



February 8, 2013

The Corporation of the Municipality of Huron East 72 Main St. S P.O. Box 610 Seaforth, ON N0K 1W0

Attention: Brad Knight, Administrator, Clerk-Treasurer

RE: Brucefield Well Supply System

2012 Annual Report

Dear Brad,

Please find attached the 2012 Annual Operations Report for the Brucefield Water System, in accordance with Section 11(1) of O. Reg. 170/03. This report covers the period from January 1 to December 31 and meets the requirement of being prepared by February 28 of this year.

Please ensure that a copy of this report is given, without charge, to every person who requests a copy. In addition, please make certain that effective steps are taken to advise residents that copies of the report are available, and of how a copy can be obtained.

As per Schedule 22 of O. Reg. 170/03, please ensure that at least a copy of the Summary Report is given to the members of municipal council no later than March 31, 2013.

Finally, please ensure that a letter is sent to OMI Canada Inc verifying that this report has been received and accepted by Council.

If you have any questions regarding the report, we would be pleased to address them and you should contact the undersigned accordingly.

Sincerely,

OMI Canada Inc.

Joe Arnold Project Manager Huron East Project 519 490 5586

cc. B. Mills, Municipality of Huron East;





2012 ANNUAL REPORT FOR WATER SYSTEMS

Part 1 – ANNUAL REPORT (as required by O. Reg. 170/03, Section 11)					
Drinking-Water System Number:		220007604			
Drinking-Water System Name:		Brucefield Water System			
Drinking-Water System Owner:		The Corporation of	of the Municipality of Huron East		
Drinking-Water System Category	:	Small Municipal F			
Period being reported:		January 1-Decem	ber 31, 2012		
Complete if your Category is Large Residential or Small Municipal Re		Complete for all	other Categories		
Does your Drinking-Water System serve more than 10,000 people?	☐ Yes ⊠ No	Number of Designation	ed Facilities		
Is your annual report available to the public at no charge on a web site on the Internet?	∑ Yes ☐ No	Did you provide a cannual report to all Facilities you serve	Designated Yes No		
Location where Summary Report requi Reg. 170/03 Schedule 22 will be available		Number of Designate served:	ed Facilities		
Town Office 72 Main St. S. Seaforth, ON		Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?			
List all Drinking-Water Systems (if	any), which rece				
Drinking Water System Name			System Number		
N/A		N/A			
Did you provide a copy of yo connected to you and to w	hom you pro				
Indicate how you notified system	users that your a	annual report is av	vailable, and is free of charge.		
Public access/notice via the web	Public access/notice via Government Office		Public access/notice via a newspaper		
Public access/notice via Public Request	Public access/notice via a Public Library		Public access/notice via a Public Library		
Describe your Drinking Water Sys	stem				

Water Distribution System Class 2.

Well located at the intersection of Highway 4 and County Road 3 is 69.3 m deep and a 200 mm diameter steel casing and a submersible pump rated for 318 L/minute. The pump house contains four 455 L bladder type pressure tanks. Primary disinfection is supplied by ultraviolet reactors, secondary disinfection by sodium hypochlorite injection.

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12% Sodium hypochlorite solution

Please provide a brief description and a breakdown of monetary expenses incurred

None during this reporting period

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-					
Water Act or secti	ion 16-4 of Schedu	le 16 of O.Reg	,.170/03 and	I reported to Spills	s Action Centre
Incident Date	Parameter	Result	Units	Corrective Action	Corrective Action Date
None during this					
reporting period					

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period						
	Number of Samples	Range of E.Coli Results (min #) - (max #)	Range of Total Coliform Results (min #) - (max #)	Number of HPC Samples	Range of HPC Results (min #) - (max #)	
Raw	12	0	0	n/a	n/a	
Treated	n/a	n/a	n/a	n/a	n/a	
Distribution	52	0	0	52	<10-2000	

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report

	Number of Grab Samples	Range of Results (min #) – (max #)	Units
Turbidity	12	0.18 - 0.54	NTU
Chlorine	8760	.25 – 3.63	mg/L
Fluoride (If the DWS provides fluoridation)	n/a		

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument					
None during this reporting period					

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Summary of Inorgani	c parameters tested during t	his reporting per	iod or the most rec	ent sample	
results					
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance	
Antimony	Apr 26/11	.02	Ug/L	No	
Arsenic	Apr 26/11	0.4	Ug/L	No	
Barium	Apr 26/11	236	Ug/L	No	
Boron	Apr 26/11	14	Ug/L	No	
Cadmium	Apr 26/11	0.188	Ug/L	No	
Chromium	Apr 26/11	1.0	Ug/L	No	
Lead-sampling conducted	by the Municipality of Huron East; s	see summary below			
Mercury	Apr 26/11	0.02	Ug/L	No	
Selenium	Apr 26/11	1.0	Ug/L	No	
Sodium	Oct 20/08	11.0	mg/L	No	
Uranium	Apr 26/11	1.81	mg/L	No	
Fluoride	Oct 6/08	1.1	mg/L	No	
Nitrite	Jan 23/12	0.005	mg/L	No	
Nitrate	Jan 23/12	0.472	mg/L	No	
Nitrite	Apr 10/12	.005	mg/L	No	
Nitrate	Apr 10/12	.483	mg/L	No	
Nitrite	July 9/12	0.005	mg/L	No	
Nitrate	July 9/12	0.483	mg/L	No	
Nitrite	Oct 9/12	0.005	mg/L	No	
Nitrate	Oct 91/12	0.486	mg/L	No	

