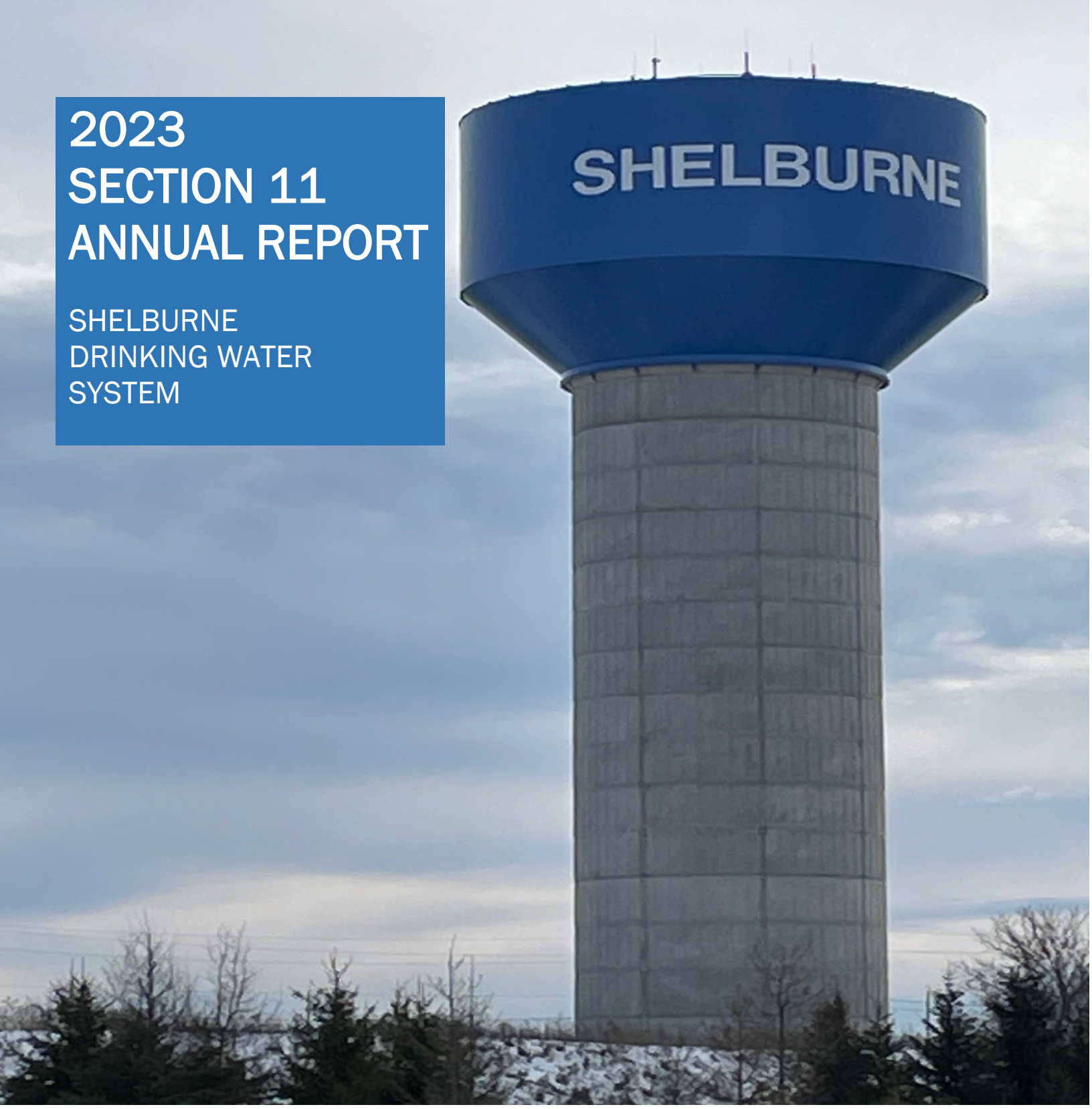
2023 SECTION 11 ANNUAL REPORT

SHELBURNE DRINKING WATER SYSTEM



For the period of
January 1st, 2023 to December 31st, 2023

Prepared for the Corporation of 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

This report was prepared in accordance with the requirements of *O.Reg 170/03, Section 11, Annual reports* for the following system and reporting period:

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, 2023 – December 31, 2023

Does your Drinking-Water System serve more than 10,000 people?

No

Is your Annual Report available to the public at no charge on a web site on the Internet?

Yes

Note: If a large municipal residential system serves more than 10,000 people, the owner of the system shall ensure that a copy of every report prepared under this section is available to the public at no charge on a website on the Internet. O. Reg. 170/03, Section 11. (10)

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection *(O.Reg 170/03, Section 11.(6)(f)):*

- Town of Shelburne Office, 203 Main Street East, Shelburne, Ontario, L9V 3K7
- https://www.shelburne.ca/en/index.aspx

Note: this is required for large municipal residential systems or small municipal residential systems.

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?

N/A

How system users are notified that the 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: _____

Note: The owner of a drinking water system shall ensure that a copy of an annual report for the system is given, without charge, to every person who requests a copy. ((O.Reg 170/03, Section 11.(7)):

Describe your Drinking-Water System (O.Reg 170/03, Section 11.(6)(a)):

The Shelburne Drinking Water System is classified as a Class II Water Distribution and Supply Subsystem and as of January 23, 2024 as Class II Water Treatment Subsystem. Under O.Reg 170/03 the Shelburne DWS is categorized as a Large Municipal Drinking Water System, servicing an approximate population of 9,384 persons. The system is comprised of four pumphouses, including Well 1, 3, 5/6 and 7/8 Pumphouses which draw water from six production wells. The four pumphouses supply water through the distribution system and into the 2 elevated storage reservoir (Water Towers).

The raw water for Well 1 pumphouse is supplied from one drilled groundwater well (PW1), which is classified as a groundwater under direct influence (GUDI) well. The water pumped from the wells is treated with Waterworx (for iron sequestration), UV and sodium hypochlorite (for primary and secondary disinfection). The treated water is stored in two chlorine contact tanks prior to entering the distribution system. Online equipment continuously monitors and records free chlorine residual and flowrates. This pumphouse is currently offline while rehabilitation and testing is being performed to bring the well back to its original flow rate. The pumphouse/ Well PW1 has been offline since January 2020.

The raw water for Well 3 pumphouse is supplied from one drilled groundwater wells (PW3). The water pumped from the wells is treated with Waterworx (for iron sequestration) and sodium hypochlorite (for primary and secondary disinfection). The treated water is stored in a watermain on the property for purpose of providing minimum chlorine contact time prior to entering the distribution system. Online equipment continuously monitors and records free chlorine residual and flowrates. Well PW3 has been offline since April 2020, this pumphouse is undergoing upgrades with commissioning scheduled for 2024.

The raw water for Well 5/6 and 7/8 pumphouses is supplied from four drilled groundwater wells (PW5, PW6, PW7 and PW8). The water pumped from the wells is treated with Waterworx (for iron sequestration) and sodium hypochlorite (for primary and secondary disinfection). The treated water for Well 5/6 is stored in a watermain on the property for the purpose of providing minimum chlorine contact time prior to entering blending building. The treated water for Well 7/8 is stored in a chlorine contact pipe, which is then discharged to the blending building located at Well 5/6 pumphouse. The treated/blended water from the blended building is then entered into the distribution system. Online equipment continuously monitors and records free chlorine residual and flowrates. The pumphouses are also equipped with standby power in the event of a power failure.

