



Ellison & Dry Valley Comprehensive Water Quality Results

Please note that water quality can change drastically in Ellison and Dry Valley as these areas can be supplied with water from the creek only; from the creek augmented by wells; or with wells only (when flows are low, and during spring freshet). **The following results are for the well only.**

Parameter	July 26/07	July 7/08	June 24/09	July 14/10	July 22/11	Units	Canadian Guidelines for Drinking Water
General Inorganic Parameters							
Alkalinity (total)	279	286	282	283	273	mg/L as CaCo3	No Guideline
Hardness (total)	286	306	356	338	316	mg/L as CaCo3	No Guideline
Chloride	8.87	9.12	9.08	5.58	5.41	mg/L	AO <250
Color (true)	<5	<5	5	<5	<5	Color Units	AO<15 TCU
Conductivity@ 25	711	719	716	689	677	Umhos/cm	No Guideline
Cyanide	<0.01	<0.01	<0.01	<0.01	<0.01	mg/L	MAC < 0.2
Fluoride	0.59	0.56	0.60	0.49	0.55	mg/L	MAC < 1.5
Nitrite	<0.010	<0.010	<0.01	<0.01	<0.01	mg/L as N	MAC < 1
Nitrate	0.141	0.095	0.15	0.19	0.08	mg/L as N	MAC < 10
pH	7.4	7.6	8.16	8.14	8.12	pH units	AO=6.5-8.5
Sulphate	109	94.4	99.7	98.5	92.8	mg/L	AO <500
Dissolved Solids (total)	451	461	434	424	412	mg/L	AO <500
Turbidity	0.5	0.5	0.4	1.9	1.7	NTU	<1
Transmissivity @ 254nm	90.2		95.6	94.6	94.2	No Guideline	
<i>Turbidity of 0.0 to 1.0 NTU is considered "Good" by IHA</i> <i>Turbidity of 1.0 to 5.0 NTU is considered "Fair" by IHA = Water Quality Advisory</i> <i>Turbidity of >5.0 NTU is considered "Poor" by IHA = Boil Water Notice</i>							
Microbiological Parameters							
Total Coliform	<1	<1	<1	<1	<1	CFU/100ml	MAC <1
E. coli	<1	<1	<1	<1	<1	CFU/100ml	MAC <1

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Total Recoverable Metals by ICPMS							
Parameter	July 26/07	July 7/08	June 24/09	July 14/10	July 22/11	Units	Canadian Guidelines for Drinking Water
Aluminum	<0.01	<0.050	<0.050	<0.050	<0.050	mg/L	
Antimony	<0.0006	<0.0030	<0.0010	<0.0010	<0.0010	mg/L	MAC <0.007
Arsenic	<0.001	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	MAC < 0.01
Barium	0.052	0.056	0.0604	0.0644	0.056	mg/L	MAC <1
Beryllium		<0.0020	<0.0010	<0.0010	<0.0010	mg/L	No Guideline
Boron	0.023	0.027	0.025	<0.040	<0.040	mg/L	MAC <5
Cadmium	<0.00001	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	MAC <0.005
Calcium	58.5	66.5	77.2	70.9	66.3	mg/L	No Guideline
Chromium	0.002	<0.015	<0.0050	<0.0050	<0.0050	mg/L	MAC <0.05
Cobalt		<0.0005	<0.00050	<0.00050	<0.00050	mg/L	No Guideline
Copper (Total)	<0.001	<0.0030	0.0017	0.0021	0.0037	mg/L	AO <1
Iron	0.53	0.69	0.54	0.43	0.47	mg/L	AO <0.3
Lead	<0.0002	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	MAC <0.01
Magnesium	34	33.9	39.8	39.2	36.4	mg/L	No Guideline
Manganese	0.144	0.173	0.169	0.177	0.161	mg/L	AO <0.05
Mercury	<0.00005	<0.00030	<0.00050	<0.00050	<0.00020	mg/L	MAC <0.001
Molybdenum	0.0214	0.0216	0.0217	0.0224	0.0202	mg/L	No Guideline
Nickel		<0.005	<0.0020	0.0022	0.0032	mg/L	No Guideline
Phosphorus		<0.20	<0.20	<0.20	0.22	mg/L	No Guideline
Potassium	3.84	3.69	3.78	3.90	3.51	mg/L	No Guideline
Selenium	<0.001	<0.0050	<0.0030	<0.0030	<0.0050	mg/L	MAC <0.01
Silicon	9.3	9.2	6.5	11.0	9.7	mg/L	No Guideline
Silver		<0.00040	<0.00050	<0.00050	<0.00050	mg/L	No Guideline
Sodium	32.6	31.5	35.8	31.3	31.3	mg/L	AO <200
Uranium	0.0063	0.007	0.00775	0.00748	0.00573	mg/L	MAC <0.02
Zinc	0.008	<0.010	<0.010	<0.010	<0.040	mg/L	AO <5
<i>MAC = Maximum Acceptable Concentration</i>				<i>AO – Aesthetic Objective</i>			