ANNUAL REPORT

SHELBURNE
DRINKING WATER SYSTEM

FOR THE PERIOD:
JANUARY 1, 2019 – DECEMBER 31, 2019

Prepared for the Town of Shelburne
by the Ontario Clean Water Agency

A People Place, A Change of Pace
SHELBURNE
ONTARIO, CANADA

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Drinking-Water System Number:	220004965
Drinking-Water System Name:	Shelburne Drinking Water System
Drinking-Water System Owner:	The Corporation of the Town of Shelburne
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2019 – December 31, 2019

Complete if your Category is Large Municipal Residential or Small Municipal Residential	***Complete for all other Categories.***
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X] **Is your annual report available to the public at no charge on a web site on the Internet?** Yes [X] No [ ] **Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.** Office of Town of Shelburne 203 Main Street East Shelburne, Ontario L9V 3K7	**Number of Designated Facilities served:** Not Applicable **Did you provide a copy of your annual report to all Designated Facilities you serve?** Not Applicable **Number of Interested Authorities you report to:** Not Applicable **Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?** Not Applicable

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
Not Applicable	*Not Applicable*

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?
Not applicable.

Indicate how you notified system users that your annual report is available, and is free of charge.

X	Public access/notice via the web
X	Public access/notice via Government Office
	Public access/notice via a newspaper
X	Public access/notice via Public Request
	Public access/notice via a Public Library
	Public access/notice via other method:

Describe your Drinking-Water System

The Town of Shelburne's water is derived from six drilled groundwater wells, noted as well numbers 1, 3, 5, 6, 7 and 8. Shelburne's groundwater wells draw its water from underground aquifers, which are generally protected from above-ground sources of contamination by overlying layers of clay. To prevent the direct entry of surface water or foreign materials into these wells, all wellheads are maintained and secure. Water from these wells is pumped into the distribution system, which consists of approximately 47 kilometers of watermain and into the Town's elevated storage reservoir.

Primary disinfection is achieved by the addition of sodium hypochlorite for Well # 3, 5, 6, 7 and 8. At Well #1, a complete two-stage primary disinfection system consisting of UV light combined with chemical disinfection is necessary to ensure that the water is adequately treated for consumption. Residual chlorine levels are maintained in the distribution system to effectively provide secondary disinfection throughout the system.

Shelburne's ground water supply contains high iron levels and is an aesthetic concern due to its potential for staining fixtures and clothing. To control the release of iron into the water, Shelburne's water supply is treated with Waterworx, a chemical that settles out iron content in the water.

List all water treatment chemicals used over this reporting period

- Sodium Hypochlorite 12% Solution NSF, Disinfection
- Waterworx (28% Solution) NSF, Iron Sequestering

Were any significant expenses incurred to?

X	Install required equipment
X	Repair required equipment
X	Replace required equipment
	No significant expenses were incurred

Please provide a brief description of any significant expenses incurred

- Annual Flow Meter Calibrations
- Annual Generator Load Testing
- Annual Backflow Preventer Inspections
- Semi-Annual UV Servicing
- DWQMS Full Scope Systems Audit
- Well #1 Waterworx Chemical Pump replacement
- Well #1 & Well #3 Chlorine Analyzer replacement
- Well #1 & Well #3 pH probe replacement

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 (yyyy/mm/dd)	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date (yyyy/mm/dd)
2019/07/15	Arsenic	10.1	µg/L	Re-sampled, currently water is being blended to reduce arsenic concentrations to below the Ontario Drinking Water Quality Standards. Future process alterations will include an arsenic filtration system.	2019/07/15
2019/07/16	Arsenic (Re-sample)	10.3	µg/L	Re-sample from the previous incident	2019/07/16

Table 1. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

Location	Number of Samples	Range of E.coli Results		Range of Total Coliforms Results		Number of HPC Samples	Range of HPC Samples	
		Min.	Max.	Min.	Max.		Min.	Max.
Raw Water - Well 1	52	0	0	0	1	-	-	-
Raw Water - Well 3	53	0	0	0	0	-	-	-
Raw Water – Well 5	53	0	0	0	0	-	-	-
Raw Water – Well 6	53	0	0	0	0	-	-	-
Raw Water – Well 7	53	0	0	0	0	-	-	-
Raw Water – Well 8	53	0	0	0	0	-	-	-
Treated Water – Well 1	37	0	0	0	0	37	0	2
Treated Water – Well 3	53	0	0	0	0	53	0	2
Treated Water – Well 5	53	0	0	0	0	53	0	1
Treated Water – Well 6	53	0	0	0	0	53	0	1
Treated Water – Well 7	53	0	0	0	0	53	0	1
Treated Water – Well 8	53	0	0	0	0	53	0	1
Distribution	250	0	0	0	0	248	0	43

