

ANNUAL REPORT

SHELBURNE DRINKING WATER SYSTEM

FOR THE PERIOD:
JANUARY 1, 2020 – DECEMBER 31, 2020

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



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



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, 2020 – December 31, 2020

<u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u>	<u>Complete for all other Categories.</u>
<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. Office of Town of Shelburne 203 Main Street East Shelburne, Ontario L9V 3K7</p>	<p>Number of Designated Facilities served: Not Applicable</p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Not Applicable</p> <p>Number of Interested Authorities you report to: Not Applicable</p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Not Applicable</p>

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
<i>Not Applicable</i>	<i>Not Applicable</i>

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.

- 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

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?

- | | |
|-------------------------------------|---------------------------------------|
| <input checked="" type="checkbox"/> | Install required equipment |
| <input type="checkbox"/> | Repair required equipment |
| <input type="checkbox"/> | Replace required equipment |
| <input type="checkbox"/> | 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 S1 Systems Audit
- Well #1 & #3 Inspection
- Well #1 new well pump installed

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)
2020/02/11	Physical/Chemical Improperly Disinfected Water Directed to Water Users	n/a	n/a	AWQI# 149574 - Well 7 & 8 were running together which lead to potentially improperly disinfected water; before it reached first user wells were shut off and backflushed; backflushing continued until normal distribution free chlorine residual was restored; free chlorine residual was verified at first user (1.08mg/L) as well as at the well house	2020/02/11
2020/04/16	Arsenic	13.7	µg/L	AWQI# 149879 - This sample was taken erroneously; proper procedure has Well 5 water blended with either Well 7 or Well 8 when sampling for arsenic, greatly lowering its concentration; Proper sampling will be completed by Operations staff as soon as reasonable possible	2020/04/16

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	12*	0	0	0	0	-	-	-
Raw Water - Well 3	13*	0	0	0	0	-	-	-
Raw Water – Well 5	52	0	0	0	0	-	-	-
Raw Water – Well 6	52	0	1	0	1	-	-	-
Raw Water – Well 7	52	0	0	0	0	-	-	-
Raw Water – Well 8	52	0	0	0	0	-	-	-
Treated Water – Well 1	10*	0	0	0	0	10	0	2
Treated Water – Well 3	13*	0	0	0	0	13	0	1
Treated Water – Well 5	52	0	0	0	0	52	0	63
Treated Water – Well 6	52	0	0	0	0	52	0	27
Treated Water – Well 7	52	0	0	0	0	52	0	420
Treated Water – Well 8	52	0	0	0	0	52	0	121
Distribution	263	0	0	0	0	260	0	1000

*Well 1 was offline from October 2019 until further notice

*Well 3 was offline from April 2020 until further notice

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)	3*	0.17	0.72
Turbidity, Well 3 (NTU)	3*	0.06	0.28
Turbidity, Well 5 (NTU)	12	0.06	0.55
Turbidity, Well 6 (NTU)	12	0.07	0.50
Turbidity, Well 7 (NTU)	12	0.08	0.29
Turbidity, Well 8 (NTU)	12	0.07	0.29
Treated Water			
Free Chlorine Residual, TW1 (mg/L)	-	0.57	1.98
Free Chlorine Residual, TW3 (mg/L)	-	0.01**	3.00
Free Chlorine Residual, TW5 (mg/L)	8760	0.29	2.39
Free Chlorine Residual, TW6 (mg/L)	8760	0.30	2.21
Free Chlorine Residual, TW7 (mg/L)	8760	0.55	2.10
Free Chlorine Residual, TW8 (mg/L)	8760	0.55	2.10
Distribution Water			
Free Chlorine Residual, DW (mg/L)	366	0.72	1.50

