

**TABLE 2**  
**SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SEEP SAMPLES**  
 PROPOSED HUNSBERGER PIT  
 WINTERBOURNE, ONTARIO

Parameter	Units	MOE Table 2 Standard <sup>(1)</sup>	ODWS Standards/ Guidelines/Objectives	GROUNDWATER												
				MW-1		MW-2	MW-4	MW-5	MW1-08		MW2-08		MW3-08		MW4-08	
				Aug 12/08	Apr 22/10	Apr 22/10	Apr 22/10	Apr 22/10	Aug 12/08	Apr 22/10	Aug 12/08	Apr 22/10	Aug 12/08	Apr 22/10	Aug 12/08	Apr 22/10
<i>Total Petroleum Hydrocarbons</i>																
F1 (C6 - C10)	µg/L	1000	--	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
F2 (C>10 - C16)	µg/L	--	--	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
F3 (C>16 - C34)	µg/L	--	--	<250	<250	<250	280	590	<250	<250	<250	<250	<250	<250	<250	
F4 (C>34 - C50)	µg/L	1000	--	<250	<250	<250	310	300	<250	<250	<250	<250	<250	<250	<250	
<i>General Chemistry</i>																
Alkalinity, Total (as CaCO3)	mg/L	--	30-500**	386	482	266	288	265	302	317	280	292	324	230	269	271
Ammonia (as N)	mg/L	--	--	1.52	2.68	0.102	0.092	0.082	0.19	0.107	0.09	0.064	0.37	0.074	0.13	0.05
Chloride	mg/L	250	250**	127	104	219	10.5	47.4	42	3	15	119	35	3.7	51	4.5
Fluoride	mg/L	--	1.5	<0.1	<0.10	<0.10	<0.10	<0.10	0.1	<0.10	0.1	<0.10	0.2	<0.10	0.2	<0.10
Nitrite - N	mg/L	1	1	<b>1.8</b>	<b>2.14</b>	<0.10	<0.10	<0.10	0.2	<0.10	<0.1	<0.10	0.1	<0.10	0.6	<0.10
Nitrate - N	mg/L	10	10	<b>103</b>	<b>78.9</b>	4.59	5.29	7.06	0.2	1.76	<b>14.4</b>	<b>11.2</b>	<b>16.6</b>	<b>12.7</b>	<b>10.4</b>	<b>15.8</b>
Sulphate	mg/L	--	500**	46	28.8	11.7	9.7	12.4	64	19.6	20	44.3	12	6.6	16	9
Colour, Apparent	C.U.	--	5**	53	70	58.4	35.2	161	15	36.3	51	46.9	29	30.5	45	33.7
Conductivity	umhos/cm	--	--	1870	1740	1200	569	680	765	752	656	1010	797	524	749	634
Hardness (as CaCO3)	mg/L	--	80-100**	620	525	339	292	283	350	331	320	452	390	301	340	360
Turbidity	NTU	--	5**	8.6	7.6	8.02	8.06	7.98	4.6	7.99	8.5	7.89	8.9	8.04	3.0	7.97
pH	--	--	6.5-8.5**	7.59	16.2	12.3	8.8	26	8.01	10.6	7.96	7	7.87	9.1	8.01	8.5
<i>Metals</i>																
Aluminum (Al)	mg/L	--	0.1**	<0.01	<0.010	<0.010	<0.010	<0.010	<0.01	<0.010	0.02	<0.010	<0.01	<0.010	<0.01	<0.010
Antimony (Sb)	mg/L	0.006	0.006*	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050
Arsenic (As)	mg/L	0.025	0.025*	<0.001	<0.0010	0.0012	<0.0010	<0.0010	0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010
Barium (Ba)	mg/L	1	1	0.17	0.137	0.058	0.02	0.019	0.10	0.064	0.02	0.038	0.03	0.011	0.06	0.05
Beryllium (Be)	mg/L	0.004	--	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010
Bismuth (Bi)	mg/L	--	--	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010
Boron (B)	mg/L	5	5*	0.17	0.204	<0.050	<0.050	<0.050	0.06	<0.050	<0.05	<0.050	<0.05	<0.050	0.06	<0.050
Cadmium (Cd)	mg/L	0.005	0.005	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010
Calcium (Ca)	mg/L	--	--	164	149	105	77.3	75.2	68.1	79.5	80.4	123	62.1	77.1	72.1	93.4