Table 2. Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

Parameter	Number of Grab Samples	Range of Results	
		Minimum	Maximum
Raw Water			
Turbidity, Well 1 (NTU)	12	0.11	0.96
Turbidity, Well 3 (NTU)	12	0.09	0.42
Turbidity, Well 5 (NTU)	12	0.08	0.50
Turbidity, Well 6 (NTU)	12	0.12	0.49
Turbidity, Well 7 (NTU)	12	0.10	0.37
Turbidity, Well 8 (NTU)	12	0.09	0.40
Treated Water			
Free Chlorine Residual, TW1 (mg/L)	8760	0.50	2.18
Free Chlorine Residual, TW3 (mg/L)	8760	0.23	1.75

Free Chlorine Residual, TW5 (mg/L)	8760	0.05	2.07
Free Chlorine Residual, TW6 (mg/L)	8760	0.22	3.05
Free Chlorine Residual, TW7 (mg/L)	8760	0.91	1.76
Free Chlorine Residual, TW8 (mg/L)	8760	0.87	1.68
Distribution Water			
Free Chlorine Residual, DW (mg/L)	365	0.87	1.28

NOTE: For continuous monitors, 8760 is used as the number of samples.

Table 3. 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				

Table 4. Summary of Inorganic parameters tested during this reporting period or most recent sample results

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Antimony: Sb (µg/L) - TW1	2019/01/08	0.09	6.0	No	No
Antimony: Sb (µg/L) - TW3	2019/01/08	0.03	6.0	No	No
Antimony: Sb (µg/L) - TW5	2019/01/08	0.08	6.0	No	No
Antimony: Sb (µg/L) - TW6	2019/01/08	0.1	6.0	No	No
Antimony: Sb (µg/L) - TW7	2019/01/08	0.26	6.0	No	No
Antimony: Sb (µg/L) - TW8	2019/01/08	0.24	6.0	No	No
Arsenic: As (µg/L) - TW1	2019/10/01	3.5	10.0	No	No
Arsenic: As (µg/L) - TW3	2019/10/01	9.8	10.0	No	Yes
Arsenic: As (µg/L) - TW5	2019/10/01	7.5	10.0	No	Yes
Arsenic: As (µg/L) - TW6	2019/10/01	8.3	10.0	No	Yes
Arsenic: As (µg/L) - TW7	2019/10/01	0.8	10.0	No	No
Arsenic: As (µg/L) - TW8	2019/10/01	0.9	10.0	No	No
Barium: Ba (µg/L) - TW1	2019/01/08	135.0	1000.0	No	No
Barium: Ba (µg/L) - TW3	2019/01/08	130.0	1000.0	No	No
Barium: Ba (µg/L) - TW5	2019/01/08	76.1	1000.0	No	No
Barium: Ba (µg/L) - TW6	2019/01/08	73.4	1000.0	No	No
Barium: Ba (µg/L) - TW7	2019/01/08	15.7	1000.0	No	No
Barium: Ba (µg/L) - TW8	2019/01/08	16.3	1000.0	No	No
Boron: B (µg/L) - TW1	2019/01/08	35.0	5000.0	No	No
Boron: B (µg/L) - TW3	2019/01/08	29.0	5000.0	No	No
Boron: B (µg/L) - TW5	2019/01/08	19.0	5000.0	No	No
Boron: B (µg/L) - TW6	2019/01/08	18.0	5000.0	No	No
Boron: B (µg/L) - TW7	2019/01/08	5.0	5000.0	No	No
Boron: B (µg/L) - TW8	2019/01/08	6.0	5000.0	No	No
Cadmium: Cd (µg/L) - TW1	2019/01/08	0.025	5.0	No	No

