

Section 11. ANNUAL REPORT.

Drinking-Water System Number:	210001022
Drinking-Water System Name:	Lansdowne Drinking Water System
Drinking-Water System Owner:	Township of Leeds and The Thousand Islands
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1 to December 31, 2016

<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; margin-top: 10px;"> Available at the Township of Leeds & the Thousands Islands Office, 1233 Prince Street, Lansdowne, Ontario. </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 100px; height: 20px;" type="text"/></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: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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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	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 [x]

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 _____

Describe your Drinking-Water System

Lansdowne's Drinking Water System consists of two groundwater water wells which are considered to be under the direct influence of surface water (GUDI). As such, the water treatment system was upgraded in 2010 to include cartridge filtration and an ultraviolet disinfection system. As water is used throughout the distribution system, and the water level in the standpipe falls to a preset limit, the duty well pump starts. Raw water from the well is pumped through two of three cartridge filter trains and then through one of two ultraviolet disinfection units. Sodium hypochlorite is added to provide secondary disinfection. The treated water is then directed through a feedermain to refill the standpipe.

List all water treatment chemicals used over this reporting period

Sodium hypochlorite was used at an average dosage rate of 2.59 mg/L.

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

- Rebuilt 3 hydrants
- Replaced UV bulbs & quartz sleeve
- Repaired watermain valve boxes
- Repaired curb stop valves
- Installed cathodic protection
- Upgraded SCADA system
- Replaced UPS batteries

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
n/a					

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of <i>E. coli</i> Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	104	0 - 0	0 - 5	n/a	n/a
Treated	52	0 - 0	0 - 0	52	<10 - 20
Distribution	104	0 - 0	0 - 0	52	<10 - 40

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 #)
Raw Turbidity	8760	0.03 - 0.96 NTU
Filter #1 Turbidity	8760	0 - 0.92 NTU
Filter #2 Turbidity	8760	0 - 0.96 NTU
Filter #3 Turbidity	8760	0 - 0.61 NTU
Chlorine	8760	0.40 - 4.65 mg/L

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
n/a				

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	03/08/2016	<0.0005	mg / L	No
Arsenic	03/08/2016	<0.001	mg / L	No
Barium	03/08/2016	0.16	mg / L	No
Boron	03/08/2016	0.03	mg / L	No
Cadmium	03/08/2016	<0.0001	mg / L	No
Chromium	03/08/2016	<0.001	mg / L	No
*Lead	n/a	n/a	mg / L	No
Mercury	03/08/2016	<0.0001	mg / L	No
Selenium	03/08/2016	<0.001	mg / L	No
Sodium	01/16/2012	36.2	mg / L	Yes
Uranium	03/08/2016	0.002	mg / L	No
Fluoride	01/16/2012	0.6	mg / L	No
Nitrite	10/11/2016	<0.1	mg / L	No
Nitrate	10/11/2016	1.6	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 #)	Number of Exceedances
Plumbing	n/a	n/a	n/a
Distribution	2	0.00036 - 0.00058 mg/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	03/08/2016	<0.5	µg / L	No
Aldrin	03/08/2016	<0.006	µg / L	No
Atrazine + N-dealkylated metabolites	03/08/2016	<0.2	µg / L	No
Azinphos-methyl	03/08/2016	<2.0	µg / L	No
Bendiocarb	03/08/2016	<2.0	µg / L	No
Benzene	03/08/2016	<0.5	µg / L	No
Benzo(a)pyrene	03/08/2016	<0.01	µg / L	No
Bromoxynil	03/08/2016	<0.5	µg / L	No
Carbaryl	03/08/2016	<5.0	µg / L	No
Carbofuran	03/08/2016	<5.0	µg / L	No
Carbon Tetrachloride	03/08/2016	<0.2	µg / L	No
Chlorpyrifos	03/08/2016	<1.0	µg / L	No
Diazinon	03/08/2016	<1.0	µg / L	No
Dieldrin	03/08/2016	<0.006	µg / L	No
Dicamba	03/08/2016	<1.0	µg / L	No
1,2-Dichlorobenzene	03/08/2016	<0.4	µg / L	No
1,4-Dichlorobenzene	03/08/2016	<0.4	µg / L	No
1,2-Dichloroethane	03/08/2016	<0.2	µg / L	No
1,1-Dichloroethylene	03/08/2016	<0.5	µg / L	No
Dichloromethane	03/08/2016	<4.0	µg / L	No
2,4 Dichlorophenol	03/08/2016	<0.5	µg / L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	03/08/2016	<1.0	µg / L	No
Diclofop-methyl	03/08/2016	<0.9	µg / L	No
Dimethoate	03/08/2016	<2.5	µg / L	No
Diquat	03/08/2016	<5	µg / L	No
Diuron	03/08/2016	<10	µg / L	No
Glyphosate	03/08/2016	<10	µg / L	No
Malathion	03/08/2016	<5.0	µg / L	No
MCPA	03/08/2016	<10	µg / L	No
Metolachlor	03/08/2016	<1.0	µg / L	No
Metribuzin	03/08/2016	<5.0	µg / L	No
Monochlorobenzene	03/08/2016	<0.2	µg / L	No
Paraquat	03/08/2016	<1	µg / L	No
Pentachlorophenol	03/08/2016	<0.5	µg / L	No
Phorate	03/08/2016	<0.5	µg / L	No
Picloram	03/08/2016	<5.0	µg / L	No
Polychlorinated Biphenyls(PCB)	03/08/2016	<0.1	µg / L	No
Prometryne	03/08/2016	<0.25	µg / L	No
Simazine	03/08/2016	<1.0	µg / L	No

THM (NOTE: show latest annual average)	10/11/2016	11.6	mg / L	No
Terbufos	03/08/2016	<0.4	µg / L	No
Tetrachloroethylene	03/08/2016	<0.3	µg / L	No
2,3,4,6-Tetrachlorophenol	03/08/2016	<0.5	µg / L	No
Triallate	03/08/2016	<1	µg / L	No
Trichloroethylene	03/08/2016	<0.3	µg / L	No
2,4,6-Trichlorophenol	03/08/2016	<0.5	µg / L	No
Trifluralin	03/08/2016	<1.0	µg / L	No
Vinyl Chloride	03/08/2016	<0.2	µg / 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
n/a			