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

*Well 1 was offline from October 2019 until further notice

*Well 3 was offline from April 2020 until further notice

**Blip occurred during electrolyte replacement in chlorine probe

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
<i>Not Applicable</i>				

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 (ug/L) - TW1	2020/08/12	0.11	6.0	No	No
Antimony: Sb (ug/L) - TW3	2019/01/08	0.03	6.0	No	No
Antimony: Sb (ug/L) - TW5	2019/01/08	0.08	6.0	No	No
Antimony: Sb (ug/L) - TW6	2019/01/08	0.1	6.0	No	No
Antimony: Sb (ug/L) - TW7	2019/01/08	0.26	6.0	No	No
Antimony: Sb (ug/L) - TW8	2019/01/08	0.24	6.0	No	No
Arsenic: As (ug/L) - TW1	2020/10/06	5.7	10.0	No	Yes
Arsenic: As (ug/L) - TW3	2020/01/14	9.4	10.0	No	Yes
Arsenic: As (ug/L) - TW5	2020/10/06	7.2	10.0	No	Yes
Arsenic: As (ug/L) - TW6	2020/10/06	5.7	10.0	No	Yes
Arsenic: As (ug/L) - TW7	2020/10/06	0.5	10.0	No	No

Arsenic: As (ug/L) - TW8	2020/10/06	0.7	10.0	No	No
Barium: Ba (ug/L) - TW1	2020/08/12	107.0	1000.0	No	No
Barium: Ba (ug/L) - TW3	2019/01/08	130.0	1000.0	No	No
Barium: Ba (ug/L) - TW5	2019/01/08	76.1	1000.0	No	No
Barium: Ba (ug/L) - TW6	2019/01/08	73.4	1000.0	No	No
Barium: Ba (ug/L) - TW7	2019/01/08	15.7	1000.0	No	No
Barium: Ba (ug/L) - TW8	2019/01/08	16.3	1000.0	No	No
Boron: B (ug/L) - TW1	2020/08/12	28.0	5000.0	No	No
Boron: B (ug/L) - TW3	2019/01/08	29.0	5000.0	No	No
Boron: B (ug/L) - TW5	2019/01/08	19.0	5000.0	No	No
Boron: B (ug/L) - TW6	2019/01/08	18.0	5000.0	No	No
Boron: B (ug/L) - TW7	2019/01/08	5.0	5000.0	No	No
Boron: B (ug/L) - TW8	2019/01/08	6.0	5000.0	No	No
Cadmium: Cd (ug/L) - TW1	2020/08/12	0.018	5.0	No	No
Cadmium: Cd (ug/L) - TW3	2019/01/08	<MDL 0.003	5.0	No	No
Cadmium: Cd (ug/L) - TW5	2019/01/08	0.011	5.0	No	No
Cadmium: Cd (ug/L) - TW6	2019/01/08	0.004	5.0	No	No
Cadmium: Cd (ug/L) - TW7	2019/01/08	0.012	5.0	No	No
Cadmium: Cd (ug/L) - TW8	2019/01/08	0.015	5.0	No	No
Chromium: Cr (ug/L) - TW1	2020/08/12	0.13	50.0	No	No
Chromium: Cr (ug/L) - TW3	2019/01/08	0.1	50.0	No	No
Chromium: Cr (ug/L) - TW5	2019/01/08	0.07	50.0	No	No
Chromium: Cr (ug/L) - TW6	2019/01/08	0.07	50.0	No	No
Chromium: Cr (ug/L) - TW7	2019/01/08	0.07	50.0	No	No
Chromium: Cr (ug/L) - TW8	2019/01/08	0.08	50.0	No	No
Mercury: Hg (ug/L) - TW1	2020/08/12	<MDL 0.01	1.0	No	No
Mercury: Hg (ug/L) - TW3	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (ug/L) - TW5	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (ug/L) - TW6	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (ug/L) - TW7	2019/01/08	<MDL 0.01	1.0	No	No
Mercury: Hg (ug/L) - TW8	2019/01/08	<MDL 0.01	1.0	No	No
Selenium: Se (ug/L) - TW1	2020/08/12	0.17	50.0	No	No
Selenium: Se (ug/L) - TW3	2019/01/08	<MDL 0.04	50.0	No	No
Selenium: Se (ug/L) - TW5	2019/01/08	0.17	50.0	No	No
Selenium: Se (ug/L) - TW6	2019/01/08	0.2	50.0	No	No
Selenium: Se (ug/L) - TW7	2019/01/08	0.57	50.0	No	No
Selenium: Se (ug/L) - TW8	2019/01/08	0.52	50.0	No	No
Uranium: U (ug/L) - TW1	2020/08/12	0.806	20.0	No	No
Uranium: U (ug/L) - TW3	2019/01/08	0.432	20.0	No	No
Uranium: U (ug/L) - TW5	2019/01/08	0.588	20.0	No	No
Uranium: U (ug/L) - TW6	2019/01/08	0.578	20.0	No	No