Summary of Lead Results*					
Sampling Period	Range of Results (µg/L)	Non-residential	Distribution	Adverse Incidents?	
Dec-11-11-Apr-15-12	0.10	N/A	1	No	
Jun-15-12-Oct-15-12	0.27	N/A	1	No	

Summary of Organic parameters tested during this reporting period or the most recent sample results Result Value Unit of Measure Parameter Sample Date Exceedance Apr 26/11 Alachlor .02 Ug/L No Apr 26/11 Ug/L Aldicarb .01 No Aldrin + Dieldrin Apr 26/11 Ug/L No 0.01 Ug/L Atrazine + N-dealkylated Apr 26/11 0.01 No metobolites Apr 26/11 Ug/L 0.02 Azinphos-methyl No Bendiocarb Apr 26/11 Ug/L No 0.01 Benzene Apr 26/11 Ug/L No 0.32 Benzo(a)pyrene Apr 26/11 Ug/L No .004 Apr 26/11 Ug/L Bromoxynil No 0.33 Carbaryl Apr 26/11 Ug/L No 0.01 Apr 26/11 No Carbofuran Ug/L 0.01 Carbon Tetrachloride Apr 26/11 Ug/L No 0.16 Apr 26/11 Ug/L No Chlordane (Total) 0.01 Apr 26/11 Chlorpyrifos Ug/L No 0.02 Cyanazine Apr 26/11 0.03 Ug/L No

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results				
Diazinon	Apr 26/11	0.02	Ug/L	No
Dicamba	Apr 26/11	0.20	Ug/L	No
1,2-Dichlorobenzene	Apr 26/11	0.41	Ug/L	No
1,4-Dichlorobenzene	Apr 26/11	0.36	Ug/L	No
Dichlorodiphenyltrichloroethane	Apr 26/11	0.01	Ug/L	No
(DDT) + metabolites		0.01	Č	
1,2-Dichloroethane	Apr 26/11	0.35	Ug/L	No
1,1-Dichloroethylene	Apr 26/11	0.33	Ug/L	No
(vinylidene chloride)			_	
Dichloromethane	Apr 26/11	0.35	Ug/L	No
2-4 Dichlorophenol	Apr 26/11	0.15	Ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Apr 26/11	0.19	Ug/L	No
Diclofop-methyl	Apr 26/11	0.40	Ug/L	No
Dimethoate	Apr 26/11	0.03	Ug/L	No
Dinoseb	Apr 26/11	0.36	Ug/L	No
Diquat	Apr 26/11	1	Ug/L	No
Diuron	Apr 26/11	0.03	Ug/L	No
Glyphosate	Apr 26/11	6	Ug/L	No
Heptachlor + Heptachlor Epoxide	Apr 26/11	0.01	Ug/L	No
Lindane (Total)	Apr 26/11	0.01	Ug/L	No
Malathion	Apr 26/11	0.02	Ug/L	No
Methoxychlor	Apr 26/11	0.01	Ug/L	No
Metolachlor	Apr 26/11	0.01	Ug/L	No
Metribuzin	Apr 26/11	0.02	Ug/L	No
Monochlorobenzene	Apr 26/11	0.03	Ug/L	No
Paraquat	Apr 26/11	1	Ug/L	No
Parathion	Apr 26/11	0.02	Ug/L	No
Pentachlorophenol	Apr 26/11	0.15	Ug/L	No
Phorate	Apr 26/11	0.01	Ug/L	No
Picloram	Apr 26/11	0.25	Ug/L	No
Polychlorinated Biphenyls(PCB)	Apr 26/11	0.04	Ug/L	No
Prometryne	Apr 26/11	0.03	Ug/L	No
Simazine	Apr 26/11	0.01	Ug/L	No
THM (NOTE: show latest annual average)	Q1-Q4 2012	2.0	Ug/L	No
Temephos	Apr 26/11	0.01	Ug/L	No
Terbufos	Apr 26/11	0.01	Ug/L	No
Tetrachloroethylene	Apr 26/11	0.35	Ug/L	No
2,3,4,6-Tetrachlorophenol	Apr 26/11	0.14	Ug/L	No
Triallate	Apr 26/11	0.01	Ug/L	No
Trichloroethylene	Apr 26/11	0.43	Ug/L	No
2,4,6-Trichlorophenol	Apr 26/11	0.25	Ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Apr 26/11	0.22	Ug/L	No
List any Inorganic or Organic of Ontario Drinking Water Qu		ceeded half the		ed in Schedule 2
Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Fluoride	Oct 6/08	1.1	mg/L	1.5

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Part 2 – SUMMARY REPORT (as required by O. Reg. 170/03, Schedule 22)

Non – Compliance with Legislations, Regulations, Approvals & Orders

During this period, the Facility was operated in full compliance with the Act, the regulations and the Facility's approval, save and except for the following:

Requirement	Duration of Failure	Measures to Correct the Failure
No Non-Compliance in 2012		

System Capability Assessment					
Monthly Raw Water Taking (m³/d):					
Month	Average Flow	Maximum Flow			
January	41	61			
February	40	50			
March	40	48			
April	42	54			
May	71	90			
June	60	98			
July	68	103			
August	68	87			
September	49	90			
October	46	60			
November	45	55			
December	43	51			
AVERAGE	51				
MAXIMUM	54	103			
SYSTEM CAPACITY	458	458			
% CAPACITY	11	22			

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