Cadmium: Cd (µg/L) - TW3	2019/01/08	<MDL 0.003	5.0	No	No
Cadmium: Cd (µg/L) - TW5	2019/01/08	0.011	5.0	No	No
Cadmium: Cd (µg/L) - TW6	2019/01/08	0.004	5.0	No	No
Cadmium: Cd (µg/L) - TW7	2019/01/08	0.012	5.0	No	No
Cadmium: Cd (µg/L) - TW8	2019/01/08	0.015	5.0	No	No
Chromium: Cr (µg/L) - TW1	2019/01/08	0.1	50.0	No	No
Chromium: Cr (µg/L) - TW3	2019/01/08	0.1	50.0	No	No
Chromium: Cr (µg/L) - TW5	2019/01/08	0.07	50.0	No	No
Chromium: Cr (µg/L) - TW6	2019/01/08	0.07	50.0	No	No
Chromium: Cr (µg/L) - TW7	2019/01/08	0.07	50.0	No	No
Chromium: Cr (µg/L) - TW8	2019/01/08	0.08	50.0	No	No
Mercury: Hg (µg/L) - TW1	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (µg/L) - TW3	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (µg/L) - TW5	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (µg/L) - TW6	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (µg/L) - TW7	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (µg/L) - TW8	2019/01/08	<MDL 0.01	1.0	No	No
Selenium: Se (µg/L) - TW1	2019/01/08	<MDL 0.04	50.0	No	No
Selenium: Se (µg/L) - TW3	2019/01/08	<MDL 0.04	50.0	No	No
Selenium: Se (µg/L) - TW5	2019/01/08	0.17	50.0	No	No
Selenium: Se (µg/L) - TW6	2019/01/08	0.2	50.0	No	No
Selenium: Se (µg/L) - TW7	2019/01/08	0.57	50.0	No	No
Selenium: Se (µg/L) - TW8	2019/01/08	0.52	50.0	No	No
Uranium: U (µg/L) - TW1	2019/01/08	1.1	20.0	No	No
Uranium: U (µg/L) - TW3	2019/01/08	0.432	20.0	No	No
Uranium: U (µg/L) - TW5	2019/01/08	0.588	20.0	No	No
Uranium: U (µg/L) - TW6	2019/01/08	0.578	20.0	No	No
Uranium: U (µg/L) - TW7	2019/01/08	0.765	20.0	No	No
Uranium: U (µg/L) - TW8	2019/01/08	0.683	20.0	No	No
Additional Inorganics					
Fluoride (mg/L) - TW1	2018/02/14	1.05	1.5	No	Yes
Fluoride (mg/L) - TW3	2018/02/14	1.1	1.5	No	Yes
Fluoride (mg/L) - TW5	2018/02/14	1.2	1.5	No	Yes
Fluoride (mg/L) - TW6	2018/02/14	1.12	1.5	No	Yes
Fluoride (mg/L) - TW7	2018/02/14	0.16	1.5	No	No
Fluoride (mg/L) - TW8	2018/02/14	0.14	1.5	No	No
Nitrite (mg/L) - TW1	2019/01/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW1	2019/04/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW1	2019/07/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW1	2019/10/01	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW3	2019/01/08	<MDL 0.003	1.0	No	No

Nitrite (mg/L) - TW3	2019/04/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW3	2019/07/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW3	2019/10/01	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW5	2019/01/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW5	2019/04/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW5	2019/07/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW5	2019/10/01	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW6	2019/01/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW6	2019/04/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW6	2019/07/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW6	2019/10/01	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW7	2019/01/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW7	2019/04/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW7	2019/07/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW7	2019/10/01	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW8	2019/01/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW8	2019/04/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW8	2019/07/09	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW8	2019/10/01	<MDL 0.003	1.0	No	No
Nitrate (mg/L) - TW1	2019/01/08	0.231	10.0	No	No
Nitrate (mg/L) - TW1	2019/04/09	0.283	10.0	No	No
Nitrate (mg/L) - TW1	2019/07/09	0.15	10.0	No	No
Nitrate (mg/L) - TW1	2019/10/01	0.018	10.0	No	No
Nitrate (mg/L) - TW3	2019/01/08	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW3	2019/04/09	0.007	10.0	No	No
Nitrate (mg/L) - TW3	2019/07/09	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW3	2019/10/01	0.028	10.0	No	No
Nitrate (mg/L) - TW5	2019/01/08	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW5	2019/04/09	0.008	10.0	No	No
Nitrate (mg/L) - TW5	2019/07/09	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW5	2019/10/01	0.012	10.0	No	No
Nitrate (mg/L) - TW6	2019/01/08	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW6	2019/04/09	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW6	2019/07/09	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW6	2019/10/01	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW7	2019/01/08	0.706	10.0	No	No
Nitrate (mg/L) - TW7	2019/04/09	0.788	10.0	No	No
Nitrate (mg/L) - TW7	2019/07/09	0.847	10.0	No	No
Nitrate (mg/L) - TW7	2019/10/01	0.921	10.0	No	No
Nitrate (mg/L) - TW8	2019/01/08	0.605	10.0	No	No
Nitrate (mg/L) - TW8	2019/04/09	0.643	10.0	No	No