List of water treatment chemicals used by the system during the reporting period (O.Reg 170/03, Section 11.(6)(a)):

- Sodium Hypochlorite 12% Solution
- Waterworx 28% Solution

Significant expenses were incurred to:

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

Description of major expenses during the reporting period to install, repair or replace required equipment *(O.Reg 170/03, Section 11.(6)(e))*:

- South Water Tower Commissioning
- Well 3 Rehabilitation/Upgrades
- Category 2 Water Main Break repairs (110/112 Main Street East)
- Category 2 Water Main Break repairs (214 Main Street East)
- Category 2 Water Main Break repairs (120/124 Main Street East)

Summary of any reports/notices submitted to the Ministry and/or Spills Action Centre in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 during the reporting period, including a description of any corrective actions taken under Schedule 17 or 18

(O.Reg 170/03, Section 11.(6)(b),(d):

Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit	Summary of Reporting, Corrective Actions & Resolution
2023/04/11	N/A	N/A	• AWQI# 161728 – Category 2 Water Main Break at 110/112 Main Street East • Town of Shelburne notified MECP and SAC April 11, 2023 and Local Health Unit April 12, 2023. • Boil Water Advisory put into place by the Town/OCWA and Local MOH. • Repairs, flushing and required sampling completed as required on April 12, 2023 and April 13, 2023 • Sample results received and boil water advisory lifted April 15, 2023. • Written notice of resolution submitted on April 19, 2023. No further actions required.
2023/07/09	N/A	N/A	• AWQI# 162495 – Category 2 Water Main Break at 214 Main Street East. Was a scheduled valve replacement • OCWA and Town of Shelburne notified Local Health Unit, MECP and SAC July 9, 2023. • Boil Water Advisory put into place by the Town. • Repairs, flushing and required sampling completed as required on July 10, 2023 and July 11, 2023. • Sample results received and boil water advisory lifted July 13, 2023 • Written notice of resolution submitted on July 13, 2023. No further actions required.

Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit	Summary of Reporting, Corrective Actions & Resolution
2023/11/20	N/A	N/A	• AWQI# 164064 – Category 2 Water Main Break at 120/124 Main Street East • Town of Shelburne notified Local Health Unit, MECP and SAC November 20, 2023. • Boil Water Advisory put into place by the Town. • Repairs, flushing and required sampling completed as required on November 20, 2023 and November 22, 2023. • Sample results received and boil water advisory lifted November 24, 2023. • Written notice of resolution submitted on November 24, 2023. No further actions required.

Table 1: Microbiological testing done under the Schedule 10 of Regulation 170/03 during this reporting period (O.Reg 170/03, Section 11.(6)(c)).

Location	Number of Samples	Range of E. Coli or Fecal Results		Range of Total Coliforms Results		Number of HPC Samples	Range of HPC Samples	
		Min.	Max.	Min.	Max.		Min.	Max.
Raw Water - Well PW1[1A]	0[1D]	-	-	-	-	n/a	n/a	n/a
Raw Water - Well PW3[1A]	0[1D]	-	-	-	-	n/a	n/a	n/a
Raw Water - Well PW5[1A]	52	0	0	0	0	n/a	n/a	n/a
Raw Water - Well PW6[1A]	52	0	0	0	0	n/a	n/a	n/a
Raw Water - Well PW7[1A]	52	0	0	0	0	n/a	n/a	n/a
Raw Water - Well PW8[1A]	52	0	0	0	0	n/a	n/a	n/a
Treated Water - Well PW1[1B]	0[1B]	-	-	-	-	0[1E]	-	-
Treated Water - Well PW3[1B]	0[1B]	-	-	-	-	0[1E]	-	-
Treated Water - Well PW5[1B]	52	0	0	0	0	52	0	5
Treated Water - Well PW6[1B]	52	0	0	0	0	52	0	4
Treated Water - Well PW7[1B]	52	0	0	0	0	52	0	89
Treated Water - Well PW8[1B]	52	0	0	0	0	52	0	5
Distribution Water[1C]	274	0	0	0	0	260	0	17

Note: HPC = Heterotrophic Plate Count

Note: Units for E.Coli or Fecal Results are cfu/100 mL, units for Total Coliform Results are cfu/100 mL, units for HPC results are cfu/1mL

[1A]O.Reg 170/03, Schedule 10-4. (1)(3) requires for a large municipal residential system that a water sample is taken at least once every week from the drinking water system's raw water, before any treatment is applied to the water and tested for E.Coli and total coliforms.

[1B]O Reg 170/03, Schedule 10-3 requires for a large municipal residential system that a treated water sample is taken at least once every week and tested for E.Coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic count (HPC).

[1C]O.Reg 170/03 Schedule 10-2.(1)(2)(3) requires that a system that serves 100,000 people or less, at least eight distribution samples, plus one additional distribution sample for every 1,000 people served by the system, are taken every month, with at least one of the samples being taken in each week and that each of the samples taken is tested for E.Coli, Total Coliforms. At least 25 percent of the samples required must be tested for general bacteria population expressed as colony counts on heterotrophic plate count (HPC). As of 2023, the population of Shelburne is 8,994 persons, as confirmed by the owner on November 17, 2022 and thus requires at the minimum 18 monthly distribution samples.

[1D]Raw water samples were not collected in 2023 for Well 1 and Well 3. Well 1 has been offline since January, 2020 and Well 3 has been out of service since April, 2020 for upgrades.

[1E]Treated water samples were not collected in 2023 as both of its source wells were offline for the duration of the reporting period.

Table 2: Operational testing done under Schedule 7 of Regulation 170/03 during the period covered by this Annual Report (O.Reg 170/03, Section 11.(6)(c)).

Parameter & Location	Number of Samples	Range of Results	
		Min.	Max.
Turbidity (NTU) - Raw Water - Well PW1[2A]	0[2D]	-	-
Turbidity (NTU) - Raw Water - Well PW3[2A]	0[2D]	-	-
Turbidity (NTU) - Raw Water - Well PW5[2A]	12	0.09	0.68
Turbidity (NTU) - Raw Water - Well PW6[2A]	12	0.10	0.46
Turbidity (NTU) - Raw Water - Well PW7[2A]	12	0.09	0.58
Turbidity (NTU) - Raw Water - Well PW8[2A]	12	0.09	0.80
Free Chlorine Residual, On-Line (mg/L) – Treated Well PW1[2B]	0[2E]	-	-
Free Chlorine Residual, On-Line (mg/L) – Treated Well PW3[2B]	0[2E]	-	-
Free Chlorine Residual, On-Line (mg/L) – Treated Well PW5[2B]	8760	0.29	4.65
Free Chlorine Residual, On-Line (mg/L) – Treated Well PW6[2B]	8760	0.37	4.36
Free Chlorine Residual, On-Line (mg/L) – Treated Well PW7[2B]	8760	0.90	2.23
Free Chlorine Residual, On-Line (mg/L) – Treated Well PW8[2B]	8760	0.84	2.63
Free Chlorine Residual, Distribution Water (mg/L) - DW[2C]	365	0.82	1.58

Note: The number of samples used for continuous monitoring units is 8760.

[2A]O.Reg 170/03 Schedule 7-3.(1)(1.1) requires a raw water sample be taken at least once every month from each well that is supplying water to the system and tested for turbidity.

[2B]O.Reg 170/03 Schedule 7-2.(1) requires a drinking water system that provides chlorination for primary disinfection to sample and test for free chlorine residual with continuous monitoring equipment in the treatment process at or near a location where the intended contact time has just been completed.

