



GEORGINA

26557 Civic Centre Rd.
Keswick, Ontario L4P 3G1

SAFE DRINKING WATER ACT 2016 ANNUAL REPORT

Regulations passed under the *Safe Drinking Water Act* require owners of municipal drinking water systems to publish annual reports describing the operation of the water system and the results of testing required to ensure that residents are provided with safe drinking water. This report covers the period from January 1st, 2016 to December 31st, 2016.

Section 19 of the *Safe Drinking Water Act - Standard of Care*, requires those with decision making authority over the Town's municipal drinking water system, including Municipal Councilors, Mayors and Officials, to act honestly, competently and with integrity, while exercising a level of care, diligence and skill to protect the safety of the users of the Town's drinking water system.

The Town of Georgina operates the water distribution system and The Regional Municipality of York provides the treatment and storage of drinking water.

The source of supply for the Keswick-Sutton system is Lake Simcoe. York Region owns and operates a water treatment plant at Clarlyn Drive and Metro Road North and another plant on Kennedy Road in Willow Beach. York Region also owns and operates four water storage tanks located at Westpark Heights, Woodbine Avenue just north of Old Homestead Road, Deer Park Drive and Dalton Road. Water is taken from Lake Simcoe at each plant and undergoes a complete treatment process consisting of screening, filtration, taste and odor control, disinfection and fluoridation before being supplied to the Town's water distribution system. York Region also carries out extensive testing at each plant and summarizes the results of these tests in an annual report. The reports describe the treatment and chemicals used in the process in more detail. Copies of York Region's annual report may be obtained by contacting York Region at 905-895-1200, extension 3000, accessing their web site at York.ca or obtaining a copy at the Town of Georgina Civic Centre located at 26557 Civic Centre Road, Keswick, Ontario.

The Town of Georgina owns and operates the water distribution system that receives water from the York Region treatment plants. The system is comprised of water booster stations, watermains, service connections up to the property line. valves, hydrants and meters. The Town does not add chemicals to your drinking water.

Licensed Town Drinking Water Operators take water samples from various locations serviced by the Keswick-Sutton water distribution system every week. Each sample is analyzed by the York-Durham Laboratory in Pickering to test for the presence of bacteria.



26557 Civic Centre Rd.
Keswick, Ontario L4P 3G1

GEORGINA

This accredited laboratory is owned jointly by York and Durham Regions and is staffed by employees of Durham Region.

Microbiology Testing from January 1 to December 31, 2016

A total of seven hundred and thirty-two (732) samples from the Keswick-Sutton distribution system were analyzed for the presence of coliform bacteria between January 1st, 2016 and December 31st, 2016. All samples tested negative for the presence of coliforms (bacteria) and ecoli.

Three hundred and forty-one (341) samples were analyzed by using the heterotrophic plate count method to check for background colonies within the drinking water. This test is used as a supplement to the routine analysis for coliform bacteria and is used as an aide in assessing overall drinking water quality.

Results from three hundred and forty-one (341) heterotrophic plate count (HPC) samples are shown in the table below.

HPC Range in Colony Forming Units (CFU)	Number of Samples
0	290
1 to 10	47
11 to 20	1
30	1
33	1
44	1
Total HPC Sample Count	341

Chlorine Residual

The Town is also required to monitor chlorine residual concentrations to ensure that bacteria does not develop within the drinking water system. The minimum acceptable chlorine residual is 0.05 mg/L. Four thousand six hundred and eighteen (4618) samples were analyzed. All samples had sufficient chlorine residual levels.



26557 Civic Centre Rd.
Keswick, Ontario L4P 3G1

GEORGINA

Lead Testing

In 2016 the Town was exempt from lead sampling within the plumbing system but must continue to sample within the distribution system. The table below outlines our rolling three year lead sampling schedule. In 2016, we are sampling as per year one.

YEAR	1 st Round	Date of Sampling	2 nd Round	Date of Sampling	# of Samples per Period	Sampling Requirements
1	Dec 15/15 to Apr 15/16	March, 9 2016	Jun 15/16 to Oct 5/16	September 14, 2016	4	Alkalinity and pH
2	Dec 15/16 to Apr 15/17	March 2017	Jun 15/17 to Oct 5/17	September 2017	4	Alkalinity and pH
3	Dec 15/17 to Apr 15/18	March 2018	Jun 5/18 to Oct 5/18	September 2018	4	Alkalinity, pH and Lead

After three consecutive years of sampling as set out above, the three year cycling begins again unless otherwise notified by the Director of the Ministry of the Environment.

A total of eight (8) distribution samples were taken in 2016 within the water distribution system. No exceedances occurred. Samples were tested for alkalinity and pH. The results are summarized in the table below.

Sample Date	Number of Samples	Lead (mg/L) Min. – Max.	Alkalinity (mg/L)	pH Min. – Max.
Mar. 3/16	4	n/a	109 – 111	6.49 – 6.59
Sep. 14/16	4	0.0005 – 0.0051*	96 – 112	6.29 – 7.07

* NOTE: Lead was sampled, although not required during this cycle. Full lead samples will be completed during the third year cycle.



26557 Civic Centre Rd.
Keswick, Ontario L4P 3G1

GEORGINA

Other Testing

Twenty-four (24) samples were tested for trihalomethanes (THM) in the Keswick/Sutton water distribution system. The maximum (12) month running average allowable limit is 100 ug/L. The THM twelve (12) month running average for 2016 was 67.64 ug/L.

Private Wells

Residents that obtain water from private wells are encouraged to take samples periodically to determine if their water is safe to drink. Sample bottles may be obtained at the Civic Centre and returned to the same location for testing by the Ministry of Health laboratory at no cost.

Further Information

Detailed lab reports are available for review at the Civic Centre, located at 26557 Civic Centre Road, Keswick.

The *Safe Drinking Water Act* requires that a Summary Report listing the requirements of the Act, the Regulations, the system's approval and any orders that the system failed to meet at any time during 2016, be given to the members of Municipal Council prior to March 31, 2017. This report will be submitted as required and will be available in the Office of the Clerk on April 1, 2017.

If you have any questions or concerns with respect to this report, please contact Dan Pisani, P.Eng, Director of Operations and Infrastructure, at 905-476-4301 extension 2233.

DATED: January 23, 2017

/mt