-	86	72
Nitrate + Nitrite	mg/L	10	0.05	ND	ND
Nitrite (N)	mg/L	1	0.01	ND	ND
Nitrate (N)	mg/L	10	0.05	ND	ND
Nitrogen (Ammonia Nitrogen)	mg/L	-	0.05	0.11	ND
Total Organic Carbon (C)	mg/L	-	0.5	ND	ND
Orthophosphate (P)	mg/L	-	0.01	ND	0.01
pH	pH	7.0-10.5 OG	-	8.16	7.95
Reactive Silica (SiO ₂)	mg/L	-	0.5	11	9.8
Sulphate (SO ₄)	mg/L	500 AO	2	16	11
Turbidity	NTU	-	0.1	ND	0.5
Conductivity	uS/cm	-	-	410	290
Anion Sum	me/L	-	-	4.31	2.95
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	-	1	134	108
Calculated TDS	mg/L	-	1	243	167
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	-	1	2	ND
Cation Sum	me/L	-	-	4.22	2.92
Ion Balance (% Difference)	%	-	-	1.01	0.51
Langelier Index (@ 20C)	N/A	-	-	0.382	0.008
Langelier Index (@ 4C)	N/A	-	-	0.132	-0.242
Saturation pH (@ 20C)	N/A	-	-	7.78	7.94
Saturation pH (@ 4C)	N/A	-	-	8.03	8.19
Calcium (Ca)	mg/L	-	0.1	30	25
Magnesium (Mg)	mg/L	-	0.1	2.7	2.3
Phosphorus (P)	mg/L	-	0.1	0.1	ND
Potassium (K)	mg/L	-	0.1	1.6	1.3
Sodium (Na)	mg/L	200 AO	0.1	57	33
Bromide (Br)	mg/L	-	0.5	ND	ND
Fluoride (F)	mg/L	1.5	0.1	0.3	0.2
Metals					
Aluminum (Al)	ug/L	-	10	16	12
Antimony (Sb)	ug/L	6	2	ND	ND
Arsenic (As)	ug/L	10	2	4	2
Barium (Ba)	ug/L	1000	5	130	110
Beryllium (Be)	ug/L	-	2	ND	ND
Bismuth (Bi)	ug/L	-	2	ND	ND
Boron (B)	ug/L	5000	5	38	27
Cadmium (Cd)	ug/L	5	0.3	ND	ND
Chromium (Cr)	ug/L	50	2	ND	ND
Cobalt (Co)	ug/L	-	1	ND	ND
Copper (Cu)	ug/L	1000 AO	2	ND	ND
Iron (Fe)	ug/L	300 AO	50	ND	ND
Lead (Pb)	ug/L	10	0.5	ND	ND
Manganese (Mn)	ug/L	50 AO	2	21	ND
Molybdenum (Mo)	ug/L	-	2	8	4
Mercury (Hg)	ug/L	1	0.01		ND
Nickel (Ni)	ug/L	-	2	ND	ND
Selenium (Se)	ug/L	50	2	ND	ND
Silver (Ag)	ug/L	-	0.5	ND	ND
Strontium (Sr)	ug/L	-	5	1100	520
Thallium (Tl)	ug/L	-	0.1	ND	ND
Tin (Sn)	ug/L	-	2	ND	ND
Titanium (Ti)	ug/L	-	2	ND	ND
Uranium (U)	ug/L	20	0.1	0.7	0.9
Vanadium (V)	ug/L	-	2	ND	ND
Zinc (Zn)	ug/L	5000 AO	5	21	ND

Notes:

All guidelines are based on Health Canada MACs (Maximum Acceptable Concentrations) or Interim (I)MACs, unless otherwise indicated.

AO = Aesthetic Objective- see Health Canada Drinking Water Guidelines for details

OG = Operational Guidance - see Health Canada Drinking Water Guidelines for details

ND = not detected and ND() = not detected at the detection limit shown in brackets ()

"-" = not applicable

Shaded values exceed guidelines.