



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

**OLIPHANT**  
**DRINKING WATER SYSTEM**

Small Municipal Residential

**SECTION 11**  
**ANNUAL REPORT**

For the period of  
**JANUARY 1, 2016 TO DECEMBER 31, 2016**

Prepared by the Ontario Clean Water Agency  
For The Town of South Bruce Peninsula

<b>Drinking Water System Number:</b>	220007695
<b>Drinking Water System Name:</b>	Oliphant
<b>Drinking Water System Owner:</b>	Town of South Bruce Peninsula
<b>Drinking Water System Category:</b>	Small Municipal Residential
<b>Reporting Period:</b>	January 1, 2016 to December 31, 2016

**Does the Drinking Water System serve more than 10,000 people?**

No.

**Is your annual report available to the public at no charge on a web site on the Internet?**

Yes.

**Location where the Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection:**

Town of South Bruce Peninsula  
315 George Street  
Warton, Ontario  
N0H 2T0  
519-534-1400

**Drinking-Water Systems (if any), which receive all of their drinking water from your system:**

n/a.

**Did you provide a copy of the annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?**

n/a.

**How system users are notified that the annual report is available, and is free of charge:**

- |                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Public access/notice via the web             |
| <input checked="" type="checkbox"/> | Public access/notice via Government Office   |
| <input type="checkbox"/>            | Public access/notice via a newspaper         |
| <input type="checkbox"/>            | Public access/notice via Public Request      |
| <input type="checkbox"/>            | Public access/notice via a Public Library    |
| <input type="checkbox"/>            | Public access/notice via other method: _____ |

**Description of Drinking Water System:**

The Oliphant Drinking Water System currently transports all of its drinking water from the Warton Drinking Water System. The equipment that is currently being used consists of:

- 2 Clearwells
- 2 Highlift pumps
- Secondary Disinfection by Sodium Hypochlorite
- PLC/SCADA system
- Standby power diesel generator

*NOTE: Starting January 20<sup>th</sup>, 2011, the Oliphant Water Treatment Plant began receiving its treated water from the Warton Water Treatment Plant.*

**List of water treatment chemicals used during the reporting period:**

- Sodium hypochlorite 12%

**Significant expenses were incurred to:**

- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| <input type="checkbox"/>            | Install required equipment            |
| <input type="checkbox"/>            | Repair required equipment             |
| <input type="checkbox"/>            | Replace required equipment            |
| <input checked="" type="checkbox"/> | No significant expenses were incurred |

**Description of expenses:**

n/a.

**Details on the notices submitted in accordance with subsection 18 (1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre:**

Date of Incident	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
n/a	n/a	n/a	n/a	n/a	n/a

**Table 1. Microbiological testing done under Schedule 10, 11 or 12 of Regulation 170/03 during this reporting Period**

Location	Number of Samples	Range of E.coli Results		Range of Total Coliforms Results		Number of HPC Samples	Range of HPC Samples	
		Minimum	Maximum	Minimum	Maximum		Minimum	Maximum
Distribution (DW)	52	0	0	0	0	52	0	3

**Table 2. Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.**

	Number of Grab Samples	Range of Results	
		Minimum	Maximum
Turbidity, On-Line (NTU) – Filter	8760	n/a*	n/a*
Free Chlorine Residual, On-Line (mg/L) - TW	8760	n/a*	n/a*
Free Chlorine Residual, In-House (mg/L) - DW	104	0.53	1.43

NOTE: Record the unit of measure if it is not milligrams per litre.

NOTE: For continuous monitors use 8760 as the number of samples

\*NOTE: These parameters are currently not applicable as the drinking water from Oliphant is transported from Wiarton.

**Table 3. Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.**

Date of Order	Parameter	Date Sampled	Result	Allowable Limit
March 19, 2015 094-105 (Issue 3)	Total Suspended Solids (Filter backwash - composite)	Quarterly	n/a*	30 mg/L

\*NOTE: Currently this parameters is not being tested, the filter is not in use. Oliphant has its water transported from Wiarton.