Nitrate (mg/L) - TW8	2019/07/09	0.69	10.0	No	No
Nitrate (mg/L) - TW8	2019/10/01	0.746	10.0	No	No
Sodium: Na (mg/L) - TW1	2018/02/22	105.0	20*	Yes	Yes
Sodium: Na (mg/L) - TW3	2018/02/14	12.7	20*	No	Yes
Sodium: Na (mg/L) - TW5	2018/02/14	11.9	20*	No	Yes
Sodium: Na (mg/L) - TW6	2018/02/14	13.0	20*	No	Yes
Sodium: Na (mg/L) - TW7	2018/02/14	2.11	20*	No	No
Sodium: Na (mg/L) - TW8	2018/02/14	2.02	20*	No	No

*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health was notified when the sodium concentration exceeded 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

Table 5. 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 Results		MAC	Number of Exceedances
		Minimum	Maximum		
Distribution - Lead Results (µg/L)	3	0.11	0.19	10	0
Distribution - Alkalinity (mg/L)	6	206	216	n/a	n/a
DW location - pH In-House	6	7.34	8.11	n/a	n/a

The Shelburne Drinking Water Systems qualifies for plumbing exemption.

Table 6. Summary of Organic parameters sampled during this reporting period or the most recent sample results

TREATED WATER	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Alachlor (µg/L) - TW1	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (µg/L) - TW3	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (µg/L) - TW5	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (µg/L) - TW6	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (µg/L) - TW7	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (µg/L) - TW8	2019/01/08	<MDL 0.02	5.0	No	No
Atrazine + N-dealkylated metabolites (µg/L) - TW1	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (µg/L) - TW3	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (µg/L) - TW5	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (µg/L) - TW6	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (µg/L) - TW7	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (µg/L) - TW8	2019/01/08	<MDL 0.01	5.0	No	No
Azinphos-methyl (µg/L) - TW1	2019/01/08	<MDL 0.05	20.0	No	No
Azinphos-methyl (µg/L) - TW3	2019/01/08	<MDL 0.05	20.0	No	No
Azinphos-methyl (µg/L) - TW5	2019/01/08	<MDL 0.05	20.0	No	No

Azinphos-methyl (µg/L) - TW6	2019/01/08	<MDL 0.05	20.0	No	No
Azinphos-methyl (µg/L) - TW7	2019/01/08	<MDL 0.05	20.0	No	No
Azinphos-methyl (µg/L) - TW8	2019/01/08	<MDL 0.05	20.0	No	No
Benzene (µg/L) - TW1	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (µg/L) - TW3	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (µg/L) - TW5	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (µg/L) - TW6	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (µg/L) - TW7	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (µg/L) - TW8	2019/01/08	<MDL 0.32	1.0	No	No
Benzo(a)pyrene (µg/L) - TW1	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (µg/L) - TW3	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (µg/L) - TW5	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (µg/L) - TW6	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (µg/L) - TW7	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (µg/L) - TW8	2019/01/08	<MDL 0.004	0.01	No	No
Bromoxynil (µg/L) - TW1	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (µg/L) - TW3	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (µg/L) - TW5	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (µg/L) - TW6	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (µg/L) - TW7	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (µg/L) - TW8	2019/01/08	<MDL 0.33	5.0	No	No
Carbaryl (µg/L) - TW1	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (µg/L) - TW3	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (µg/L) - TW5	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (µg/L) - TW6	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (µg/L) - TW7	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (µg/L) - TW8	2019/01/08	<MDL 0.05	90.0	No	No
Carbofuran (µg/L) - TW1	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (µg/L) - TW3	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (µg/L) - TW5	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (µg/L) - TW6	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (µg/L) - TW7	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (µg/L) - TW8	2019/01/08	<MDL 0.01	90.0	No	No
Carbon Tetrachloride (µg/L) - TW1	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (µg/L) - TW3	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (µg/L) - TW5	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (µg/L) - TW6	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (µg/L) - TW7	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (µg/L) - TW8	2019/01/08	<MDL 0.16	2.0	No	No
Chlorpyrifos (µg/L) - TW1	2019/01/08	<MDL 0.02	90.0	No	No
Chlorpyrifos (µg/L) - TW3	2019/01/08	<MDL 0.02	90.0	No	No