[2C]O.Reg 170/03 Schedule 7-2.(3)(4) requires a large municipal residential system that provides secondary disinfection to take at least seven distribution samples each week and immediately tested for free chlorine residual, if the system provides chlorination and does not provide chloramination, unless at least one

sample is taken on each day of the week. At the Shelburne DWS, secondary disinfection is monitored by taking one sample each day of the week.

[2D]Monthly raw water turbidity samples were not taken during the reporting period. Well 1 was offline and Well 3 out of service for upgrades during the reporting period.

[2E]Continuous free chlorine residuals were not sampled/taken and tested at TW-PW1 and TW-PW3 in 2023 as their supplying wells were offline for the duration of the reporting period.

Table 3: Summary of additional testing and sampling results carried out in accordance with the requirement of an approval, municipal drinking water licence (MDWL) or order (including OWRA) or other legal instrument. (O.Reg 170/03, Section 11.(6)(c))

Legal Instrument & Issue Date (yyyy/mm/dd)	**Sample Location & Parameter**	**Sampling Frequency**	**Sample Date** (yyyy/mm/dd)	**Sample Results**
MDWL 109-101, Issue 6 2021/05/31	Pumphouse PH 5/6 Arsenic[3A]	Quarterly	2023/01/03	TW5: 14.6 µg/L
			2023/04/04	TW5: 14.2 µg/L
			2023/07/18	TW5: 13.0 µg/L
			2023/10/03	TW5: 12.6 µg/L
			2023/01/03	TW6: 14.1 µg/L
			2023/04/04	TW6: 14.5 µg/L
			2023/07/18	TW6: 0.80 µg/L
			2023/10/03	TW6: 12.6 µg/L
	Pumphouse PH 7/8 Arsenic[3A]	Quarterly	2023/01/03	TW7: 0.4 µg/L
			2023/04/04	TW7: 0.5 µg/L
			2023/07/18	TW7: 0.3 µg/L
			2023/10/03	TW7: 0.4 µg/L
			2023/01/03	TW8: 0.5 µg/L
			2023/04/04	TW8: 0.5 µg/L
			2023/07/18	TW8: 0.5 µg/L
			2023/10/03	TW8: 0.5 µg/L
	Water Tower Arsenic[3A]	Quarterly	2023/01/03	6.1 µg/L
			2023/04/04	5.0 µg/L
			2023/07/04	5.3 µg/L
			2023/10/03	4.8 µg/L
	Blended Treated Water or Distribution Water (before first consumer) Arsenic	Quarterly	2023/01/03	TW Blended: 8.1 µg/L
			2023/04/04	TW Blended: 8.0 µg/L
			2023/07/04	TW Blended: 7.5 µg/L
			2023/10/03	TW Blended: 7.0 µg/L
			2023/01/03	TW 1st Service: 5.9 µg/L
			2023/04/04	TW 1st Service: 6.3 µg/L
			2023/07/04	TW 1st Service: 5.6 µg/L
			2023/10/03	TW 1st Service: 5.5 µg/L

[3A]As per MDWL Section 5.0 (Table 5) Arsenic is required on a quarterly basis at the monitoring location PH5/6, PH7/8, Water Tower and either a)blending building after mixing 5/6 and 7/8 water or, b)distribution system before first consumer. Quarterly samples at PH 5/6 and PH 7/8 are to determine arsenic concentrations prior to blending for operational and monitoring purposes (non-reportable). Quarterly samples at the Water Tower and Blending building or Distribution system prior to first consumer are to assess arsenic concentration in the drinking water sent to consumers and are considered to be reportable treated water samples.

Table 4: Summary of Inorganic parameters tested during this reporting period or the most recent sample results[4A] (O.Reg 170/03, Section 11.(6)(c))

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Antimony: Sb (µg/L) - TW1	2021/07/20	<MDL 0.9	6.0	No
Antimony: Sb (µg/L) - TW3	2019/01/08	0.03	6.0	No
Antimony: Sb (µg/L) - TW5	2021/01/05	<MDL 0.9	6.0	No
Antimony: Sb (µg/L) - TW6	2021/01/05	<MDL 0.9	6.0	No
Antimony: Sb (µg/L) - TW7	2021/01/05	<MDL 0.9	6.0	No
Antimony: Sb (µg/L) - TW8	2021/01/05	<MDL 0.9	6.0	No
Arsenic: As (µg/L) - TW1	2021/07/20	19.1	10.0	Yes
Arsenic: As (µg/L) - TW3	2020/01/14	9.4	10.0	No
Arsenic: As (µg/L) - TW5	2021/01/05	12.1	10.0	Yes
Arsenic: As (µg/L) - TW6	2021/01/05	11.6	10.0	No
Arsenic: As (µg/L) - TW7	2021/01/05	0.5	10.0	No
Arsenic: As (µg/L) - TW8	2021/01/05	0.7	10.0	No
Barium: Ba (µg/L) - TW1	2021/07/20	115.0	1000.0	No
Barium: Ba (µg/L) - TW3	2019/01/08	130.0	1000.0	No
Barium: Ba (µg/L) - TW5	2021/01/05	107.0	1000.0	No
Barium: Ba (µg/L) - TW6	2021/01/05	106.0	1000.0	No
Barium: Ba (µg/L) - TW7	2021/01/05	17.0	1000.0	No
Barium: Ba (µg/L) - TW8	2021/01/05	16.7	1000.0	No
Boron: B (µg/L) - TW1	2021/07/20	20.0	5000.0	No
Boron: B (µg/L) - TW3	2019/01/08	29.0	5000.0	No
Boron: B (µg/L) - TW5	2021/01/05	29.0	5000.0	No
Boron: B (µg/L) - TW6	2021/01/05	28.0	5000.0	No
Boron: B (µg/L) - TW7	2021/01/05	7.0	5000.0	No
Boron: B (µg/L) - TW8	2021/01/05	6.0	5000.0	No
Cadmium: Cd (µg/L) - TW1	2021/07/20	0.036	5.0	No
Cadmium: Cd (µg/L) - TW3	2019/01/08	<MDL 0.003	5.0	No
Cadmium: Cd (µg/L) - TW5	2021/01/05	0.007	5.0	No
Cadmium: Cd (µg/L) - TW6	2021/01/05	<MDL 0.003	5.0	No
Cadmium: Cd (µg/L) - TW7	2021/01/05	0.023	5.0	No
Cadmium: Cd (µg/L) - TW8	2021/01/05	0.019	5.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Chromium: Cr (µg/L) - TW1	2021/07/20	0.3	50.0	No
Chromium: Cr (µg/L) - TW3	2019/01/08	0.1	50.0	No
Chromium: Cr (µg/L) - TW5	2021/01/05	0.12	50.0	No
Chromium: Cr (µg/L) - TW6	2021/01/05	0.13	50.0	No
Chromium: Cr (µg/L) - TW7	2021/01/05	0.14	50.0	No
Chromium: Cr (µg/L) - TW8	2021/01/05	0.14	50.0	No
Mercury: Hg (µg/L) - TW1	2021/07/20	<MDL 0.01	1.0	No
Mercury: Hg (µg/L) - TW3	2019/01/08	<MDL 0.01	1.0	No
Mercury: Hg (µg/L) - TW5	2021/01/05	<MDL 0.01	1.0	No
Mercury: Hg (µg/L) - TW6	2021/01/05	<MDL 0.01	1.0	No
Mercury: Hg (µg/L) - TW7	2021/01/05	<MDL 0.01	1.0	No
Mercury: Hg (µg/L) - TW8	2021/01/05	<MDL 0.01	1.0	No
Selenium: Se (µg/L) - TW1	2021/07/20	0.38	50.0	No
Selenium: Se (µg/L) - TW3	2019/01/08	<MDL 0.04	50.0	No
Selenium: Se (µg/L) - TW5	2021/01/05	<MDL 0.04	50.0	No
Selenium: Se (µg/L) - TW6	2021/01/05	<MDL 0.04	50.0	No
Selenium: Se (µg/L) - TW7	2021/01/05	0.64	50.0	No
Selenium: Se (µg/L) - TW8	2021/01/05	0.53	50.0	No
Uranium: U (µg/L) - TW1	2021/07/20	0.631	20.0	No
Uranium: U (µg/L) - TW3	2019/01/08	0.432	20.0	No
Uranium: U (µg/L) - TW5	2021/01/05	0.569	20.0	No
Uranium: U (µg/L) - TW6	2021/01/05	0.535	20.0	No
Uranium: U (µg/L) - TW7	2021/01/05	0.832	20.0	No
Uranium: U (µg/L) - TW8	2021/01/05	0.712	20.0	No
Additional Inorganics				
Fluoride (mg/L) - TW1	2018/02/14	1.05	1.5	No
Fluoride (mg/L) - TW3	2018/02/14	1.1	1.5	No
Fluoride (mg/L) - TW5	2023/02/07	1.11	1.5	No
Fluoride (mg/L) - TW6	2023/02/07	1.07	1.5	No
Fluoride (mg/L) - TW7	2023/02/07	0.13	1.5	No
Fluoride (mg/L) - TW8	2023/02/07	0.14	1.5	No
Nitrite (mg/L) - TW1[4C]	-	-	1.0	-
Nitrite (mg/L) - TW1[4C]	-	-	1.0	-
Nitrite (mg/L) - TW1[4C]	-	-	1.0	-
Nitrite (mg/L) - TW1[4C]	-	-	1.0	-
Nitrite (mg/L) - TW3[4C]	-	-	1.0	-
Nitrite (mg/L) - TW3[4C]	-	-	1.0	-
Nitrite (mg/L) - TW3[4C]	-	-	1.0	-

