Horne Lake Distribution Water Analysis
Horne Lake Regional Park

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 21 2015	May 11 2016	October 12 2016	April 12 2017	Nov. 29 2018	April 17 2019
Miscellaneous Inorganics									
Fluoride	mg/L	1.5	MAC	0.018	<0.010	<0.010	0.013	<0.020	<0.02
Alkalinity (total as $CaCO_3$)	mg/L			5.22	3.38	1.96	2.02	4.2	5.4
Anions									
Dissolved Sulphate	mg/L	500	AO	0.69	<0.50	<1.0	0.52	<1.0	<1
Dissolved Chloride	mg/L	250	AO	3.6	2	1.1	1.7	3.1	2
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.005
Miscellaneous									
Apparent Colour	Colour Unit			5	10	<5		<5.0	5
Nutrients									
Total Ammonia	mg/L			0.0085	0.0068	0.11	0.023	<0.020	0.044
Physical Properties									
Conductivity	µS/cm			22.5	11.7	9.9	10.6	19	15.9
pH	pH	7.0:10.5	AO	6.64	6.52	6.44	6.53	6.65	6.61
TDS	mg/L	500	AO	14	12	16	<10	10	14
Turbidity	NTU			<0.10	<0.10	<0.10	<0.10	0.16	0.63
Microbiological Parameters									
E.coli	MPN/100mL	1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0	0
Total Coliforms	MPN/100mL	1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0	0
Calculated Parameters									
Total Hardness ($CaCO_3$)	mg/L			0.63	<0.50	1.05	<0.50	3.59	<0.5
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.020	0.022	<0.020	<0.02
Elements									
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.000002	<0.000002
Total Metals									
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	<0.003	<0.003	0.0066	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005
Total Arsenic	mg/L	0.01	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Barium	mg/L	1	MAC	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001		<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001		<0.001	<0.001
Total Boron	mg/L	5	MAC	<0.05	<0.050	<0.050	<0.050	<0.050	<0.05
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.0865	<0.0002	0.0094	0.0003	0.0168	0.0165
Total Iron	mg/L	0.3	AO	0.0237	<0.005	0.0053	<0.005	<0.005	<0.005
Total Lead	mg/L	0.01	MAC	0.00203	<0.0002	0.00024	<0.0002	0.00049	0.00097
Total Manganese	mg/L	0.05	AO	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			0.122	<0.100	0.138		0.279	0.29
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			<0.001	<0.001	0.0012		0.0032	<0.001
Total Thallium	mg/L			<0.00005	<0.00005	<0.00005		<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005		<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<0.005		<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	0.317	<0.005	0.0071	<0.005	0.0151	0.015
Total Zirconium	mg/L			<0.0005	<0.0005	<0.0005		<0.0001	<0.0001
Total Calcium	mg/L			0.253	<0.050	0.327	<0.050	1.15	<0.05
Total Magnesium	mg/L			<0.050	<0.050	0.056	<0.050	0.173	<0.05
Total Potassium	mg/L			<0.050	<0.050	<0.050	<0.050	<0.050	<0.05
Total Sodium	mg/L	200	AO	4.33	2.1	2.3	2.02	2.32	3.1
Total Sulphur	mg/L			<3.0	<3.0	<3.0	<3.0	<3.0	<3