Chromium (Cr)	mg/L	0.05	0.05	<0.001	0.0064	0.0083	0.003	0.0033	<0.001	0.0021	<0.001	0.006	<0.001	0.0024	<0.001	0.0023
Cobalt (Co)	mg/L	0.1	--	0.0008	<0.00050	<0.00050	<0.00050	<0.00050	<0.0005	<0.00050	<0.0005	<0.00050	<0.0005	<0.00050	<0.0005	<0.00050
Copper (Cu)	mg/L	0.023	--	0.012	0.01	<0.0010	<0.0010	0.0013	<0.001	0.001	0.001	0.0019	0.001	<0.0010	0.001	0.0013
Iron (Fe)	mg/L	--	--	<0.05	<0.050	<0.050	<0.050	<0.050	<0.05	<0.050	<0.05	<0.050	<0.05	<0.050	<0.05	<0.050
Lead (Pb)	mg/L	0.01	0.01	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010
Magnesium (Mg)	mg/L	--	--	50.3	37.1	18.6	24.1	23	43.8	32.2	27.8	35.3	55.9	26.4	38.3	30.8
Manganese (Mn)	mg/L	--	--	0.016	0.0191	0.213	<0.0010	0.0031	<0.001	<0.0010	0.120	0.0029	0.062	<0.0010	0.052	<0.0010
Molybdenum (Mo)	mg/L	7.3	--	<0.001	<0.0010	0.0018	<0.0010	<0.0010	0.043	0.0098	0.004	<0.0010	0.016	<0.0010	0.017	0.0014
Nickel (Ni)	mg/L	0.1	--	0.011	0.0052	<0.0020	<0.0020	<0.0020	0.004	<0.0020	0.003	<0.0020	0.002	<0.0020	0.003	<0.0020
Phosphorous (P)	mg/L	--	--	<0.05	<0.050	<0.050	<0.050	0.144	<0.05	<0.050	<0.05	<0.050	<0.05	<0.050	<0.05	<0.050
Potassium (K)	mg/L	--	--	120	126	2.2	<1.0	2.2	4	2.6	<1	1	4	<1.0	3	1.3
Selenium (Se)	mg/L	0.01	--	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050
Silicon (Si)	mg/L	--	--	6.9	5.9	2.3	3.6	3	6.8	4.1	5.1	5.2	5.5	2.4	7.2	4.1
Silver (Ag)	mg/L	0.0012	--	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010
Sodium (Na)	mg/L	200	--	77.0	57.9	158	15.2	28.1	12.1	11.5	6.3	44.6	8.5	1.87	14.2	6.23
Strontium (Sr)	mg/L	--	--	0.332	0.276	0.202	0.117	0.1	0.163	0.13	0.165	0.201	0.170	0.0714	0.360	0.236
Thallium (Tl)	mg/L	0.002	--	<0.0003	<0.00030	<0.00030	<0.00030	<0.00030	<0.0003	<0.00030	<0.0003	<0.00030	<0.0003	<0.00030	<0.0003	<0.00030
Tin (Sn)	mg/L	--	--	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010
Titanium (Ti)	mg/L	--	--	<0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.002	<0.0020	<0.002	<0.0020	<0.002	<0.0020	<0.002	<0.0020
Tungsten (W)	mg/L	--	--	<0.01	<0.010	<0.010	<0.010	<0.010	<0.01	<0.010	<0.01	<0.010	<0.01	<0.010	<0.01	<0.010
Uranium (U)	mg/L	--	0.02	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050
Vanadium (V)	mg/L	0.2	--	0.005	0.0082	0.0036	0.0039	0.0037	0.002	0.0037	0.002	0.0043	0.002	0.0033	0.003	0.0026
Zinc (Zn)	mg/L	1.1	--	0.025	<0.0030	0.0044	<0.0030	<0.0030	0.012	<0.0030	0.054	0.0031	<0.003	<0.0030	0.004	<0.0030
Zirconium (Zr)	mg/L	--	--	<0.004	<0.0040	<0.0040	<0.0040	<0.0040	<0.004	<0.0040	<0.004	<0.0040	<0.004	<0.0040	<0.004	<0.0040
Phosphate-P	mg/L	--	--	0.004	NA	NA	NA	NA	0.003	NA	0.003	NA	0.004	NA	0.004	NA
Total Dissolved Solids	mg/L	--	--	1480	NA	NA	NA	NA	460	NA	390	NA	460	NA	420	NA

(1) Table 2 Standards for use (agricultural) in a potable groundwater condition from "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act," dated March 9, 2004.  