Uranium: U (ug/L) - TW7	2019/01/08	0.765	20.0	No	No
Uranium: U (ug/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	n/a	n/a	1.0	No	No
Nitrite (mg/L) - TW1	n/a	n/a	1.0	No	No
Nitrite (mg/L) - TW1	2020/08/12	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW1	2020/10/06	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW3	2020/01/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW3	n/a	n/a	1.0	No	No
Nitrite (mg/L) - TW3	n/a	n/a	1.0	No	No
Nitrite (mg/L) - TW3	n/a	n/a	1.0	No	No
Nitrite (mg/L) - TW5	2020/01/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW5	2020/04/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW5	2020/07/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW5	2020/10/06	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW6	2020/01/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW6	2020/04/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW6	2020/07/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW6	2020/10/06	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW7	2020/01/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW7	2020/04/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW7	2020/07/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW7	2020/10/06	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW8	2020/01/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW8	2020/04/14	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW8	2020/07/08	<MDL 0.003	1.0	No	No
Nitrite (mg/L) - TW8	2020/10/06	<MDL 0.003	1.0	No	No
Nitrate (mg/L) - TW1	n/a	n/a	10.0	No	No
Nitrate (mg/L) - TW1	n/a	n/a	10.0	No	No
Nitrate (mg/L) - TW1	2020/08/12	0.17	10.0	No	No
Nitrate (mg/L) - TW1	2020/10/06	0.281	10.0	No	No
Nitrate (mg/L) - TW3	2020/01/14	0.016	10.0	No	No
Nitrate (mg/L) - TW3	n/a	n/a	10.0	No	No
Nitrate (mg/L) - TW3	n/a	n/a	10.0	No	No
Nitrate (mg/L) - TW3	n/a	n/a	10.0	No	No

Nitrate (mg/L) - TW5	2020/01/14	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW5	2020/04/14	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW5	2020/07/08	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW5	2020/10/06	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW6	2020/01/14	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW6	2020/04/14	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW6	2020/07/08	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW6	2020/10/06	<MDL 0.006	10.0	No	No
Nitrate (mg/L) - TW7	2020/01/14	0.968	10.0	No	No
Nitrate (mg/L) - TW7	2020/04/14	1.01	10.0	No	No
Nitrate (mg/L) - TW7	2020/07/08	1.15	10.0	No	No
Nitrate (mg/L) - TW7	2020/10/06	1.35	10.0	No	No
Nitrate (mg/L) - TW8	2020/01/14	0.801	10.0	No	No
Nitrate (mg/L) - TW8	2020/04/14	0.83	10.0	No	No
Nitrate (mg/L) - TW8	2020/07/08	1.0	10.0	No	No
Nitrate (mg/L) - TW8	2020/10/06	0.914	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)	6	0.20	0.37	10	0
Distribution - Alkalinity (mg/L)	6	214	219	n/a	n/a
DW location - pH In-House	6	7.21	7.63	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 (ug/L) - TW1	2020/08/12	<MDL 0.02	5.0	No	No