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Nitrite (mg/L) - TW3[4C]	-	-	1.0	-
Nitrite (mg/L) - TW5	2023/01/03	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW5	2023/04/04	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW5	2023/07/18	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW5	2023/10/03	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW6	2023/01/03	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW6	2023/04/04	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW6	2023/07/18	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW6	2023/10/03	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW7	2023/01/03	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW7	2023/04/04	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW7	2023/07/18	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW7	2023/10/03	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW8	2023/01/03	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW8	2023/04/04	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW8	2023/07/18	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW8	2023/10/03	<MDL 0.003	1.0	No
Nitrate (mg/L) - TW1[4C]	-	-	10.0	-
Nitrate (mg/L) - TW1[4C]	-	-	10.0	-
Nitrate (mg/L) - TW1[4C]	-	-	10.0	-
Nitrate (mg/L) - TW1[4C]	-	-	10.0	-
Nitrate (mg/L) - TW3[4C]	-	-	10.0	-
Nitrate (mg/L) - TW3[4C]	-	-	10.0	-
Nitrate (mg/L) - TW3[4C]	-	-	10.0	-
Nitrate (mg/L) - TW3[4C]	-	-	10.0	-
Nitrate (mg/L) - TW5	2023/01/03	<MDL 0.006	10.0	No
Nitrate (mg/L) - TW5	2023/04/04	<MDL 0.006	10.0	No
Nitrate (mg/L) - TW5	2023/07/18	<MDL 0.006	10.0	No
Nitrate (mg/L) - TW5	2023/10/03	<MDL 0.006	10.0	No
Nitrate (mg/L) - TW6	2023/01/03	<MDL 0.006	10.0	No
Nitrate (mg/L) - TW6	2023/04/04	<MDL 0.006	10.0	No
Nitrate (mg/L) - TW6	2023/07/18	1.71	10.0	No
Nitrate (mg/L) - TW6	2023/10/03	<MDL 0.006	10.0	No
Nitrate (mg/L) - TW7	2023/01/03	1.72	10.0	No
Nitrate (mg/L) - TW7	2023/04/04	1.9	10.0	No
Nitrate (mg/L) - TW7	2023/07/18	2.41	10.0	No
Nitrate (mg/L) - TW7	2023/10/03	1.8	10.0	No
Nitrate (mg/L) - TW8	2023/01/03	1.52	10.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Nitrate (mg/L) - TW8	2023/04/04	1.43	10.0	No
Nitrate (mg/L) - TW8	2023/07/18	1.72	10.0	No
Nitrate (mg/L) - TW8	2023/10/03	1.23	10.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Aesthetic Objective (AO)	Exceedance	
				AO	> 20 mg/L
Sodium: Na (mg/L) – TW1	2018/02/21[4D]	82.0	200	No	Yes[4E]
Sodium: Na (mg/L) – TW1	2018/02/22[4D]	105.0	200	No	Yes[4E]
Sodium: Na (mg/L) – TW3	2018/02/14[4D]	12.7	200	No	No
Sodium: Na (mg/L) – TW5	2023/02/07[4D]	12.9	200	No	No
Sodium: Na (mg/L) – TW6	2023/02/07[4D]	15.2	200	No	No
Sodium: Na (mg/L) – TW7	2023/02/07[4D]	3.9	200	No	No
Sodium: Na (mg/L) – TW8	2023/02/07[4D]	3.24	200	No	No

Note: MDL = Minimum Detection Limit, TW = Treated Water

Note: There is no regulatory Maximum Allowable Concentration (MAC) Sodium. The aesthetic objective (AO) for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

[4A]Inorganic Parameters (Schedule 23) are required to be tested every 36 months for a large municipal residential system (O. Reg 170/03 Schedule 13-2.(1)). The most recent set of samples for Inorganic Parameters for TW3 were completed in 2019 as the well and treated water source has been offline. Regulatory sampling and testing for Inorganic Parameters will be completed prior to putting the wells and treated water source back online. For all other TW sources (TW1, TW5, TW6, TW7 and TW8) The last set of samples were collected and tested in 2021, the next set of samples is scheduled to be collected and tested in 2024. The Arsenic samples in Table 4 was collected as part of the requirements of O.Reg 170/03 Schedule 13-2.

[4B]Fluoride is reportable every 60 months. The most recent fluoride samples were taken in 2018 for TW1 and TW3 as the wells were offline. Regulatory sampling and testing will be completed for Fluoride will be completed prior to putting the wells and treated water source back online. For all other TW sources (TW5, TW6, TW7 and TW8) the most recent set of samples were taken in 2023. The next set of fluoride samples is scheduled to be tested in 2028.

[4C]Quarterly sampling for Nitrates and Nitrites, as required under O.Reg 170/03, Schedule 13-7 was not completed for TW1 and TW3 as the wells and TW sources were offline in 2023. Quarterly sampling to commence once the wells and TW sources are placed back online.

[4D]Sodium is reportable every 60 months. The most recent sodium samples were taken in 2018 for TW1 and TW3 as the wells were offline. Regulatory sampling and testing will be completed for Fluoride will be completed prior to putting the wells and treated water source back online. For all other TW sources (TW5,

TW6, TW7 and TW8) the most recent set of samples were taken in 2023. The next set of fluoride samples is scheduled to be tested in 2028.