**Table 4. Summary of Inorganic parameters tested during this reporting period or most recent sample results**

Parameter	Sample Date (mm/dd/yyyy)	Sample Result	Exceedance
Antimony: Sb (ug/L) - TW	01/10/11	< 0.02	No
Arsenic: As (ug/L) - TW	01/10/11	0.3	No
Barium: Ba (ug/L) - TW	1/10/2011	595	Yes
Boron: B (ug/L) - TW	1/10/2011	33	No
Cadmium: Cd (ug/L) - TW	1/10/2011	< 0.003	No
Chromium: Cr (ug/L) - TW	1/10/2011	< 0.5	No
Mercury: Hg (ug/L) - TW	1/10/2011	< 0.02	No
Selenium: Se (ug/L) - TW	1/10/2011	< 1.0	No
Uranium: U (ug/L) - TW	1/10/2011	0.008	No
Fluoride (mg/L) - TW	01/10/11	0.24	No
Nitrite (mg/L) - TW	01/07/13	< 0.005	No
Nitrite (mg/L) - TW	04/02/12	< 0.005	No
Nitrite (mg/L) - TW	07/09/12	< 0.005	No
Nitrite (mg/L) - TW	10/16/12	< 0.005	No
Nitrate (mg/L) - TW	01/07/13	0.258	No
Nitrate (mg/L) - TW	04/02/12	0.281	No
Nitrate (mg/L) - TW	07/09/12	0.250	No
Nitrate (mg/L) - TW	10/16/12	0.233	No
Sodium: Na (mg/L) - TW	01/10/11	0.13	No

*NOTE: There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.*

*NOTE: Schedule 23, Sodium and Fluoride samples are to be taken every 60 months. The most current sampling session was in January 2011 for Schedule 23, the next sampling session is scheduled for when the plant restarts. The most current sampling session for Sodium was in January 2011, the next sampling session is scheduled for when the plant restarts. The most current sampling session for Fluoride was in January 2011, the next sampling session is scheduled for when the plant restarts.*

**Table 5. Summary of lead testing under Schedule 15.1 during this reporting period.**

Location Type	Number of Samples	Range of Lead Results		Number of Exceedances
		Minimum	Maximum	
Plumbing	-	-	-	-
Distribution (ug/L)	-	-	-	-

*NOTE: This system now qualifies for the plumbing exemption as per Ontario Regulation 170/03 Schedule 15.1-5 (9) (10). Two (2) distribution lead samples are only taken every 36 months during the sampling periods (i.e. 1 distribution sample per period). The most current set of samples was taken in 2015; the next set of samples will be taken in 2018.*