 ODWS Values - No \*\*\* - Value is Maximum Acceptable Concentration  
 ODWS Values - One \*\*\*\* - Value is Interim Maximum Acceptable Concentration  
 ODWS Values - Two \*\*\*\*\* - Value is Objective or Guideline  
 <0.01 - Parameter not detected at associated detection limit.  
 NA - Parameter not analyzed.  
 -- No numerical Table 2 Standard for parameter.

**275** Parameter exceeds Table 2 Standard or ODWS.

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 PROPOSED HUNSBERGER PIT  
 WINTERBOURNE, ONTARIO

Parameter	Units	MOE Table 2 Standard <sup>(1)</sup>	GROUNDWATER								SEEPS								
			MW5-08		MW6-08		MW7-08		MW8-08		Hunsberger Supply Well	Hunsberger 'Farm' Well	107 Golf Course Road	MP-1	MP-2	MP-4	MP-5		
			Aug 12/08	Apr 22/10	Aug 12/08	Apr 22/10	Aug 12/08	Apr 22/10	Aug 12/08	Apr 22/10	Feb 5/10	Feb 17/10	Jul 9/10	Apr 22/10	Apr 22/10	Apr 22/10	Apr 22/10		
<i>Total Petroleum Hydrocarbons</i>																			
F1 (C6 - C10)	µg/L	1000	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NA	NA	<100	NA	<100	<100	NA
F2 (C>10 - C16)	µg/L		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NA	NA	<100	NA	<100	<100	NA
F3 (C>16 - C34)	µg/L	1000	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	NA	NA	<250	NA	<250	260	NA
F4 (C>34 - C50)	µg/L		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	NA	NA	<250	NA	270	310	NA
<i>General Chemistry</i>																			
Alkalinity, Total (as CaCO3)	mg/L	--	252	272	443	403	226	180	243	320	344	159	199	288	262	220	379		
Ammonia (as N)	mg/L	--	0.22	0.087	0.14	0.121	0.13	<0.050	0.11	0.072	2.5	0.146	0.161	0.089	0.06	0.238	NA		
Chloride	mg/L	250	17	5	30	13.5	19	11.7	280	848	23.4	72.8	<10	4.7	9	25.7	56.9		
Fluoride	mg/L	--	0.1	<0.10	0.1	<0.10	0.1	<0.10	0.1	<0.50	<0.1	0.19	1.15	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite - N	mg/L	1	0.2	<0.10	<0.1	<0.10	0.1	<0.10	<0.1	<0.50	0.12	<0.1	<0.5	<0.10	<0.10	<0.10	<0.10	0.3	
Nitrate - N	mg/L	10	11.3	9.22	8.0	6.05	18.3	5.64	10.3	9.6	28.8	<0.1	<0.5	13.4	14.8	9.71	2.5		
Sulphate	mg/L	--	20	17.1	27	16.9	15	8	17	25.8	17.6	56.1	1610	7.8	10.4	27.4	19.9		
Colour, Apparent	C.U.	--	38	36.9	24	64	40	72.1	57	61.2	1.4	35.1	59.7	NA	52.5	297	NA		
Conductivity	umhos/cm	--	599	585	1090	829	619	424	1370	3030	887	637	2160	630	632	595	796		
Hardness (as CaCO3)	mg/L	--	300	309	400	336	280	216	350	707	457	258	1340	NA	344	314	NA		
