Melrose Well # 1 Water Analysis
3853 Melrose Road

CDWG=Canadian Drinking Water Guidelines
OG= Operational Guidance Value

MAC=Maximum Acceptable Concentration
AO= Asthetic Objective.

Red font indicates non-compliance with Canadian Drinking Water Guidelines

	Units	CDWG		October 19 2005	October 24 2006	October 22 2007	October 14 2008	October 14 2009	October 27 2010	October 19 2011	October 16 2012	October 17 2013						
Miscellaneous Inorganics																		
Fluoride	mg/L	1.5	MAC	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	0.06	0.06						
Alkalinity (total as $CaCO_3$)	mg/L			81	76	82	69	66	75	86	82	80						
Anions																		
Dissolved Sulphate	mg/L	500	AO	<2	<2.0	<2.0	2.6	<2.0	2.1	1.4	2	1.9						
Dissolved Chloride	mg/L	250	AO	40.6	51.3	48.1	63	59	55.2	51.5	66	74						
Nitrite	mg/L	1	MAC	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.01	<0.05	<0.05						
Miscellaneous																		
Apparent Colour	Colour Unit			200	<5	200	500	>150	>150	310	240	26						
Nutrients																		
Total Ammonia	mg/L										0.17	0.17						
Physical Properties																		
Conductivity	µS/cm			313	335	333	340	342	349	351	416	425						
pH	pH	7.0:10.5	OG	7.3	7.1	6.85	7.1	7	6.8	6.8	7	7						
TDS	mg/L	500	AO	272	220	246	308	272	230	204	298	250						
Turbidity	NTU			25.3	38	1.7	24.6	55	34.7	46	40.2	9.4						
Microbiological Parameters																		
E.coli	MPN/100mL	<1	MAC		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0						
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0						
Calculated Parameters																		
Total Hardness ($CaCO_3$)	mg/L			120	120	130	140	140	130	140	150	150						
Nitrate	mg/L	10	MAC	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.01	<0.05	<0.05						
Elements																		
Total Mercury	mg/L	0.001	MAC	<0.0001	<0.0001	<0.0001	<0.01	<0.01	<0.00001	<0.00001	<0.0001	<0.00001						
Total Metals																		
Total Aluminum	mg/L	0.1	OG	0.006	<0.01	0.006	<0.005	<0.005	<0.005	<0.005	0.003	<0.005						
Total Antimony	mg/L	0.006	MAC	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	<0.0002						
Total Arsenic	mg/L	0.01	MAC	0.0004	<0.0004	0.0004	0.0003	0.0004	0.0003	0.0004	0.00031	0.0004						
Total Barium	mg/L	1	MAC	0.022	0.022	0.026	0.02	0.023	0.024	0.026	0.0283	0.029						
Total Beryllium	mg/L									<0.00004	<0.00005	<0.00004						
Total Bismuth	mg/L									<0.001	<0.0001	<0.0010						
Total Boron	mg/L	5	MAC	0.007	0.007	0.006	0.005	0.007	<0.005	0.008	0.007	<0.005						
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001						
Total Chromium	mg/L	0.05	MAC	0.0008	<0.001	0.0011	0.0005	0.0005	0.0005	0.0006	<0.0005	0.0004						
Total Cobalt	mg/L									0.00008	<0.0001	0.00005						
Total Copper	mg/L	1	AO	0.011	<0.002	<0.001	0.002	0.013	0.003	0.003	0.0025	0.002						
Total Iron	mg/L	0.3	AO	8.8	8.6	9.4	8.63	9.36	9.08	8.88	8.9	9.81						
Total Lead	mg/L	0.01	MAC	0.0056	0.0006	<0.0001	0.0004	0.0023	0.0001	0.0006	0.0002	0.0009						
Total Manganese	mg/L	0.05	AO	0.224	0.232	0.26	0.211	0.219	0.264	0.27	0.264	0.27						
Total Molybdenum	mg/L									<0.0001	0.00006	0.0012						
Total Nickel	mg/L							<0.001	<0.001	<0.001	<0.0002	<0.001						
Total Selenium	mg/L	0.05	MAC	<0.0002	<0.0004	0.0003	<0.0006	<0.0006	<0.0006	0.0051	<0.0001	<0.0006						
Total Silicon	mg/L									13.7	15.7	13.9						
Total Silver	mg/L							<0.00001	<0.00001	<0.00001	<0.00001	<0.00001						
Total Strontium	mg/L									0.07	0.071	0.076						
Total Thallium	mg/L									<0.00001	<0.00001	<0.00001						
Total Tin	mg/L									<0.0001	0.0004	0.0002						
Total Titanium	mg/L									0.006	0.0006	0.0013						
Total Uranium	mg/L	0.02	MAC	<0.0005	<0.001	<0.0005	<0.0004	<0.0004	<0.0004	<0.0004	<0.00001	<0.0004						
Total Vanadium	mg/L									0.0023	0.0014	0.0013						
Total Zinc	mg/L	5	AO	0.017	0.022	0.007	0.043	0.038	0.03	0.018	0.0172	0.312						
Total Zirconium	mg/L																	
Total Calcium	mg/L			32.3	30.5	34.1	33	33.9	33.4	36.5	38.3	36.5						
Total Magnesium	mg/L			10.4	11	11.4	12.9	13.1	11.8	11.5	13.8	14.4						
Total Potassium	mg/L			<0.4	<0.08	<0.4	0.2	0.4	0.4	0.8	0.4	0.53						
Total Sodium	mg/L	200	AO	7.6	8.3	9.2	8.69	11.5	21.8	12.8	15.1	18						
Total Sulphur	mg/L																	