[4E]Initial sample of sodium taken February 21, 2018 result 82 mg/L, was reported as AWQI 138776 with corrective actions of re-sampling. Re-sample was completed February 22, 2018 result 105 mg/L. Public Health distributed information on elevated sodium levels to the Town of Shelburne for Public Notice.

Table 5: Summary of lead testing under Schedule 15.1 during this reporting period (O.Reg 170/03, Section 11.(6)(g))

Location/Type & Parameter	Number of Samples	Range of Results		Number of Lead Exceedances (MAC = 10 µ/L)
		Min.	Max.	
Period: January 1 to April 15				
Plumbing – Lead (µg/L) [5B]	N/A	N/A	N/A	0
Distribution – Lead (µg/L) [5C]	3	0.16	0.29	0
Distribution – Alkalinity (mg/L as $CaCO_3$)	3	220	247	N/A
Distribution – pH	3	7.30	7.50	N/A
Period: June 15 to October 15				
Plumbing – Lead (µg/L) [5B]	N/A	N/A	N/A	0
Distribution – Lead (µg/L) [5C]	3	0.22	0.30	0
Distribution – Alkalinity (mg/L as $CaCO_3$)	3	219	221	N/A
Distribution – pH	3	7.20	7.50	N/A
Period: December 15 to 31				
Plumbing – Lead (µg/L) [5B]	N/A	N/A	N/A	0
Distribution – Lead (µg/L) [5C]	N/A	N/A	N/A	0
Distribution – Alkalinity (mg/L as $CaCO_3$)	N/A	N/A	N/A	N/A
Distribution - pH	N/A	N/A	N/A	N/A

Note: this is required for large municipal residential systems, small municipal residential systems or non-municipal year-round residential system.

[5A]This system follows a reduced sampling schedule (O.Reg 170/03, Section 15.1.5). The number of sampling points for the system is based on the population served by the system. The number of people served by the system is 8,994 persons, as confirmed by the owner on November 17, 2022 and therefore requires 3 distribution sampling points per sampling period.

[5B]Plumbing samples are not applicable as this system qualifies for the plumbing exemption per O. Reg 170/03 Schedule 15.1-5 (9) (10).

[5C]Distribution lead samples are taken every 36 months. The next set of distribution lead samples is scheduled to be sampled during the winter period of December 15, 2025 to April 15, 2026 and summer period of June 15, 2026 to October 15, 2026.

Table 6: Summary of Organic parameters sampled during this reporting period or the most recent sample results[6A] *(O.Reg 170/03, Section 11.(6)(c)).*

