

Water Sample Results - General Chemistry and Metals

Parameter	Units	Canadian Drinking Water Guideline	Detection Limit	Dalem Lake (069)	
				14-Dec-2006	11-Dec-2008
General Chemistry					
Total Alkalinity (Total as CaCO ₃)	mg/L	-	5	63	65
Chloride (Cl)	mg/L	250 AO	1	38	38
Colour	TCU	15 AO	5	ND	ND
Hardness (CaCO ₃)	mg/L	500 AO	-	120	100
Nitrate + Nitrite	mg/L	10	0.05	ND	0.06
Nitrite (N)	mg/L	1	0.01	ND	ND
Nitrate (N)	mg/L	10	0.05	ND	0.06
Nitrogen (Ammonia Nitrogen)	mg/L	-	0.05	ND	ND
Total Organic Carbon (C)	mg/L	-	0.5	2.6	ND
Orthophosphate (P)	mg/L	-	0.01	0.01	ND
pH	pH	6.5 - 8.5 AO	-	7.8	7.77
Reactive Silica (SiO ₂)	mg/L	-	0.5	12	12
Sulphate (SO ₄)	mg/L	500 AO	2	8	7
Turbidity	NTU	5 AO	0.1	0.3	1.2
Conductivity	uS/cm	-	-	260	260
Anion Sum	me/L	-	-	2.51	2.54
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	-	1	62	65
Calculated TDS	mg/L	-	1	150	145
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	-	1	ND	ND
Cation Sum	me/L	-	-	2.77	2.45
Ion Balance (% Difference)	%	-	-	4.97	1.8
Langelier Index (@ 20C)	N/A	-	-	-0.191	-0.263
Langelier Index (@ 4C)	N/A	-	-	-0.442	-0.514
Saturation pH (@ 20C)	N/A	-	-	7.99	8.03
Saturation pH (@ 4C)	N/A	-	-	8.24	8.28
Calcium (Ca)	mg/L	-	0.1	38	33
Magnesium (Mg)	mg/L	-	0.1	6.1	5.3
Phosphorus (P)	mg/L	-	0.1	ND	ND
Potassium (K)	mg/L	-	0.1	1.3	1.2
Sodium (Na)	mg/L	200 AO	0.1	7.5	7.5
Bromide (Br)	mg/L	-	0.5	ND	ND
Fluoride (F)	mg/L	1.5	0.1	0.2	0.2
Metals					
Aluminum (Al)	ug/L	-	10	ND	ND
Antimony (Sb)	ug/L	6	2	ND	ND
Arsenic (As)	ug/L	10	2	4	3
Barium (Ba)	ug/L	1000	5	150	150
Beryllium (Be)	ug/L	-	2	ND	ND
Bismuth (Bi)	ug/L	-	2	ND	ND
Boron (B)	ug/L	5000	5	9	5
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	180	160
Lead (Pb)	ug/L	10	0.5	ND	ND
Manganese (Mn)	ug/L	50 AO	2	330	350
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	10	2	ND	ND
Silver (Ag)	ug/L	-	0.5	ND	ND
Strontium (Sr)	ug/L	-	5	77	58
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	ND

Notes:

AO = Aesthetic Objective.

ND = not detected

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

All guidelines are health-based MACs or IMACs, unless otherwise indicated.

Shaded values exceed guidelines.