Water Sample Results - General Chemistry and Metals

Parameter	Units	Canadian Drinking Water Guideline	Detection Limit	Hebron (063)	
				9-Jun-2005	17-Dec-2009
General Chemistry					
Total Alkalinity (Total as CaCO3)	mg/L	-	5	23	24
Chloride (Cl)	mg/L	250 AO	1	49	57
Colour	TCU	15 AO	5	5.8	8
Hardness (CaCO3)	mg/L	500 AO	-	71	65
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	ND	0.05
Total Organic Carbon (C)	mg/L	-	0.5	1.2	1.6
Orthophosphate (P)	mg/L	-	0.01	ND	0.01
pH	pH	6.5 - 8.5 AO	-	**6.29**	6.5
Reactive Silica (SiO2)	mg/L		0.5	17	16
Sulphate (SO4)	mg/L	500 AO	2	13	16
Turbidity	NTU	5 AO	0.1	**150**	**45**
Conductivity	uS/cm	-	-	270	310
Anion Sum	me/L	-	-	2.12	2.41
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	-	1	23.2	24
Calculated TDS	mg/L	-	1	169	174
Carb. Alkalinity (calc. as CaCO3)	mg/L	-	1	ND	ND
Cation Sum	me/L	-	-	3.38	3.14
Ion Balance (% Difference)	%	-	-	22.9	13.2
Langelier Index (@ 20C)	N/A	-	-	-2.47	-2.29
Langelier Index (@ 4C)	N/A	-	-	-2.72	-2.54
Saturation pH (@ 20C)	N/A	-	-	8.76	8.79
Saturation pH (@ 4C)	N/A	-	-	9.01	9.04
Calcium (Ca)	mg/L	-	0.1	18	16
Magnesium (Mg)	mg/L	-	0.1	6.3	6
Phosphorus (P)	mg/L	-	0.1	ND	0.1
Potassium (K)	mg/L	-	0.1	1.7	1.8
Sodium (Na)	mg/L	200 AO	0.1	20	20
Bromide (Br)	mg/L	-	0.5	0.5	0.5
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	14	17
Beryllium (Be)	ug/L	-	2	ND	ND
Bismuth (Bi)	ug/L	-	2	ND	ND
Boron (B)	ug/L	5000	5	8.8	10
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	**27000**	**26000**
Lead (Pb)	ug/L	10	0.5	ND	ND
Manganese (Mn)	ug/L	50 AO	2	**440**	**460**
Molybdenum (Mo)	ug/L	-	2	ND	ND
Mercury (Hg)	ug/L	1	0.01		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	91	92
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	16	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.