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Alachlor (µg/L) - TW1	2021/07/20	<MDL 0.02	5.0	No
Alachlor (µg/L) - TW3	2019/01/08	<MDL 0.02	5.0	No
Alachlor (µg/L) - TW5	2021/01/05	<MDL 0.02	5.0	No
Alachlor (µg/L) - TW6	2021/01/05	<MDL 0.02	5.0	No
Alachlor (µg/L) - TW7	2021/01/05	<MDL 0.02	5.0	No
Alachlor (µg/L) - TW8	2021/01/05	<MDL 0.02	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW1	2021/07/20	<MDL 0.01	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW3	2019/01/08	<MDL 0.01	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW5	2021/01/05	<MDL 0.01	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW6	2021/01/05	<MDL 0.01	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW7	2021/01/05	<MDL 0.01	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW8	2021/01/05	<MDL 0.01	5.0	No
Azinphos-methyl (µg/L) - TW1	2021/07/20	<MDL 0.05	20.0	No
Azinphos-methyl (µg/L) - TW3	2019/01/08	<MDL 0.05	20.0	No
Azinphos-methyl (µg/L) - TW5	2021/01/05	<MDL 0.05	20.0	No
Azinphos-methyl (µg/L) - TW6	2021/01/05	<MDL 0.05	20.0	No
Azinphos-methyl (µg/L) - TW7	2021/01/05	<MDL 0.05	20.0	No
Azinphos-methyl (µg/L) - TW8	2021/01/05	<MDL 0.05	20.0	No
Benzene (µg/L) - TW1	2021/07/20	<MDL 0.32	1.0	No
Benzene (µg/L) - TW3	2019/01/08	<MDL 0.32	1.0	No
Benzene (µg/L) - TW5	2021/01/05	<MDL 0.32	1.0	No
Benzene (µg/L) - TW6	2021/01/05	<MDL 0.32	1.0	No
Benzene (µg/L) - TW7	2021/01/05	<MDL 0.32	1.0	No
Benzene (µg/L) - TW8	2021/01/05	<MDL 0.32	1.0	No
Benzo(a)pyrene (µg/L) - TW1	2021/07/20	<MDL 0.004	0.01	No
Benzo(a)pyrene (µg/L) - TW3	2019/01/08	<MDL 0.004	0.01	No
Benzo(a)pyrene (µg/L) - TW5	2021/01/05	<MDL 0.004	0.01	No
Benzo(a)pyrene (µg/L) - TW6	2021/01/05	<MDL 0.004	0.01	No
Benzo(a)pyrene (µg/L) - TW7	2021/01/05	<MDL 0.004	0.01	No
Benzo(a)pyrene (µg/L) - TW8	2021/01/05	<MDL 0.004	0.01	No
Bromoxynil (µg/L) - TW1	2021/07/20	<MDL 0.33	5.0	No
Bromoxynil (µg/L) - TW3	2019/01/08	<MDL 0.33	5.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Bromoxynil (µg/L) - TW5	2021/01/05	<MDL 0.33	5.0	No
Bromoxynil (µg/L) - TW6	2021/01/05	<MDL 0.33	5.0	No
Bromoxynil (µg/L) - TW7	2021/01/05	<MDL 0.33	5.0	No
Bromoxynil (µg/L) - TW8	2021/01/05	<MDL 0.33	5.0	No
Carbaryl (µg/L) - TW1	2021/07/20	<MDL 0.05	90.0	No
Carbaryl (µg/L) - TW3	2019/01/08	<MDL 0.05	90.0	No
Carbaryl (µg/L) - TW5	2021/01/05	<MDL 0.05	90.0	No
Carbaryl (µg/L) - TW6	2021/01/05	<MDL 0.05	90.0	No
Carbaryl (µg/L) - TW7	2021/01/05	<MDL 0.05	90.0	No
Carbaryl (µg/L) - TW8	2021/01/05	<MDL 0.05	90.0	No
Carbofuran (µg/L) - TW1	2021/07/20	<MDL 0.01	90.0	No
Carbofuran (µg/L) - TW3	2019/01/08	<MDL 0.01	90.0	No
Carbofuran (µg/L) - TW5	2021/01/05	<MDL 0.01	90.0	No
Carbofuran (µg/L) - TW6	2021/01/05	<MDL 0.01	90.0	No
Carbofuran (µg/L) - TW7	2021/01/05	<MDL 0.01	90.0	No
Carbofuran (µg/L) - TW8	2021/01/05	<MDL 0.01	90.0	No
Carbon Tetrachloride (µg/L) - TW1	2021/07/20	<MDL 0.17	2.0	No
Carbon Tetrachloride (µg/L) - TW3	2019/01/08	<MDL 0.16	2.0	No
Carbon Tetrachloride (µg/L) - TW5	2021/01/05	<MDL 0.17	2.0	No
Carbon Tetrachloride (µg/L) - TW6	2021/01/05	<MDL 0.17	2.0	No
Carbon Tetrachloride (µg/L) - TW7	2021/01/05	<MDL 0.17	2.0	No
Carbon Tetrachloride (µg/L) - TW8	2021/01/05	<MDL 0.17	2.0	No
Chlorpyrifos (µg/L) - TW1	2021/07/20	<MDL 0.02	90.0	No
Chlorpyrifos (µg/L) - TW3	2019/01/08	<MDL 0.02	90.0	No
Chlorpyrifos (µg/L) - TW5	2021/01/05	<MDL 0.02	90.0	No
Chlorpyrifos (µg/L) - TW6	2021/01/05	<MDL 0.02	90.0	No
Chlorpyrifos (µg/L) - TW7	2021/01/05	<MDL 0.02	90.0	No
Chlorpyrifos (µg/L) - TW8	2021/01/05	<MDL 0.02	90.0	No
Diazinon (µg/L) - TW1	2021/07/20	<MDL 0.02	20.0	No
Diazinon (µg/L) - TW3	2019/01/08	<MDL 0.02	20.0	No
Diazinon (µg/L) - TW5	2021/01/05	<MDL 0.02	20.0	No
Diazinon (µg/L) - TW6	2021/01/05	<MDL 0.02	20.0	No
Diazinon (µg/L) - TW7	2021/01/05	<MDL 0.02	20.0	No
Diazinon (µg/L) - TW8	2021/01/05	<MDL 0.02	20.0	No
Dicamba (µg/L) - TW1	2021/07/20	<MDL 0.2	120.0	No
Dicamba (µg/L) - TW3	2019/01/08	<MDL 0.2	120.0	No
Dicamba (µg/L) - TW5	2021/01/05	<MDL 0.2	120.0	No
Dicamba (µg/L) - TW6	2021/01/05	<MDL 0.2	120.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Dicamba (µg/L) - TW7	2021/01/05	<MDL 0.2	120.0	No
Dicamba (µg/L) - TW8	2021/01/05	<MDL 0.2	120.0	No
1,2-Dichlorobenzene (µg/L) - TW1	2021/07/20	<MDL 0.41	200.0	No
1,2-Dichlorobenzene (µg/L) - TW3	2019/01/08	<MDL 0.41	200.0	No
1,2-Dichlorobenzene (µg/L) - TW5	2021/01/05	<MDL 0.41	200.0	No
1,2-Dichlorobenzene (µg/L) - TW6	2021/01/05	<MDL 0.41	200.0	No
1,2-Dichlorobenzene (µg/L) - TW7	2021/01/05	<MDL 0.41	200.0	No
1,2-Dichlorobenzene (µg/L) - TW8	2021/01/05	<MDL 0.41	200.0	No
1,4-Dichlorobenzene (µg/L) - TW1	2021/07/20	<MDL 0.36	5.0	No
1,4-Dichlorobenzene (µg/L) - TW3	2019/01/08	<MDL 0.36	5.0	No
1,4-Dichlorobenzene (µg/L) - TW5	2021/01/05	<MDL 0.36	5.0	No
1,4-Dichlorobenzene (µg/L) - TW6	2021/01/05	<MDL 0.36	5.0	No
1,4-Dichlorobenzene (µg/L) - TW7	2021/01/05	<MDL 0.36	5.0	No
1,4-Dichlorobenzene (µg/L) - TW8	2021/01/05	<MDL 0.36	5.0	No
1,2-Dichloroethane (µg/L) - TW1	2021/07/20	<MDL 0.35	5.0	No
1,2-Dichloroethane (µg/L) - TW3	2019/01/08	<MDL 0.35	5.0	No
1,2-Dichloroethane (µg/L) - TW5	2021/01/05	<MDL 0.35	5.0	No
1,2-Dichloroethane (µg/L) - TW6	2021/01/05	<MDL 0.35	5.0	No
1,2-Dichloroethane (µg/L) - TW7	2021/01/05	<MDL 0.35	5.0	No
1,2-Dichloroethane (µg/L) - TW8	2021/01/05	<MDL 0.35	5.0	No
1,1-Dichloroethylene (µg/L) - TW1	2021/07/20	<MDL 0.33	14.0	No
1,1-Dichloroethylene (µg/L) - TW3	2019/01/08	<MDL 0.33	14.0	No
1,1-Dichloroethylene (µg/L) - TW5	2021/01/05	<MDL 0.33	14.0	No
1,1-Dichloroethylene (µg/L) - TW6	2021/01/05	<MDL 0.33	14.0	No
1,1-Dichloroethylene (µg/L) - TW7	2021/01/05	<MDL 0.33	14.0	No
1,1-Dichloroethylene (µg/L) - TW8	2021/01/05	<MDL 0.33	14.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW1	2021/07/20	<MDL 0.35	50.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW3	2019/01/08	<MDL 0.35	50.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW5	2021/01/05	<MDL 0.35	50.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW6	2021/01/05	<MDL 0.35	50.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW7	2021/01/05	<MDL 0.35	50.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW8	2021/01/05	<MDL 0.35	50.0	No
2,4-Dichlorophenol (µg/L) - TW1	2021/07/20	<MDL 0.15	900.0	No
2,4-Dichlorophenol (µg/L) - TW3	2019/01/08	<MDL 0.15	900.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
2,4-Dichlorophenol (µg/L) - TW5	2021/01/05	<MDL 0.15	900.0	No
2,4-Dichlorophenol (µg/L) - TW6	2021/01/05	<MDL 0.15	900.0	No
2,4-Dichlorophenol (µg/L) - TW7	2021/01/05	<MDL 0.15	900.0	No
2,4-Dichlorophenol (µg/L) - TW8	2021/01/05	<MDL 0.15	900.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW1	2021/07/20	<MDL 0.19	100.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW3	2019/01/08	<MDL 0.19	100.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW5	2021/01/05	<MDL 0.19	100.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW6	2021/01/05	<MDL 0.19	100.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW7	2021/01/05	<MDL 0.19	100.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW8	2021/01/05	<MDL 0.19	100.0	No
Diclofop-methyl (µg/L) - TW1	2021/07/20	<MDL 0.4	9.0	No
Diclofop-methyl (µg/L) - TW3	2019/01/08	<MDL 0.4	9.0	No
Diclofop-methyl (µg/L) - TW5	2021/01/05	<MDL 0.4	9.0	No
Diclofop-methyl (µg/L) - TW6	2021/01/05	<MDL 0.4	9.0	No
Diclofop-methyl (µg/L) - TW7	2021/01/05	<MDL 0.4	9.0	No
Diclofop-methyl (µg/L) - TW8	2021/01/05	<MDL 0.4	9.0	No
Dimethoate (µg/L) - TW1	2021/07/20	<MDL 0.06	20.0	No
Dimethoate (µg/L) - TW3	2019/01/08	<MDL 0.06	20.0	No
Dimethoate (µg/L) - TW5	2021/01/05	<MDL 0.06	20.0	No
Dimethoate (µg/L) - TW6	2021/01/05	<MDL 0.06	20.0	No
Dimethoate (µg/L) - TW7	2021/01/05	<MDL 0.06	20.0	No
Dimethoate (µg/L) - TW8	2021/01/05	<MDL 0.06	20.0	No
Diquat (µg/L) - TW1	2021/07/20	<MDL 1.0	70.0	No
Diquat (µg/L) - TW3	2019/01/08	<MDL 1.0	70.0	No
Diquat (µg/L) - TW5	2021/01/05	<MDL 1.0	70.0	No
Diquat (µg/L) - TW6	2021/01/05	<MDL 1.0	70.0	No
Diquat (µg/L) - TW7	2021/01/05	<MDL 1.0	70.0	No
Diquat (µg/L) - TW8	2021/01/05	<MDL 1.0	70.0	No
Diuron (µg/L) - TW1	2021/07/20	<MDL 0.03	150.0	No
Diuron (µg/L) - TW3	2019/01/08	<MDL 0.03	150.0	No
Diuron (µg/L) - TW5	2021/01/05	<MDL 0.03	150.0	No
Diuron (µg/L) - TW6	2021/01/05	<MDL 0.03	150.0	No
Diuron (µg/L) - TW7	2021/01/05	<MDL 0.03	150.0	No
Diuron (µg/L) - TW8	2021/01/05	<MDL 0.03	150.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Glyphosate (µg/L) - TW1	2021/07/20	<MDL 1.0	280.0	No
Glyphosate (µg/L) - TW3	2019/01/08	<MDL 1.0	280.0	No
Glyphosate (µg/L) - TW5	2021/01/05	<MDL 1.0	280.0	No
Glyphosate (µg/L) - TW6	2021/01/05	<MDL 1.0	280.0	No
Glyphosate (µg/L) - TW7	2021/01/05	<MDL 1.0	280.0	No
Glyphosate (µg/L) - TW8	2021/01/05	<MDL 1.0	280.0	No
Malathion (µg/L) - TW1	2021/07/20	<MDL 0.02	190.0	No
Malathion (µg/L) - TW3	2019/01/08	<MDL 0.02	190.0	No
Malathion (µg/L) - TW5	2021/01/05	<MDL 0.02	190.0	No
Malathion (µg/L) - TW6	2021/01/05	<MDL 0.02	190.0	No
Malathion (µg/L) - TW7	2021/01/05	<MDL 0.02	190.0	No
Malathion (µg/L) - TW8	2021/01/05	<MDL 0.02	190.0	No
Metolachlor (µg/L) - TW1	2021/07/20	<MDL 0.01	50.0	No
Metolachlor (µg/L) - TW3	2019/01/08	<MDL 0.01	50.0	No
Metolachlor (µg/L) - TW5	2021/01/05	<MDL 0.01	50.0	No
Metolachlor (µg/L) - TW6	2021/01/05	<MDL 0.01	50.0	No
Metolachlor (µg/L) - TW7	2021/01/05	<MDL 0.01	50.0	No
Metolachlor (µg/L) - TW8	2021/01/05	<MDL 0.01	50.0	No
Metribuzin (µg/L) - TW1	2021/07/20	<MDL 0.02	80.0	No
Metribuzin (µg/L) - TW3	2019/01/08	<MDL 0.02	80.0	No
Metribuzin (µg/L) - TW5	2021/01/05	<MDL 0.02	80.0	No
Metribuzin (µg/L) - TW6	2021/01/05	<MDL 0.02	80.0	No
Metribuzin (µg/L) - TW7	2021/01/05	<MDL 0.02	80.0	No
Metribuzin (µg/L) - TW8	2021/01/05	<MDL 0.02	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW1	2021/07/20	<MDL 0.3	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW3	2019/01/08	<MDL 0.3	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW5	2021/01/05	<MDL 0.3	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW6	2021/01/05	<MDL 0.3	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW7	2021/01/05	<MDL 0.3	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW8	2021/01/05	<MDL 0.3	80.0	No
Paraquat (µg/L) - TW1	2021/07/20	<MDL 1.0	10.0	No
Paraquat (µg/L) - TW3	2019/01/08	<MDL 1.0	10.0	No
Paraquat (µg/L) - TW5	2021/01/05	<MDL 1.0	10.0	No
Paraquat (µg/L) - TW6	2021/01/05	<MDL 1.0	10.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Paraquat (µg/L) - TW7	2021/01/05	<MDL 1.0	10.0	No
Paraquat (µg/L) - TW8	2021/01/05	<MDL 1.0	10.0	No
PCB (µg/L) - TW1	2021/07/20	<MDL 0.04	3.0	No
PCB (µg/L) - TW3	2019/01/08	<MDL 0.04	3.0	No
PCB (µg/L) - TW5	2021/01/05	<MDL 0.04	3.0	No
PCB (µg/L) - TW6	2021/01/05	<MDL 0.04	3.0	No
PCB (µg/L) - TW7	2021/01/05	<MDL 0.04	3.0	No
PCB (µg/L) - TW8	2021/01/05	<MDL 0.04	3.0	No
Pentachlorophenol (µg/L) - TW1	2021/07/20	<MDL 0.15	60.0	No
Pentachlorophenol (µg/L) - TW3	2019/01/08	<MDL 0.15	60.0	No
Pentachlorophenol (µg/L) - TW5	2021/01/05	<MDL 0.15	60.0	No
Pentachlorophenol (µg/L) - TW6	2021/01/05	<MDL 0.15	60.0	No
Pentachlorophenol (µg/L) - TW7	2021/01/05	<MDL 0.15	60.0	No
Pentachlorophenol (µg/L) - TW8	2021/01/05	<MDL 0.15	60.0	No
Phorate (µg/L) - TW1	2021/07/20	<MDL 0.01	2.0	No
Phorate (µg/L) - TW3	2019/01/08	<MDL 0.01	2.0	No
Phorate (µg/L) - TW5	2021/01/05	<MDL 0.01	2.0	No
Phorate (µg/L) - TW6	2021/01/05	<MDL 0.01	2.0	No
Phorate (µg/L) - TW7	2021/01/05	<MDL 0.01	2.0	No
Phorate (µg/L) - TW8	2021/01/05	<MDL 0.01	2.0	No
Picloram (µg/L) - TW1	2021/07/20	<MDL 1.0	190.0	No
Picloram (µg/L) - TW3	2019/01/08	<MDL 1.0	190.0	No
Picloram (µg/L) - TW5	2021/01/05	<MDL 1.0	190.0	No
Picloram (µg/L) - TW6	2021/01/05	<MDL 1.0	190.0	No
Picloram (µg/L) - TW7	2021/01/05	<MDL 1.0	190.0	No
Picloram (µg/L) - TW8	2021/01/05	<MDL 1.0	190.0	No
Prometryne (µg/L) - TW1	2021/07/20	<MDL 0.03	1.0	No
Prometryne (µg/L) - TW3	2019/01/08	<MDL 0.03	1.0	No
Prometryne (µg/L) - TW5	2021/01/05	<MDL 0.03	1.0	No
Prometryne (µg/L) - TW6	2021/01/05	<MDL 0.03	1.0	No
Prometryne (µg/L) - TW7	2021/01/05	<MDL 0.03	1.0	No
Prometryne (µg/L) - TW8	2021/01/05	<MDL 0.03	1.0	No
Simazine (µg/L) - TW1	2021/07/20	<MDL 0.01	10.0	No
Simazine (µg/L) - TW3	2019/01/08	<MDL 0.01	10.0	No
Simazine (µg/L) - TW5	2021/01/05	<MDL 0.01	10.0	No
Simazine (µg/L) - TW6	2021/01/05	<MDL 0.01	10.0	No
Simazine (µg/L) - TW7	2021/01/05	<MDL 0.01	10.0	No
Simazine (µg/L) - TW8	2021/01/05	<MDL 0.01	10.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Terbufos (µg/L) - TW1	2021/07/20	<MDL 0.01	1.0	No
Terbufos (µg/L) - TW3	2019/01/08	<MDL 0.01	1.0	No
Terbufos (µg/L) - TW5	2021/01/05	<MDL 0.01	1.0	No
Terbufos (µg/L) - TW6	2021/01/05	<MDL 0.01	1.0	No
Terbufos (µg/L) - TW7	2021/01/05	<MDL 0.01	1.0	No
Terbufos (µg/L) - TW8	2021/01/05	<MDL 0.01	1.0	No
Tetrachloroethylene (µg/L) - TW1	2021/07/20	<MDL 0.35	10.0	No
Tetrachloroethylene (µg/L) - TW3	2019/01/08	<MDL 0.35	10.0	No
Tetrachloroethylene (µg/L) - TW5	2021/01/05	<MDL 0.35	10.0	No
Tetrachloroethylene (µg/L) - TW6	2021/01/05	<MDL 0.35	10.0	No
Tetrachloroethylene (µg/L) - TW7	2021/01/05	<MDL 0.35	10.0	No
Tetrachloroethylene (µg/L) - TW8	2021/01/05	<MDL 0.35	10.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW1	2021/07/20	<MDL 0.2	100.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW3	2019/01/08	<MDL 0.2	100.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW5	2021/01/05	<MDL 0.2	100.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW6	2021/01/05	<MDL 0.2	100.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW7	2021/01/05	<MDL 0.2	100.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW8	2021/01/05	<MDL 0.2	100.0	No
Triallate (µg/L) - TW1	2021/07/20	<MDL 0.01	230.0	No
Triallate (µg/L) - TW3	2019/01/08	<MDL 0.01	230.0	No
Triallate (µg/L) - TW5	2021/01/05	<MDL 0.01	230.0	No
Triallate (µg/L) - TW6	2021/01/05	<MDL 0.01	230.0	No
Triallate (µg/L) - TW7	2021/01/05	<MDL 0.01	230.0	No
Triallate (µg/L) - TW8	2021/01/05	<MDL 0.01	230.0	No
Trichloroethylene (µg/L) - TW1	2021/07/20	<MDL 0.44	5.0	No
Trichloroethylene (µg/L) - TW3	2019/01/08	<MDL 0.44	5.0	No
Trichloroethylene (µg/L) - TW5	2021/01/05	<MDL 0.44	5.0	No
Trichloroethylene (µg/L) - TW6	2021/01/05	<MDL 0.44	5.0	No
Trichloroethylene (µg/L) - TW7	2021/01/05	<MDL 0.44	5.0	No
Trichloroethylene (µg/L) - TW8	2021/01/05	<MDL 0.44	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW1	2021/07/20	<MDL 0.25	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW3	2019/01/08	<MDL 0.25	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW5	2021/01/05	<MDL 0.25	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW6	2021/01/05	<MDL 0.25	5.0	No

