

**Part III Form 2
Section 11. ANNUAL REPORT.**

Drinking-Water System Number:	220013553
Drinking-Water System Name:	WaldemarHeights Well Water Supply
Drinking-Water System Owner:	Township of Amaranth
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 01, 2019 to December 31, 2019

<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> <div style="border: 1px solid black; padding: 5px;"> Township of Amaranth 374026 Sixth Line Amaranth, ON L9W 0M6 </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; padding: 2px; display: inline-block;">N/A</div> </p> <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: <div style="border: 1px solid black; padding: 2px; display: inline-block;">N/A</div> </p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No [] – N/A </p>
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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
N/A	

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 [] – N/A

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 circulated to property owners

Describe your Drinking-Water System

The Waldemar Heights Well Water Supply System consists of three wells, a distribution monitoring station and the watermains. The wells are known as well #1, well #2, and well #3.

Water is disinfected using sodium hypochlorite and is distributed to approximately 100 homes in the WaldemarHeights and Achione subdivisions.

The naturally occurring fluoride content of this water is slightly high. The concentration in the water has always been slightly higher than the limit of 1.5 mg/l and the MOE and local health unit are aware of this fact.

The water is tested for microbiological contaminants within the overall system, including the raw water, after treatment, and in the distribution system. The results of this testing are summarized in the following sections of this report.

Detailed analytical test results on dozens of compounds and tables showing daily flows and other calculations are available for review at the Township Office.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite – (12% Solution – NSF Foodgrade)

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

Remote inspection and cleaning of reservoir +/- \$10,000 plus raw valve replacement

Drinking-Water Systems Regulation O. Reg. 170/03

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

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	156	0-0	0-0	0	n.a.
Treated	52	0-0	0-0	52	0 to 5
Distribution	118	0-0	0-0	52	0 to 1

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 #)
Turbidity Raw Grab	36	0.14 to 0.61
Chlorine Treated Continuous	8760	0.65 to 2.18
Chlorine Dist Grab	429	0.71 to 1.83
Fluoride (If the DWS provides fluoridation)	N/A	

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

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

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	Oct 05/18	ND	ug/l	No
Arsenic	Oct 05/18	ND	ug/l	No
Barium	Oct 05/18	28	ug/l	No
Boron	Oct 05/18	86	ug/l	No
Cadmium	Oct 05/18	ND	ug/l	No
Chromium	Oct 05/18	ND	ug/l	No
Lead	Apr 15/19	ND	ug/l	No
Mercury	Oct 05/18	ND	ug/l	No
Selenium	Oct 05/18	ND	ug/l	No
Sodium	Oct 05/18	20	mg/l	No
Uranium	Oct 05/18	ND	ug/l	No
Fluoride	Oct 25/18	1.9	mg/l	Yes
Nitrite	Dec 12/19	ND	mg/l	No
Nitrate	Dec 12/19	ND	mg/l	No

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	Oct 05/18	ND	ug/l	No
Aldicarb	Oct 05/18	ND	ug/l	No
Aldrin + Dieldrin	Oct 05/18	ND	ug/l	No
Atrazine + N-dealkylatedmetabolites	Oct 05/18	ND	ug/l	No
Azinphos-methyl	Oct 05/18	ND	ug/l	No
Bendiocarb	Oct 05/18	ND	ug/l	No
Benzene	Oct 05/18	ND	ug/l	No
Benzo(a)pyrene	Oct 05/18	ND	ug/l	No
Bromoxynil	Oct 05/18	ND	ug/l	No
Carbaryl	Oct 05/18	ND	ug/l	No
Carbofuran	Oct 05/18	ND	ug/l	No
Carbon Tetrachloride	Oct 05/18	ND	ug/l	No
Chlordane (Total)	Oct 05/18	ND	ug/l	No
Chlorpyrifos	Oct 05/18	ND	ug/l	No
Cyanazine	Oct 05/18	ND	ug/l	No
Diazinon	Oct 05/18	ND	ug/l	No
Dicamba	Oct 05/18	ND	ug/l	No
1,2-Dichlorobenzene	Oct 05/18	ND	ug/l	No
1,4-Dichlorobenzene	Oct 05/18	ND	ug/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Oct 05/18	ND	ug/l	No
1,2-Dichloroethane	Oct 05/18	ND	ug/l	No

1,1-Dichloroethylene (vinylidene chloride)	Oct 05/18	ND	ug/l	No
Dichloromethane	Oct 05/18	ND	ug/l	No
2-4 Dichlorophenol	Oct 05/18	ND	ug/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Oct 05/18	ND	ug/l	No
Diclofop-methyl	Oct 05/18	ND	ug/l	No
Dimethoate	Oct 05/18	ND	ug/l	No
Dinoseb	Oct 05/18	ND	ug/l	No
Diquat	Oct 05/18	ND	ug/l	No
Diuron	Oct 05/18	ND	ug/l	No
Glyphosate	Oct 05/18	ND	ug/l	No
HAAs - Annual Average	2019	ND	ug/l	No
Heptachlor + Heptachlor Epoxide	Oct 05/18	ND	ug/l	No
Lindane (Total)	Oct 05/18	ND	ug/l	No
Malathion	Oct 05/18	ND	ug/l	No
MCPA	Oct 05/18	ND	ug/l	No
Methoxychlor	Oct 05/18	ND	ug/l	No
Metolachlor	Oct 05/18	ND	ug/l	No
Metribuzin	Oct 05/18	ND	ug/l	No
Monochlorobenzene	Oct 05/18	ND	ug/l	No
Paraquat	Oct 05/18	ND	ug/l	No
Parathion	Oct 05/18	ND	ug/l	No
Pentachlorophenol	Oct 05/18	ND	ug/l	No
Phorate	Oct 05/18	ND	ug/l	No
Picloram	Oct 05/18	ND	ug/l	No
Polychlorinated Biphenyls(PCB)	Oct 05/18	ND	ug/l	No
Prometryne	Oct 05/18	ND	ug/l	No
Simazine	Oct 05/18	ND	ug/l	No
THM (NOTE: show latest annual average)	2019	8.17	ug/l	No
Temephos	Oct 05/18	ND	ug/l	No
Terbufos	Oct 05/18	ND	ug/l	No
Tetrachloroethylene	Oct 05/18	ND	ug/l	No
2,3,4,6-Tetrachlorophenol	Oct 05/18	ND	ug/l	No
Triallate	Oct 05/18	ND	ug/l	No
Trichloroethylene	Oct 05/18	ND	ug/l	No
2,4,6-Trichlorophenol	Oct 05/18	ND	ug/l	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Oct 05/18	ND	ug/l	No
Trifluralin	Oct 05/18	ND	ug/l	No
Vinyl Chloride	Oct 05/18	ND	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
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Fluoride	1.9	Mg/L	Oct 25/18
Sodium	20	Mg/L	Oct 05/18

(Only if DWS category is large municipal residential, small municipal residential, large municipal non residential, non municipal year round residential, large non municipal non residential)