Alachlor (ug/L) - TW3	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (ug/L) - TW5	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (ug/L) - TW6	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (ug/L) - TW7	2019/01/08	<MDL 0.02	5.0	No	No
Alachlor (ug/L) - TW8	2019/01/08	<MDL 0.02	5.0	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW1	2020/08/12	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW3	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW5	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW6	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW7	2019/01/08	<MDL 0.01	5.0	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW8	2019/01/08	<MDL 0.01	5.0	No	No
Azinphos-methyl (ug/L) - TW1	2020/08/12	<MDL 0.05	20.0	No	No
Azinphos-methyl (ug/L) - TW3	2019/01/08	<MDL 0.05	20.0	No	No
Azinphos-methyl (ug/L) - TW5	2019/01/08	<MDL 0.05	20.0	No	No
Azinphos-methyl (ug/L) - TW6	2019/01/08	<MDL 0.05	20.0	No	No
Azinphos-methyl (ug/L) - TW7	2019/01/08	<MDL 0.05	20.0	No	No
Azinphos-methyl (ug/L) - TW8	2019/01/08	<MDL 0.05	20.0	No	No
Benzene (ug/L) - TW1	2020/08/12	<MDL 0.32	1.0	No	No
Benzene (ug/L) - TW3	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (ug/L) - TW5	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (ug/L) - TW6	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (ug/L) - TW7	2019/01/08	<MDL 0.32	1.0	No	No
Benzene (ug/L) - TW8	2019/01/08	<MDL 0.32	1.0	No	No
Benzo(a)pyrene (ug/L) - TW1	2020/08/12	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (ug/L) - TW3	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (ug/L) - TW5	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (ug/L) - TW6	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (ug/L) - TW7	2019/01/08	<MDL 0.004	0.01	No	No
Benzo(a)pyrene (ug/L) - TW8	2019/01/08	<MDL 0.004	0.01	No	No
Bromoxynil (ug/L) - TW1	2020/08/12	<MDL 0.33	5.0	No	No
Bromoxynil (ug/L) - TW3	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (ug/L) - TW5	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (ug/L) - TW6	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (ug/L) - TW7	2019/01/08	<MDL 0.33	5.0	No	No
Bromoxynil (ug/L) - TW8	2019/01/08	<MDL 0.33	5.0	No	No
Carbaryl (ug/L) - TW1	2020/08/12	<MDL 0.05	90.0	No	No
Carbaryl (ug/L) - TW3	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (ug/L) - TW5	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (ug/L) - TW6	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (ug/L) - TW7	2019/01/08	<MDL 0.05	90.0	No	No
Carbaryl (ug/L) - TW8	2019/01/08	<MDL 0.05	90.0	No	No

Carbofuran (ug/L) - TW1	2020/08/12	<MDL 0.01	90.0	No	No
Carbofuran (ug/L) - TW3	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (ug/L) - TW5	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (ug/L) - TW6	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (ug/L) - TW7	2019/01/08	<MDL 0.01	90.0	No	No
Carbofuran (ug/L) - TW8	2019/01/08	<MDL 0.01	90.0	No	No
Carbon Tetrachloride (ug/L) - TW1	2020/08/12	<MDL 0.17	2.0	No	No
Carbon Tetrachloride (ug/L) - TW3	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (ug/L) - TW5	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (ug/L) - TW6	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (ug/L) - TW7	2019/01/08	<MDL 0.16	2.0	No	No
Carbon Tetrachloride (ug/L) - TW8	2019/01/08	<MDL 0.16	2.0	No	No
Chlorpyrifos (ug/L) - TW1	2020/08/12	<MDL 0.02	90.0	No	No
Chlorpyrifos (ug/L) - TW3	2019/01/08	<MDL 0.02	90.0	No	No
Chlorpyrifos (ug/L) - TW5	2019/01/08	<MDL 0.02	90.0	No	No
Chlorpyrifos (ug/L) - TW6	2019/01/08	<MDL 0.02	90.0	No	No
Chlorpyrifos (ug/L) - TW7	2019/01/08	<MDL 0.02	90.0	No	No
Chlorpyrifos (ug/L) - TW8	2019/01/08	<MDL 0.02	90.0	No	No
Diazinon (ug/L) - TW1	2020/08/12	<MDL 0.02	20.0	No	No
Diazinon (ug/L) - TW3	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (ug/L) - TW5	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (ug/L) - TW6	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (ug/L) - TW7	2019/01/08	<MDL 0.02	20.0	No	No
Diazinon (ug/L) - TW8	2019/01/08	<MDL 0.02	20.0	No	No
Dicamba (ug/L) - TW1	2020/08/12	<MDL 0.2	120.0	No	No
Dicamba (ug/L) - TW3	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (ug/L) - TW5	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (ug/L) - TW6	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (ug/L) - TW7	2019/01/08	<MDL 0.2	120.0	No	No
Dicamba (ug/L) - TW8	2019/01/08	<MDL 0.2	120.0	No	No
1,2-Dichlorobenzene (ug/L) - TW1	2020/08/12	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (ug/L) - TW3	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (ug/L) - TW5	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (ug/L) - TW6	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (ug/L) - TW7	2019/01/08	<MDL 0.41	200.0	No	No
1,2-Dichlorobenzene (ug/L) - TW8	2019/01/08	<MDL 0.41	200.0	No	No
1,4-Dichlorobenzene (ug/L) - TW1	2020/08/12	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (ug/L) - TW3	2019/01/08	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (ug/L) - TW5	2019/01/08	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (ug/L) - TW6	2019/01/08	<MDL 0.36	5.0	No	No
1,4-Dichlorobenzene (ug/L) - TW7	2019/01/08	<MDL 0.36	5.0	No	No