**Table 6. Summary of Organic parameters sampled during this reporting period or most recent sample results.**

Parameter	Sample Date	Result Value	Exceedance
Alachlor (ug/L) - TW	1/10/2011	< 0.02	No
Aldicarb (ug/L) - TW	1/10/2011	< 0.01	No
Aldrin+Dieldrin (ug/L) - TW	1/10/2011	< 0.01	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	1/10/2011	< 0.01	No
Azinphos-methyl (ug/L) - TW	1/10/2011	< 0.02	No
Bendiocarb (ug/L) - TW	1/10/2011	< 0.01	No
Benzene (ug/L) - TW	1/10/2011	< 0.32	No
Benzo(a)pyrene (ug/L) - TW	1/10/2011	< 0.004	No
Bromoxynil (ug/L) - TW	1/10/2011	< 0.33	No
Carbaryl (ug/L) - TW	1/10/2011	< 0.01	No
Carbofuran (ug/L) - TW	1/10/2011	< 0.01	No
Carbon Tetrachloride (ug/L) - TW	1/10/2011	< 0.16	No
Chlordane: Total (ug/L) - TW	1/10/2011	< 0.01	No
Chlorpyrifos (ug/L) - TW	1/10/2011	< 0.02	No
Cyanazine (ug/L) - TW	1/10/2011	< 0.03	No
Diazinon (ug/L) - TW	1/10/2011	< 0.02	No
Dicamba (ug/L) - TW	1/10/2011	< 0.2	No
1,2-Dichlorobenzene (ug/L) - TW	1/10/2011	< 0.41	No
1,4-Dichlorobenzene (ug/L) - TW	1/10/2011	< 0.36	No
DDT + metabolites (ug/L) - TW	1/10/2011	< 0.01	No
1,2-Dichloroethane (ug/L) - TW	1/10/2011	< 0.35	No
1,1-Dichloroethylene (ug/L) - TW	1/10/2011	< 0.33	No
Dichloromethane (Methylene Chloride) (ug/L) - TW	1/10/2011	< 0.35	No
2,4-Dichlorophenol (ug/L) - TW	1/10/2011	< 0.15	No
Dimethoate (ug/L) - TW	1/10/2011	< 0.03	No
Dinoseb (ug/L) - TW	1/10/2011	< 0.36	No
Diquat (ug/L) - TW	1/10/2011	< 1.0	No
Diuron (ug/L) - TW	1/10/2011	< 0.03	No
Glyphosate (ug/L) - TW	1/10/2011	< 6.0	No
Heptachlor+hepachlor epoxide (ug/L) - TW	1/10/2011	< 0.01	No
Lindane (ug/L) - TW	1/10/2011	< 0.01	No
Malathion (ug/L) - TW	1/10/2011	< 0.02	No
Methoxychlor (ug/L) - TW	1/10/2011	< 0.01	No
Metolachlor (ug/L) - TW	1/10/2011	< 0.01	No
Metribuzin (ug/L) - TW	1/10/2011	< 0.02	No
Monochlorobenzene (Chlorobenzene) (ug/L) - TW	1/10/2011	< 0.3	No
Paraquat (ug/L) - TW	1/10/2011	< 1.0	No
Parathion (ug/L) - TW	1/10/2011	< 0.02	No
PCB (ug/L) - TW	1/10/2011	< 0.04	No
Pentachlorophenol (ug/L) - TW	1/10/2011	< 0.15	No
Phorate (ug/L) - TW	1/10/2011	< 0.01	No
Picloram (ug/L) - TW	1/10/2011	< 0.25	No
Prometryne (ug/L) - TW	1/10/2011	< 0.03	No
Simazine (ug/L) - TW	1/10/2011	< 0.01	No
Temephos (ug/L) - TW	1/10/2011	< 0.01	No
Terbufos (ug/L) - TW	1/10/2011	< 0.01	No
Tetrachloroethylene (ug/L) - TW	1/10/2011	< 0.35	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	1/10/2011	< 0.14	No
Triallate (ug/L) - TW	1/10/2011	< 0.01	No
Trichloroethylene (ug/L) - TW	1/10/2011	< 0.43	No
2,4,6-Trichlorophenol (ug/L) - TW	1/10/2011	1.3	No
Trifluralin (ug/L) - TW	1/10/2011	< 0.02	No
Vinyl Chloride (ug/L) - TW	1/10/2011	< 0.17	No
Trihalomethane: Total (ug/L) Annual Average - DW	2016 (Quarterly)	66.0	No

*NOTE: Schedule 24 samples are to be taken every 60 months. The most current sampling session was in January 2011 for Schedule 24, the next sampling session is scheduled for when the plant restarts.*

**Table 7. List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.**

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
Barium	595	mg/L	2011/01/10
Trihalomethane: Total (ug/L)	52	ug/L	2016/01/11
Trihalomethane: Total (ug/L)	77	ug/L	2016/07/11
Trihalomethane: Total (ug/L)	92	ug/L	2016/10/17

*NOTE: This is required only if DWS category is large municipal residential, small municipal residential, large municipal non-residential, small municipal non-residential, large non municipal non-residential)*