Chlorpyrifos (µg/L) - TW5	2019/01/08	<MDL 0.02	90.0	No	No
Chlorpyrifos (µg/L) - TW6	2019/01/08	<MDL 0.02	90.0	No	No
Chlorpyrifos (µg/L) - TW7	2019/01/08	<MDL 0.02	90.0	No	No
Chlorpyrifos (µg/L) - TW8	2019/01/08	<MDL 0.02	90.0	No	No
Diazinon (µg/L) - TW1	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (µg/L) - TW3	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (µg/L) - TW5	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (µg/L) - TW6	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (µg/L) - TW7	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (µg/L) - TW8	2019/01/08	<MDL 0.02	20.0	No	No
Dicamba (µg/L) - TW1	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (µg/L) - TW3	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (µg/L) - TW5	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (µg/L) - TW6	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (µg/L) - TW7	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (µg/L) - TW8	2019/01/08	<MDL 0.2	120.0	No	No
1,2-Dichlorobenzene (µg/L) - TW1	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (µg/L) - TW3	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (µg/L) - TW5	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (µg/L) - TW6	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (µg/L) - TW7	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (µg/L) - TW8	2019/01/08	<MDL 0.41	200.0	No	No
1,4-Dichlorobenzene (µg/L) - TW1	2019/01/08	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (µg/L) - TW3	2019/01/08	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (µg/L) - TW5	2019/01/08	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (µg/L) - TW6	2019/01/08	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (µg/L) - TW7	2019/01/08	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (µg/L) - TW8	2019/01/08	<MDL 0.36	5.0	No	No
1,2-Dichloroethane (µg/L) - TW1	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (µg/L) - TW3	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (µg/L) - TW5	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (µg/L) - TW6	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (µg/L) - TW7	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (µg/L) - TW8	2019/01/08	<MDL 0.35	5.0	No	No
1,1-Dichloroethylene (µg/L) - TW1	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (µg/L) - TW3	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (µg/L) - TW5	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (µg/L) - TW6	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (µg/L) - TW7	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (µg/L) - TW8	2019/01/08	<MDL 0.33	14.0	No	No
Dichloromethane (Methylene Chloride) (µg/L) - TW1	2019/01/08	<MDL 0.35	50.0	No	No

Dichloromethane (Methylene Chloride) (µg/L) - TW3	2019/01/08	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (µg/L) - TW5	2019/01/08	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (µg/L) - TW6	2019/01/08	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (µg/L) - TW7	2019/01/08	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (µg/L) - TW8	2019/01/08	<MDL 0.35	50.0	No	No
2,4-Dichlorophenol (µg/L) - TW1	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (µg/L) - TW3	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (µg/L) - TW5	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (µg/L) - TW6	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (µg/L) - TW7	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (µg/L) - TW8	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW1	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW3	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW5	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW6	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW7	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW8	2019/01/08	<MDL 0.19	100.0	No	No
Diclofop-methyl (µg/L) - TW1	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (µg/L) - TW3	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (µg/L) - TW5	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (µg/L) - TW6	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (µg/L) - TW7	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (µg/L) - TW8	2019/01/08	<MDL 0.4	9.0	No	No
Dimethoate (µg/L) - TW1	2019/01/08	<MDL 0.06	20.0	No	No
Dimethoate (µg/L) - TW3	2019/01/08	<MDL 0.06	20.0	No	No
Dimethoate (µg/L) - TW5	2019/01/08	<MDL 0.06	20.0	No	No
Dimethoate (µg/L) – TW6	2019/01/08	<MDL 0.06	20.0	No	No
Dimethoate (µg/L) - TW7	2019/01/08	<MDL 0.06	20.0	No	No
Dimethoate (µg/L) - TW8	2019/01/08	<MDL 0.06	20.0	No	No
Diquat (µg/L) - TW1	2019/01/08	<MDL 1.0	70.0	No	No
Diquat (µg/L) - TW3	2019/01/08	<MDL 1.0	70.0	No	No
Diquat (µg/L) - TW5	2019/01/08	<MDL 1.0	70.0	No	No
Diquat (µg/L) - TW6	2019/01/08	<MDL 1.0	70.0	No	No
Diquat (µg/L) - TW7	2019/01/08	<MDL 1.0	70.0	No	No
Diquat (µg/L) - TW8	2019/01/08	<MDL 1.0	70.0	No	No
Diuron (µg/L) - TW1	2019/01/08	<MDL 0.03	150.0	No	No
Diuron (µg/L) - TW3	2019/01/08	<MDL 0.03	150.0	No	No
Diuron (µg/L) - TW5	2019/01/08	<MDL 0.03	150.0	No	No
Diuron (µg/L) - TW6	2019/01/08	<MDL 0.03	150.0	No	No
Diuron (µg/L) - TW7	2019/01/08	<MDL 0.03	150.0	No	No
Diuron (µg/L) - TW8	2019/01/08	<MDL 0.03	150.0	No	No

