

Water Sample Results - General Chemistry and Metals

Parameter	Units	Canadian Drinking Water Guideline	Detection Limit	Kelley River (073)	
				12-Jan-2007	09-Jun-2009
General Chemistry					
Total Alkalinity (Total as CaCO3)	mg/L	-	5	22	26
Chloride (Cl)	mg/L	250 AO	1	8	7
Colour	TCU	15 AO	5	ND	ND
Hardness (CaCO3)	mg/L	-	-	13	14
Nitrate + Nitrite	mg/L	10	0.05	0.07	ND
Nitrite (N)	mg/L	1	0.01	ND	ND
Nitrate (N)	mg/L	10	0.05	0.07	ND
Nitrogen (Ammonia Nitrogen)	mg/L	-	0.05	ND	ND
Total Organic Carbon (C)	mg/L	-	0.5	2.7	ND
Orthophosphate (P)	mg/L	-	0.01	ND	ND
pH	pH	7.0-10.5 OG	-	7.22	7.1
Reactive Silica (SiO2)	mg/L	-	0.5	4.3	4.9
Sulphate (SO4)	mg/L	500 AO	2	4	4
Turbidity	NTU	-	0.1	0.2	0.2
Conductivity	uS/cm	-	-	81	86
Anion Sum	me/L	-	-	0.765	0.81
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	-	1	22	26
Calculated TDS	mg/L	-	1	46	51
Carb. Alkalinity (calc. as CaCO3)	mg/L	-	1	ND	ND
Cation Sum	me/L	-	-	0.746	0.86
Ion Balance (% Difference)	%	-	-	1.26	2.99
Langelier Index (@ 20C)	N/A	-	-	-2.19	-2.21
Langelier Index (@ 4C)	N/A	-	-	-2.44	-2.47
Saturation pH (@ 20C)	N/A	-	-	9.41	9.31
Saturation pH (@ 4C)	N/A	-	-	9.66	9.57
Calcium (Ca)	mg/L	-	0.1	3.6	3.9
Magnesium (Mg)	mg/L	-	0.1	1	1.1
Phosphorus (P)	mg/L	-	0.1	ND	ND
Potassium (K)	mg/L	-	0.1	1	0.9
Sodium (Na)	mg/L	200 AO	0.1	11	13
Bromide (Br)	mg/L	-	0.5	ND	ND
Fluoride (F)	mg/L	1.5	0.1	ND	ND
Metals					
Aluminum (Al)	ug/L	-	10	ND	ND
Antimony (Sb)	ug/L	6	2	ND	ND
Arsenic (As)	ug/L	10	2	ND	ND
Barium (Ba)	ug/L	1000	5	24	170
Beryllium (Be)	ug/L	-	2	ND	ND
Bismuth (Bi)	ug/L	-	2	ND	ND
Boron (B)	ug/L	5000	5	14	30
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	87	ND
Lead (Pb)	ug/L	10	0.5	ND	ND
Manganese (Mn)	ug/L	50 AO	2	20	2
Molybdenum (Mo)	ug/L	-	2	ND	ND
Mercury (Hg)	ug/L	1	0.01	ND	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	20	22
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	ND	ND
Vanadium (V)	ug/L	-	2	ND	ND
Zinc (Zn)	ug/L	5000 AO	5	ND	130

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.