MODIFIED OPTIONAL ANNUAL REPORT TEMPLATE

Accessible formats or communication supports are available upon request.

Drinking-Water System Number:	260006737
Drinking-Water System Name:	Ballantrae-Musselman's Lake Drinking Water
	System
Drinking-Water System Owner:	Town of Whitchurch-Stouffville
Drinking-Water System Category:	Large Municipal Residential, Class 1
Period being reported:	January 1, 2019 to December 31, 2019

The Ballantrae-Musselman's Lake Drinking Water System serves less than 10,000 people.

This annual report is available to the public at no charge on the Town's web site and upon request.

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

Town of Whitchurch-Stouffville 111 Sandiford Drive Stouffville, ON L4A 0Z8 www.townofws.ca/en/residents/water-quality.aspx

No additional Drinking Water System owners that are connected to and receive drinking water from the Town of Whitchurch-Stouffville.

System users were notified that the Ballantrae-Musselman's Lake annual report is available free of charge by public access and notice through:

- Web
- Municipal Government Office (Administrative Office 111 Sandiford Drive)
- Public Request at any time

Description of the Ballantrae-Musselman's Lake Drinking Water System

About Ballantrae-Musselman's Lake

The water treatment and supply for the Ballantrae/Musselman's Lake distribution system is the responsibility of the Regional Municipality of York. The Communities of Ballantrae and Musselman's Lake are presently serviced by three ground production wells and one elevated storage tank. For further information regarding water supply and treatment, contact the Regional Municipality of York located at 17250 Yonge Street, Newmarket, Ontario, L3Y 6Z1 or visit their website at www.york.ca/drinkingwater.

The Town of Whitchurch-Stouffville owns and operates the Ballantrae-Musselman's Lake Water Distribution System, servicing approximately 5900 residents in the communities of Ballantrae and Musselman's Lake.

Presently, this water distribution system infrastructure consists of approximately 47 kilometres of watermain, 296 watermain valves, 337 hydrants and 16 sampling stations.

The operation and maintenance of this system to ensure safe drinking water is the responsibility of the Town's Public Works Department. Staff are certified in accordance with the Ministry of the Environment, Conservation and Parks (MECP) requirements. In 2011 the MECP issued to the Town the Drinking Water License for the Ballantrae Musselman's Lake Water Distribution System and also approved the Town's "Operational Plan". This plan is part of the Town's Quality Management System that describes the processes and procedures by which this water distribution system is operated and maintained. Activities generally include watermain break repairs, valve maintenance, hydrant maintenance, water locate stakeouts, watermain flushing and water quality sampling. The Operational Plan is available for review to the Public on the Town's website www.townofws.ca. A copy of the water distribution system annual and summary reports are also available on the Town's <u>website</u>.

List all water treatment chemicals used over this reporting period

Not applicable. Treatment chemicals are introduced at the various sources by the York Region only. Refer to the York Region website <u>www.york.ca/drinkingwater</u>.

Were any significant expenses incurred to?

- [] Install required equipment
- [] Repair required equipment
- [] Replace required equipment

Brief description and breakdown of monetary expenses incurred

\$0 for various watermain, valve and hydrant repairs.

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 and Location	Parameter	Result	Unit of Measure	Corrective Action and Result	Corrective Action Date
AWQI # 147111 August 6, 2019, 6207 Churchill Dr Sampling Station	TC	Ρ	P-A	Flush & resample	August 7, 2019

Microbiological testing done under the Schedule 10 of Regulation 170/03 during this reporting period

	Number of Distribution Samples	Range of Results (min # - max #)	Detections	
E. coli	233	0 - 0	0	
Total Coliforms	233	0 - P	1	
HPC	124 0 -120 N/A			
Raw and Treated	For raw and treated samples collected under Schedule 10, refer to the York			
	Region Annual Report.			

Operational testing done under Schedule 7 of Regulation 170/03 during the period covered by this Annual Report

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure	NOTE: For continuous
Turbidity (treated)	Refer to York Reg	ion Annual Report.		monitors
Chlorine (free)	402	0.50-2.02	mg/L	use 8760
Fluoride (If the DWS provides fluoridation)	Refer to <u>York Reg</u>	ion Annual Report.		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
Not applicable				

Summary of Inorganic parameters tested during this reporting period, or the most recent result.

Parameter	Date Sampled	Result	Unit of Measure
Nitrite	December 5, 2019	< 0.50	mg/L
Nitrate	December 5, 2019	< 0.050	mg/L
Lead (Distribution system)	August 13, 2019	0.0005	mg/L

For all other results please refer to the <u>York Region Annual Report</u>.

Summary of calculated running annual average Trihalomethane (THM) during this reporting period

Facility monitored for THM	Ballantrae-Musselman's Lake DWS
Annual Average Q1-Q4 2019	0.028 mg/L
Does result exceed Standard of	No
0.100 mg/L?	

Drinking Water Systems Regulation Modified from PIBS 4435e01

Summary of Calculated Running Annual Average Total Haloacetic Acids (HAAs).

Facility monitored for HAAs	Ballantrae-Musselman's Lake DWS
Annual Average (mg/L)	0.016 mg/L
Does result exceed Proposed	No
Standard of 0.080 mg/L?	

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
None			