Glyphosate (µg/L) - TW1	2019/01/08	<MDL 1.0	280.0	No	No
Glyphosate (µg/L) - TW3	2019/01/08	<MDL 1.0	280.0	No	No
Glyphosate (µg/L) - TW5	2019/01/08	<MDL 1.0	280.0	No	No
Glyphosate (µg/L) - TW6	2019/01/08	<MDL 1.0	280.0	No	No
Glyphosate (µg/L) - TW7	2019/01/08	<MDL 1.0	280.0	No	No
Glyphosate (µg/L) - TW8	2019/01/08	<MDL 1.0	280.0	No	No
Malathion (µg/L) - TW1	2019/01/08	<MDL 0.02	190.0	No	No
Malathion (µg/L) - TW3	2019/01/08	<MDL 0.02	190.0	No	No
Malathion (µg/L) - TW5	2019/01/08	<MDL 0.02	190.0	No	No
Malathion (µg/L) - TW6	2019/01/08	<MDL 0.02	190.0	No	No
Malathion (µg/L) - TW7	2019/01/08	<MDL 0.02	190.0	No	No
Malathion (µg/L) - TW8	2019/01/08	<MDL 0.02	190.0	No	No
Metolachlor (µg/L) - TW1	2019/01/08	<MDL 0.01	50.0	No	No
Metolachlor (µg/L) - TW3	2019/01/08	<MDL 0.01	50.0	No	No
Metolachlor (µg/L) - TW5	2019/01/08	<MDL 0.01	50.0	No	No
Metolachlor (µg/L) - TW6	2019/01/08	<MDL 0.01	50.0	No	No
Metolachlor (µg/L) - TW7	2019/01/08	<MDL 0.01	50.0	No	No
Metolachlor (µg/L) - TW8	2019/01/08	<MDL 0.01	50.0	No	No
Metribuzin (µg/L) - TW1	2019/01/08	<MDL 0.02	80.0	No	No
Metribuzin (µg/L) - TW3	2019/01/08	<MDL 0.02	80.0	No	No
Metribuzin (µg/L) - TW5	2019/01/08	<MDL 0.02	80.0	No	No
Metribuzin (µg/L) - TW6	2019/01/08	<MDL 0.02	80.0	No	No
Metribuzin (µg/L) - TW7	2019/01/08	<MDL 0.02	80.0	No	No
Metribuzin (µg/L) - TW8	2019/01/08	<MDL 0.02	80.0	No	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW1	2019/01/08	<MDL 0.3	80.0	No	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW3	2019/01/08	<MDL 0.3	80.0	No	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW5	2019/01/08	<MDL 0.3	80.0	No	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW6	2019/01/08	<MDL 0.3	80.0	No	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW7	2019/01/08	<MDL 0.3	80.0	No	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW8	2019/01/08	<MDL 0.3	80.0	No	No
Paraquat (µg/L) - TW1	2019/01/08	<MDL 1.0	10.0	No	No
Paraquat (µg/L) - TW3	2019/01/08	<MDL 1.0	10.0	No	No
Paraquat (µg/L) - TW5	2019/01/08	<MDL 1.0	10.0	No	No
Paraquat (µg/L) - TW6	2019/01/08	<MDL 1.0	10.0	No	No
Paraquat (µg/L) - TW7	2019/01/08	<MDL 1.0	10.0	No	No
Paraquat (µg/L) - TW8	2019/01/08	<MDL 1.0	10.0	No	No
PCB (µg/L) - TW1	2019/01/08	<MDL 0.04	3.0	No	No
PCB (µg/L) - TW3	2019/01/08	<MDL 0.04	3.0	No	No
PCB (µg/L) - TW5	2019/01/08	<MDL 0.04	3.0	No	No
PCB (µg/L) - TW6	2019/01/08	<MDL 0.04	3.0	No	No
PCB (µg/L) - TW7	2019/01/08	<MDL 0.04	3.0	No	No

