



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220008140
Drinking-Water System Name:	Barwick Well Supply
Drinking-Water System Owner:	Corporation of the Township of Chapple
Drinking-Water System Category:	Small Municipal Residential System
Period being reported:	January 1, 2017 to December 31, 2017

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [X]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <table border="1" style="width: 100%;"> <tr> <td>Chapple Municipal Office Chapple Water Treatment Plant</td> </tr> </table>	Chapple Municipal Office Chapple Water Treatment Plant	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <table border="1" style="width: 100%;"> <tr> <td style="height: 20px;"></td> </tr> </table> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to:</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 100px; height: 20px;"></td> </tr> </table> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>		
Chapple Municipal Office Chapple Water Treatment Plant				

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

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

Drinking Water System Name	Drinking Water System Number

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water? Yes [] No []



Indicate how you notified system users that your annual report is available, 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 other method Newsletter_____

Describe your Drinking-Water System

Ground water treatment plant with softening, coagulation, flocculation, sedimentation, filtration, chlorination and pH adjustment

List all water treatment chemicals used over this reporting period

Lime, Carbon Dioxide gas, and Sodium-Hypochlorite 12%

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment

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

- **DP #1** – Timer replacement in the motor control panel
- **Building** – Roof Repair requirement – All screws on the roof were replaced as well as any damaged foam was replaced around the ridge cap.
- **Well # 5** – Repair was made to the casing – a collar was welded on to existing pipe as well as a new locking well cap was placed on the well with upgraded electrical conduit.
- **Curb Stop Repair** in the village
- **Lime Pump** - Solenoid replaced on the backwash line.

Provide 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

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
Sept 21/16	Sodium	49.6	Mg/l	Resample	Sept 28/16



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 Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	36	36 – Absent	35 – Absent 1 – Present		
Treated					
Distribution	26	Absent	Absent	26	0 to 67

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 #)	Unit of Measure
Turbidity	8760	0.013 – 0.059	NTU
Chlorine	8760	0.44 – 1.08	Mg/l
Fluoride (If the DWS provides fluoridation)			

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

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

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Nov 16/15	<0.60	Ug/l	No
Arsenic	Nov 16/15	<1	Ug/l	No
Barium	Nov 16/15	<10	Ug/l	No
Boron	Nov 16/15	108	Ug/l	No
Cadmium	Nov 16/15	<0.1	Ug/l	No
Chromium	Nov 16/15	<1.0	Ug/l	No
*Lead				
Mercury	Nov 16/15	<0.10	Ug/l	No
Selenium	Nov 16/15	<1.0	Ug/l	No
Sodium	Sept 21/16	49.6	Mg/l	Yes
Uranium	Nov 16/15	<2.0	Ug/l	No
Fluoride	Mar 9/15	0.053	Mg/l	No



Nitrite	Dec 13 /17	<0.010	Mg/l	No
Nitrate	Dec 13 /17	0.097	Mg/l	No

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	12	<1.0 – 3.8	Ug/l	0
Distribution	2	<1.0	Ug/l	0

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Mar 7/16	<0.1	Ug/l	No
Aldicarb – Removed Jan 1 2016				
Aldrin + Dieldrin – Removed Jan 1 2016				
Atrazine + N-dealkylated metabolites	Mar 7/16	<0.20	Ug/l	No
Azinphos-methyl	Mar 7/16	<0.10	Ug/l	No
Bendiocarb – Removed Jan 1 2016				
Benzene	Mar 7/16	<0.50	Ug/l	No
Benzo(a)pyrene	Mar 7/16	<0.010	Ug/l	No
Bromoxynil	Mar 7/16	<0.20	Ug/l	No
Carbaryl	Mar 7/16	<0.20	Ug/l	No
Carbofuran	Mar 7/16	<0.20	Ug/l	No
Carbon Tetrachloride	Mar 7/16	<0.50	Ug/l	No
Chlordane (Total) – Removed Jan 1 2016				
Chlorpyrifos	Mar 7/16	<0.10	Ug/l	No
Cyanazine – Removed Jan 1 2016				
Diazinon	Mar 7/16	<0.10	Ug/l	No
Dicamba	Mar 7/16	<0.20	Ug/l	No
1,2-Dichlorobenzene	Mar 7/16	<0.50	Ug/l	No
1,4-Dichlorobenzene	Mar 7/16	<0.50	Ug/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites – Removed Jan 1 2016				
1,2-Dichloroethane	Mar 7/16	<0.50	Ug/l	No
1,1-Dichloroethylene (vinylidene chloride)	Mar 7/16	<0.50	Ug/l	No
Dichloromethane	Mar 7/16	<5.0	Ug/l	No
2-4 Dichlorophenol	Mar 7/16	<0.30	Ug/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Mar 7/16	<0.20	Ug/l	No
Diclofop-methyl	Mar 7/16	<0.20	Ug/l	No



Dimethoate	Mar 7/16	<0.10	Ug/l	No
Dinoseb – Removed Jan 1 2016				
Diquat	Mar 7/16	<1.0	Ug/l	No
Diuron	Mar 7/16	<1.0	Ug/l	No
Glyphosate	Mar 7/16	<5.0	Ug/l	No
Heptachlor + Heptachlor Epoxide – Removed Jan 1 2016				
Lindane (Total) – Removed Jan 1 2016				
Malathion	Mar 7/16	<0.10	Ug/l	No
Methoxychlor – Removed Jan 1 2016				
Metolachlor	Mar 7/16	<0.10	Ug/l	No
Metribuzin	Mar 7/16	<0.10	Ug/l	No
Monochlorobenzene	Mar 7/16	<0.50	Ug/l	No
Paraquat	Mar 7/16	<1.0	Ug/l	No
Parathion – Removed Jan 1 2016				
Pentachlorophenol	Mar 7/16	<0.50	Ug/l	No
Phorate	Mar 7/16	<0.10	Ug/l	No
Picloram	Mar 7/16	<0.20	Ug/l	No
Polychlorinated Biphenyls(PCB)	Mar 7/16	<0.035	Ug/l	No
Prometryne	Mar 7/16	<0.10	Ug/l	No
Simazine	Mar 7/16	<0.10	Ug/l	No
THM (NOTE: show latest annual average)	2017 Average	86.57	Ug/l	No
HAA (NOTE: latest annual average)	2017 Average	10.2	Ug/l	No
Temephos – Removed Jan 1 2016				
Terbufos	Mar 7/16	<0.20	Ug/l	No
Tetrachloroethylene	Mar 7/16	<0.50	Ug/l	No
2,3,4,6-Tetrachlorophenol	Mar 7/16	<0.50	Ug/l	No
Triallate	Mar 7/16	<0.10	Ug/l	No
Trichloroethylene	Mar 7/16	<0.50	Ug/l	No
2,4,6-Trichlorophenol	Mar 7/16	<0.50	Ug/l	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T) – Removed Jan 1 2016				
Trifluralin	Mar 7/16	<0.10	Ug/l	No
Vinyl Chloride	Mar 7/16	<0.20	Ug/l	No
MCPA – New Jan 1 2016	Mar 7/16	<0.20	Ug/l	No

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

Parameter	Result Value	Unit of Measure	Date of Sample
Sodium	49.6	Mg/l	Sept 21, 2016