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
2,4,6-Trichlorophenol (µg/L) - TW7	2021/01/05	<MDL 0.25	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW8	2021/01/05	<MDL 0.25	5.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW1	2021/07/20	<MDL 0.12	100.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW3	2019/01/08	<MDL 0.12	100.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW5	2021/01/05	<MDL 0.12	100.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW6	2021/01/05	<MDL 0.12	100.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW7	2021/01/05	<MDL 0.12	100.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW8	2021/01/05	<MDL 0.12	100.0	No
Trifluralin (µg/L) - TW1	2021/07/20	<MDL 0.02	45.0	No
Trifluralin (µg/L) - TW3	2019/01/08	<MDL 0.02	45.0	No
Trifluralin (µg/L) - TW5	2021/01/05	<MDL 0.02	45.0	No
Trifluralin (µg/L) - TW6	2021/01/05	<MDL 0.02	45.0	No
Trifluralin (µg/L) - TW7	2021/01/05	<MDL 0.02	45.0	No
Trifluralin (µg/L) - TW8	2021/01/05	<MDL 0.02	45.0	No
Vinyl Chloride (µg/L) - TW1	2021/07/20	<MDL 0.17	1.0	No
Vinyl Chloride (µg/L) - TW3	2019/01/08	<MDL 0.17	1.0	No
Vinyl Chloride (µg/L) - TW5	2021/01/05	<MDL 0.17	1.0	No
Vinyl Chloride (µg/L) - TW6	2021/01/05	<MDL 0.17	1.0	No
Vinyl Chloride (µg/L) - TW7	2021/01/05	<MDL 0.17	1.0	No
Vinyl Chloride (µg/L) - TW8	2021/01/05	<MDL 0.17	1.0	No
Trihalomethane: Total (µg/L) Annual Average - DW1	2023 (Quarterly)	6.05	100.0	No
Trihalomethane: Total (µg/L) Annual Average - DW2	2023 (Quarterly)	2.98	100.0	No
HAA Total (µg/L) Annual Average - DW1	2023 (Quarterly)	5.3	80.0	No
HAA Total (µg/L) Annual Average - DW2	2023 (Quarterly)	5.3	80.0	No