PCB (µg/L) - TW8	2019/01/08	<MDL 0.04	3.0	No	No
Pentachlorophenol (µg/L) - TW1	2019/01/08	<MDL 0.15	60.0	No	No
Pentachlorophenol (µg/L) - TW3	2019/01/08	<MDL 0.15	60.0	No	No
Pentachlorophenol (µg/L) - TW5	2019/01/08	<MDL 0.15	60.0	No	No
Pentachlorophenol (µg/L) - TW6	2019/01/08	<MDL 0.15	60.0	No	No
Pentachlorophenol (µg/L) - TW7	2019/01/08	<MDL 0.15	60.0	No	No
Pentachlorophenol (µg/L) - TW8	2019/01/08	<MDL 0.15	60.0	No	No
Phorate (µg/L) - TW1	2019/01/08	<MDL 0.01	2.0	No	No
Phorate (µg/L) - TW3	2019/01/08	<MDL 0.01	2.0	No	No
Phorate (µg/L) - TW5	2019/01/08	<MDL 0.01	2.0	No	No
Phorate (µg/L) - TW6	2019/01/08	<MDL 0.01	2.0	No	No
Phorate (µg/L) - TW7	2019/01/08	<MDL 0.01	2.0	No	No
Phorate (µg/L) - TW8	2019/01/08	<MDL 0.01	2.0	No	No
Picloram (µg/L) - TW1	2019/01/08	<MDL 1.0	190.0	No	No
Picloram (µg/L) - TW3	2019/01/08	<MDL 1.0	190.0	No	No
Picloram (µg/L) - TW5	2019/01/08	<MDL 1.0	190.0	No	No
Picloram (µg/L) - TW6	2019/01/08	<MDL 1.0	190.0	No	No
Picloram (µg/L) - TW7	2019/01/08	<MDL 1.0	190.0	No	No
Picloram (µg/L) - TW8	2019/01/08	<MDL 1.0	190.0	No	No
Prometryne (µg/L) - TW1	2019/01/08	<MDL 0.03	1.0	No	No
Prometryne (µg/L) - TW3	2019/01/08	<MDL 0.03	1.0	No	No
Prometryne (µg/L) - TW5	2019/01/08	<MDL 0.03	1.0	No	No
Prometryne (µg/L) - TW6	2019/01/08	<MDL 0.03	1.0	No	No
Prometryne (µg/L) - TW7	2019/01/08	<MDL 0.03	1.0	No	No
Prometryne (µg/L) - TW8	2019/01/08	<MDL 0.03	1.0	No	No
Simazine (µg/L) - TW1	2019/01/08	<MDL 0.01	10.0	No	No
Simazine (µg/L) - TW3	2019/01/08	<MDL 0.01	10.0	No	No
Simazine (µg/L) - TW5	2019/01/08	<MDL 0.01	10.0	No	No
Simazine (µg/L) - TW6	2019/01/08	<MDL 0.01	10.0	No	No
Simazine (µg/L) - TW7	2019/01/08	<MDL 0.01	10.0	No	No
Simazine (µg/L) - TW8	2019/01/08	<MDL 0.01	10.0	No	No
Terbufos (µg/L) - TW1	2019/01/08	<MDL 0.01	1.0	No	No
Terbufos (µg/L) - TW3	2019/01/08	<MDL 0.01	1.0	No	No
Terbufos (µg/L) - TW5	2019/01/08	<MDL 0.01	1.0	No	No
Terbufos (µg/L) - TW6	2019/01/08	<MDL 0.01	1.0	No	No
Terbufos (µg/L) - TW7	2019/01/08	<MDL 0.01	1.0	No	No
Terbufos (µg/L) - TW8	2019/01/08	<MDL 0.01	1.0	No	No
Tetrachloroethylene (µg/L) - TW1	2019/01/08	<MDL 0.35	10.0	No	No
Tetrachloroethylene (µg/L) - TW3	2019/01/08	<MDL 0.35	10.0	No	No
Tetrachloroethylene (µg/L) - TW5	2019/01/08	<MDL 0.35	10.0	No	No
Tetrachloroethylene (µg/L) - TW6	2019/01/08	<MDL 0.35	10.0	No	No