Turbidity	NTU	--	3.9	7.98	6.9	7.9	16.4	8.11	6.0	7.8	<0.1	6.7	13.9	8.04	7.99	7.68	8.06		
pH		--	8.04	8.1	7.56	14.2	7.94	9.8	7.99	8.7	7.34	8.3	7.77	13.6	7.6	78	38		
<i>Metals</i>																			
Aluminum (Al)	mg/L	--	0.06	<0.010	<0.01	<0.010	<0.01	<0.010	<0.01	<0.010	NA	NA	<0.010	<0.010	<0.010	0.012	NA		
Antimony (Sb)	mg/L	0.006	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA		
Arsenic (As)	mg/L	0.025	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	NA	NA	<0.0010	<0.0010	<0.0010	<0.0010	NA		
Barium (Ba)	mg/L	1	0.02	0.034	0.09	0.078	0.02	0.024	0.06	0.15	NA	NA	<0.010	0.039	0.03	0.045	NA		
Beryllium (Be)	mg/L	0.004	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	NA	NA	<0.0010	<0.0010	<0.0010	<0.0010	NA		
Bismuth (Bi)	mg/L	--	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	NA	NA	<0.0010	<0.0010	<0.0010	<0.0010	NA		
Boron (B)	mg/L	5	<0.05	<0.050	0.09	<0.050	<0.05	<0.050	<0.05	<0.050	NA	NA	0.222	<0.050	<0.050	<0.050	NA		
Cadmium (Cd)	mg/L	0.005	<0.0001	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010	NA	NA	<0.00010	<0.00010	<0.00010	<0.00010	NA		
Calcium (Ca)	mg/L	--	69.3	81.9	101	90.7	73.8	59.6	106	216	NA	39.9	400	110	94	78.9	NA		
Chromium (Cr)	mg/L	0.05	<0.001	0.0027	<0.001	0.0052	<0.001	0.0031	<0.001	0.02	NA	NA	<0.0010	0.0026	0.0032	0.0028	NA		
Cobalt (Co)	mg/L	0.1	0.0005	<0.00050	<0.0005	<0.00050	<0.0005	<0.00050	0.0011	<0.00050	NA	NA	<0.00050	<0.00050	<0.00050	<0.00050	NA		
Copper (Cu)	mg/L	0.023	<0.001	0.011	0.005	0.0036	0.001	<0.0010	0.001	0.016	NA	NA	0.0186	0.0036	0.0014	0.0031	NA		
Iron (Fe)	mg/L	--	<0.05	<0.050	<0.05	<0.050	<0.05	<0.050	<0.05	<0.050	NA	NA	1.38	<0.050	<0.050	<0.050	NA		
Lead (Pb)	mg/L	0.01	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	NA	NA	<0.0010	<0.0010	<0.0010	<0.0010	NA		
Magnesium (Mg)	mg/L	--	31.3	25.3	36.2	26.7	23.6	16.3	21.1	41.1	NA	38.5	83.2	34.6	26.4	28.3	NA		
Manganese (Mn)	mg/L	--	0.096	0.0296	0.062	<0.0010	0.004	<0.0010	0.307	0.0029	NA	NA	0.0191	0.0049	<0.0010	0.0027	NA		
Molybdenum (Mo)	mg/L	7.3	0.010	0.0016	0.007	0.0017	0.003	<0.0010	0.004	<0.0010	NA	NA	<0.0010	0.0023	0.0017	<0.0010	NA		
Nickel (Ni)	mg/L	0.1	0.003	<0.0020	0.004	<0.0020	0.002	<0.0020	0.005	<0.0020	NA	NA	<0.0020	<0.0020	<0.0020	<0.0020	NA		
Phosphorous (P)	mg/L	--	<0.05	<0.050	<0.05	<0.050	<0.05	<0.050	<0.05	<0.050	NA	NA	<0.050	<0.050	<0.050	<0.050	NA		