Note: TW = Treated Water, DW = Distribution Water, MDL = Minimum Detection Limit, MAC = Maximum Allowable Concentration, HAA = Haloacetic Acids

[6A]Organic Parameters (Schedule 24) are required to be tested every 36 months for a large municipal residential system (O. Reg 170/03 Schedule 13-4.(1)). The most recent set of samples for Organic Parameters for TW3 were completed in 2019 as the well and treated water source has been offline. Regulatory sampling and testing for Organic Parameters will be completed prior to putting the well and

treated water source back online. For all other TW sources (TW1, TW5, TW6, TW7 and TW8) The last set of samples was collected and tested in 2021, the next set of samples is scheduled to be collected and tested in 2024.

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

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result
Pumphouse PH 5/6 Arsenic[7A]	2023/01/03	TW5: 14.6 µg/L
	2023/04/04	TW5: 14.2 µg/L
	2023/07/18	TW5: 13.0 µg/L
	2023/10/03	TW5: 12.6 µg/L
	2023/01/03	TW6: 14.1 µg/L
	2023/04/04	TW6: 14.5 µg/L
	2023/10/03	TW6: 12.6 µg/L
Water Tower Arsenic[7A]	2023/01/03	6.1 µg/L
	2023/07/04	5.3 µg/L
	2023/10/03	4.8 µg/L
Blended Treated Water or Distribution Water (before first consumer) Arsenic	2023/01/03	TW Blended: 8.1 µg/L
	2023/04/04	TW Blended: 8.0 µg/L
	2023/07/04	TW Blended: 7.5 µg/L
	2023/10/03	TW Blended: 7.0 µg/L
	2023/01/03	TW 1st Service: 5.9 µg/L
	2023/04/04	TW 1st Service: 6.3 µg/L
	2023/07/04	TW 1st Service: 5.6 µg/L
	2023/10/03	TW 1st Service: 5.5 µg/L

[7A]As per MDWL Section 5.0 (Table 5) Arsenic is required on a quarterly basis at the monitoring location PH5/6, PH7/8, Water Tower and either a)blending building after mixing 5/6 and 7/8 water or, b)distribution system before first consumer. Quarterly samples at PH 5/6 and PH 7/8 are to determine arsenic concentrations prior to blending for operational and monitoring purposes (non-reportable). Quarterly samples at the Water Tower and Blending building or Distribution system prior to first consumer are to assess arsenic concentration in the drinking water sent to consumers and are considered to be reportable treated water samples.