Tetrachloroethylene (µg/L) - TW7	2019/01/08	<MDL 0.35	10.0	No	No
Tetrachloroethylene (µg/L) - TW8	2019/01/08	<MDL 0.35	10.0	No	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW1	2019/01/08	<MDL 0.2	100.0	No	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW3	2019/01/08	<MDL 0.2	100.0	No	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW5	2019/01/08	<MDL 0.2	100.0	No	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW6	2019/01/08	<MDL 0.2	100.0	No	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW7	2019/01/08	<MDL 0.2	100.0	No	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW8	2019/01/08	<MDL 0.2	100.0	No	No
Triallate (µg/L) - TW1	2019/01/08	<MDL 0.01	230.0	No	No
Triallate (µg/L) - TW3	2019/01/08	<MDL 0.01	230.0	No	No
Triallate (µg/L) - TW5	2019/01/08	<MDL 0.01	230.0	No	No
Triallate (µg/L) - TW6	2019/01/08	<MDL 0.01	230.0	No	No
Triallate (µg/L) - TW7	2019/01/08	<MDL 0.01	230.0	No	No
Triallate (µg/L) - TW8	2019/01/08	<MDL 0.01	230.0	No	No
Trichloroethylene (µg/L) - TW1	2019/01/08	<MDL 0.44	5.0	No	No
Trichloroethylene (µg/L) - TW3	2019/01/08	<MDL 0.44	5.0	No	No
Trichloroethylene (µg/L) - TW5	2019/01/08	<MDL 0.44	5.0	No	No
Trichloroethylene (µg/L) - TW6	2019/01/08	<MDL 0.44	5.0	No	No
Trichloroethylene (µg/L) - TW7	2019/01/08	<MDL 0.44	5.0	No	No
Trichloroethylene (µg/L) - TW8	2019/01/08	<MDL 0.44	5.0	No	No
2,4,6-Trichlorophenol (µg/L) - TW1	2019/01/08	<MDL 0.25	5.0	No	No
2,4,6-Trichlorophenol (µg/L) - TW3	2019/01/08	<MDL 0.25	5.0	No	No
2,4,6-Trichlorophenol (µg/L) - TW5	2019/01/08	<MDL 0.25	5.0	No	No
2,4,6-Trichlorophenol (µg/L) - TW6	2019/01/08	<MDL 0.25	5.0	No	No
2,4,6-Trichlorophenol (µg/L) - TW7	2019/01/08	<MDL 0.25	5.0	No	No
2,4,6-Trichlorophenol (µg/L) - TW8	2019/01/08	<MDL 0.25	5.0	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW1	2019/01/08	<MDL 0.12	100.0	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW3	2019/01/08	<MDL 0.12	100.0	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW5	2019/01/08	<MDL 0.12	100.0	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW6	2019/01/08	<MDL 0.12	100.0	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW7	2019/01/08	<MDL 0.12	100.0	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW8	2019/01/08	<MDL 0.12	100.0	No	No
Trifluralin (µg/L) - TW1	2019/01/08	<MDL 0.02	45.0	No	No
Trifluralin (µg/L) - TW3	2019/01/08	<MDL 0.02	45.0	No	No
Trifluralin (µg/L) - TW5	2019/01/08	<MDL 0.02	45.0	No	No
Trifluralin (µg/L) - TW6	2019/01/08	<MDL 0.02	45.0	No	No
Trifluralin (µg/L) - TW7	2019/01/08	<MDL 0.02	45.0	No	No
Trifluralin (µg/L) - TW8	2019/01/08	<MDL 0.02	45.0	No	No
Vinyl Chloride (µg/L) - TW1	2019/01/08	<MDL 0.17	1.0	No	No
Vinyl Chloride (µg/L) - TW3	2019/01/08	<MDL 0.17	1.0	No	No
Vinyl Chloride (µg/L) - TW5	2019/01/08	<MDL 0.17	1.0	No	No

Vinyl Chloride (µg/L) - TW6	2019/01/08	<MDL 0.17	1.0	No	No
Vinyl Chloride (µg/L) - TW7	2019/01/08	<MDL 0.17	1.0	No	No
Vinyl Chloride (µg/L) - TW8	2019/01/08	<MDL 0.17	1.0	No	No
Distribution Water					
Trihalomethane: Total (µg/L) Annual Average - DW1	2019 (Quarterly)	3.75	100.0	No	No
Trihalomethane: Total (µg/L) Annual Average - DW2	2019 (Quarterly)	2.55	100.0	No	No
HAA Total (µg/L) Annual Average - DW1	2019 (Quarterly)	<MDL 5.3	n/a	No	No
HAA Total (µg/L) Annual Average - DW2	2019 (Quarterly)	<MDL 5.3	n/a	No	No

Table 7. List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards. (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)

Parameter	Result Value	Unit of Measure	Date of Sample
Arsenic – TW3	9.8	µg/L	2019/10/01
Arsenic – TW5	7.5	µg/L	2019/10/01
Arsenic – TW6	8.3	µg/L	2019/10/01

The Shelburne Drinking Water System was last inspected by the Ministry of the Environment, Conservation, and Parks on November 15, 2018.