Potassium (K)	mg/L	--	2	1.1	100	67	2	1.3	2	1.7	NA	NA	2.2	1.8	1.1	5.4	NA		
Selenium (Se)	mg/L	0.01	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA		
Silicon (Si)	mg/L	--	6.0	5.2	9.4	5	5.2	2.9	4.0	3.7	NA	NA	6.1	4.1	4.3	1.2	NA		
Silver (Ag)	mg/L	0.0012	<0.0001	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010	<0.0001	<0.00010	NA	NA	<0.00010	<0.00010	<0.00010	<0.00010	NA		
Sodium (Na)	mg/L	200	6.0	5.09	9.6	7.47	8.5	6.44	146	275	NA	NA	13.1	6.08	4.13	12.5	NA		
Strontium (Sr)	mg/L	--	0.198	0.181	0.166	0.102	0.171	0.164	0.319	0.532	NA	NA	11.8	0.239	0.126	0.152	NA		
Thallium (Tl)	mg/L	0.002	<0.0003	<0.00030	<0.0003	<0.00030	<0.0003	<0.00030	<0.0003	<0.00030	NA	NA	<0.00030	<0.00030	<0.00030	<0.00030	NA		
Tin (Sn)	mg/L	--	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	<0.001	<0.0010	NA	NA	<0.0010	<0.0010	<0.0010	<0.0010	NA		
Titanium (Ti)	mg/L	--	<0.002	<0.0020	<0.002	<0.0020	<0.002	<0.0020	<0.002	<0.0020	NA	NA	0.0192	<0.0020	<0.0020	<0.0020	NA		
Tungsten (W)	mg/L	--	<0.01	<0.010	<0.01	<0.010	<0.01	<0.010	<0.01	<0.010	NA	NA	<0.010	<0.010	<0.010	<0.010	NA		
Uranium (U)	mg/L	--	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	<0.005	<0.0050	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA		
Vanadium (V)	mg/L	0.2	0.003	0.0033	0.007	0.0055	0.003	0.0029	0.002	0.0046	NA	NA	<0.0010	0.0039	0.0027	0.0038	NA		
Zinc (Zn)	mg/L	1.1	0.131	<0.0030	<0.003	<0.0030	<0.003	<0.0030	<0.003	<0.0030	NA	NA	0.026	<0.0030	<0.0030	<0.0030	NA		
Zirconium (Zr)	mg/L	--	<0.004	<0.0040	<0.004	<0.0040	<0.004	<0.0040	<0.004	<0.0040	NA	NA	<0.0040	<0.0040	<0.0040	<0.0040	NA		
Phosphate-P	mg/L	--	0.004	NA	0.011	NA	0.005	NA	0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	mg/L	--	340	NA	660	NA	350	NA	760	NA	NA	NA	2120	NA	NA	NA	NA	NA	NA

(1) Table 2 Standards for use (agricultural) in a potable groundwater condition from "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act," dated March 9, 2004.  
 ODWS Values - No "M" - Value is Maximum Acceptable Concentration  
 ODWS Values - One "M" - Value is Interim Maximum Acceptable Concentration  
 ODWS Values - Two "M" - Value is Objective or Guideline  
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 NA - Parameter not analyzed.  
 -- No numerical Table 2 Standard for parameter.

275 Parameter exceeds Table 2 Standard