1,4-Dichlorobenzene (ug/L) - TW8	2019/01/08	<MDL 0.36	5.0	No	No
1,2-Dichloroethane (ug/L) - TW1	2020/08/12	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (ug/L) - TW3	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (ug/L) - TW5	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (ug/L) - TW6	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (ug/L) - TW7	2019/01/08	<MDL 0.35	5.0	No	No
1,2-Dichloroethane (ug/L) - TW8	2019/01/08	<MDL 0.35	5.0	No	No
1,1-Dichloroethylene (ug/L) - TW1	2020/08/12	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (ug/L) - TW3	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (ug/L) - TW5	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (ug/L) - TW6	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (ug/L) - TW7	2019/01/08	<MDL 0.33	14.0	No	No
1,1-Dichloroethylene (ug/L) - TW8	2019/01/08	<MDL 0.33	14.0	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW1	2020/08/12	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW3	2019/01/08	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW5	2019/01/08	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW6	2019/01/08	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW7	2019/01/08	<MDL 0.35	50.0	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW8	2019/01/08	<MDL 0.35	50.0	No	No
2,4-Dichlorophenol (ug/L) - TW1	2020/08/12	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (ug/L) - TW3	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (ug/L) - TW5	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (ug/L) - TW6	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (ug/L) - TW7	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenol (ug/L) - TW8	2019/01/08	<MDL 0.15	900.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW1	2020/08/12	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW3	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW5	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW6	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW7	2019/01/08	<MDL 0.19	100.0	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW8	2019/01/08	<MDL 0.19	100.0	No	No
Diclofop-methyl (ug/L) - TW1	2020/08/12	<MDL 0.4	9.0	No	No
Diclofop-methyl (ug/L) - TW3	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (ug/L) - TW5	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (ug/L) - TW6	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (ug/L) - TW7	2019/01/08	<MDL 0.4	9.0	No	No
Diclofop-methyl (ug/L) - TW8	2019/01/08	<MDL 0.4	9.0	No	No
Dimethoate (ug/L) - TW1	2020/08/12	<MDL 0.06	20.0	No	No
Dimethoate (ug/L) - TW3	2019/01/08	<MDL 0.06	20.0	No	No
Dimethoate (ug/L) - TW5	2019/01/08	<MDL 0.06	20.0	No	No
Dimethoate (ug/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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020/08/12	<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	2020 (Quarterly)	2.875	100.0	No	No
Trihalomethane: Total (µg/L) Annual Average - DW2	2020 (Quarterly)	3.125	100.0	No	No
HAA Total (µg/L) Annual Average - DW1	2020 (Quarterly)	5.3	80.0	No	No
HAA Total (µg/L) Annual Average - DW2	2020 (Quarterly)	5.3	80.0	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: As (ug/L) - TW1	5.7	µg/L	2020/10/06
Arsenic: As (ug/L) - TW3	9.4	µg/L	2020/01/14
Arsenic: As (ug/L) - TW5*	7.2	µg/L	2020/10/06
Arsenic: As (ug/L) - TW6*	5.7	µg/L	2020/10/06
Fluoride (mg/L) - TW1	1.05	mg/L	2018/02/14
Fluoride (mg/L) - TW3	1.1	mg/L	2018/02/14
Fluoride (mg/L) - TW5	1.2	mg/L	2018/02/14
Fluoride (mg/L) - TW6	1.12	mg/L	2018/02/14

*Well 5 and 6 samples were blended with Well 7 and 8 and sampled at the blended building

The Shelburne Drinking Water System was last inspected by the Ministry of the Environment, Conservation, and Parks on September 15, 2020.