

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

Prepared for the Town of Wasaga Beach by the Ontario Clean Water Agency





Section 11 Annual Report: January 1, 2023 to December 31, 2023

The Corporation of the Town of Wasaga Beach: Wasaga Beach Drinking Water System

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

Drinking Water System Number:	220002137
Drinking Water System Name:	Wasaga Beach Drinking Water System
Drinking Water System Owner:	The Corporation of the Town of Wasaga Beach
Drinking Water System Category:	Large Municipal Residential
Reporting Period:	January 1, 2023 to December 31, 2023

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

Yes

### Is your Annual Report available to the public at no charge on a website 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)(5)):

- Hard copy available for public viewing at the Town of Wasaga Beach Public Works
   Office, 150 Westbury Road, Wasaga Beach, Ontario, L9Z 0C8
- http://www.wasagabeach.com

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:

<b>Drinking Water System Name</b>	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

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X Public access/notice via Government Office
Public access/notice via a newspaper
X Public access/notice via Public Request

#### Description of Drinking Water System (O.Reg 170/03, Section 11.(6)(a)):

Drinking Water System Regulation: O. Reg 170/03

Public access/notice via a Public Library Public access/notice via other method:

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The Town of Wasaga Beach Drinking Water System is a Class III Water Distribution and Supply subsystem and is categorized under O.Reg 170/03 as a Large Municipal Drinking Water System, servicing an approximate population of 24,862 persons. The system is comprised of two pumphouses, including the Powerline Pumphouse and Jenetta Pumphouse that draw water from a total of six production wells. The two facilities supply water through a common distribution system.

Three drilled groundwater wells (Well 2, 3 and 4) supply raw water for the Powerline pumphouse. The water pumped from the wells is treated with sodium silicate (for iron sequestration) and sodium hypochlorite (for primary and secondary disinfection). The treated water is stored in one underground reservoir prior to entering the distribution system. Online equipment continuously monitors and records free chlorine residual and flowrates. For power failure events, the pumphouse is equipped with standby power.

Three drilled groundwater wells (Well 1, 2 and 3) supply raw water for the Jenetta pumphouse. The water pumped from the wells is treated with sodium silicate (for iron sequestration) and sodium hypochlorite (for primary and secondary disinfection). Online equipment continuously monitors and records free chlorine residual and flowrates. For power failure events, the pumphouse is equipped with standby power.

The distribution system consists of water that is stored in two elevated storage tanks with capacities of 2,837.5 cubic meters and 9,550 cubic meters, respectively. There is additional storage in the 3,405 cubic meter underground reservoir located at the Powerline pumphouse. Sunnidale Trails Booster Pumping Station provides the Sunnidale Trails and surrounding area with adequate pressure. Online equipment continuously monitors and records free chlorine residual and flowrates at the Booster Station. For power failure events, Sunnidale Booster station is equipped with standby power.

# 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
- Sodium Silicate

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#### 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)):

- Powerline WS Well Building Door Replacement
- Powerline WS HLP#5 Refurbishment
- Powerline WS MCC and Chemical Storage Upgrades Design
- Powerline WS High-lift Pump Control Valve Repairs
- Sunnidale Booster Station Pump #1 Repair
- Powerline WS Well and HLP Building Genset Repairs
- Powerline WS Chemical Feed System PRV Repairs
- Powerline WS Well Pump 4 Well and Pump Inspection and Refurbishment
- Powerline WS Well Pump 4 Motor Replacement
- Jenetta outside receptacle cover replacement
- Jenetta WS Well #3 Motor Replacement
- Jenetta WS Gas Fired Heaters Repairs
- Tower #2 Aircraft Warning Lights Repairs
- Jenetta WS Gas Fired Unit Heaters Repairs 3
- Jenetta WS Well Pump 1 Well and Pump Inspection and Refurbishment

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	Reporting Summary, Corrective Actions & Resolution
2023/06/12	Notification of potential improper disinfection	N/A	<ul> <li>AWQI#162173 – Precautionary adverse water incident due to chlorine analyzer calibration error</li> <li>On Friday June 9, 2023- operational staff were preforming routine calibration on the post-treated water free chlorine analyzer at Jenetta Pumphouse.</li> <li>On Monday, June 12- operational staff attended the facility for checks and reviews and observed that throughout the weekend (June 9 at 1351 hrs until June 12 at 0804hrs) the post-chlorine free</li> </ul>

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Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit	Reporting Summary, Corrective Actions & Resolution
			<ul> <li>analyzer became "stuck' or frozen and locked out at 1.17 mg/L due to a calibration error on Friday.</li> <li>Pre-chlorine analyzer and distribution free chlorine analyzer were functional and never dropped below the alarming set points that would trigger an operator response.</li> <li>Out of an abundance of caution an adverse quality incident was reported as the post-chlorine free chlorine was not operational and therefore could not confirm that CT was adequately met. OCWA reported the AWQI Incident to the MECP, local Health unit and SAC on 2023/06/12.</li> <li>On June 12, 2023 operations staff took treated water and distribution water free chlorine residuals which were within acceptable limits. Bacteriological samples were also collected</li> <li>Sample results received on June 13, 2023 and were negative for bacteriological presencewithin regulatory requirements. No additional actions required by the Health Unit or MECP</li> <li>Written notice of resolution submitted on July 14, 2023. No further actions required.</li> </ul>

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

Location	Number of	Range o	of E. Coli Results	Range of Coliform		Number of HPC	Range Sam	of HPC ples
	Samples	Min.	Max.	Min.	Max.	Samples	Min.	Max.
RW <sup>1A</sup> , Well P-2	52	0	0	0	0	0	N/A	N/A
RW <sup>1A</sup> , Well P-3	52	0	0	0	0	0	N/A	N/A
RW <sup>1A</sup> , Well P-4	43 <sup>1D</sup>	0	0	0	0	0	N/A	N/A
RW <sup>1A</sup> , Well J-1	43 <sup>1D</sup>	0	0	0	0	0	N/A	N/A
RW <sup>1A</sup> , Well J-2	52	0	0	0	0	0	N/A	N/A
RW <sup>1A</sup> , Well J-3	52	0	0	0	0	0	N/A	N/A
TW1-P <sup>1B</sup>	52	0	0	0	0	52	<10	30
TW2-J <sup>1B</sup>	53	0	0	0	0	52	<10	30
Distribution	452 <sup>1C</sup>	0	0	0	0	137 <sup>1C</sup>	<10	130

Note: HPC = Heterotrophic Plate Count

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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

<sup>1A</sup>RW = Well P-2=Powerline Well 2; Well P-3=Powerline Well 3; Well P-4=Powerline Well 4; Well J-1=Jenetta Street Well 1; Well J-2=Jenetta Street Well 2; Well J-3=Jenetta Street Well 3 as per PTTW #8041-BFHJV2. 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.

<sup>18</sup>TW= Treated Water. TW1= Powerline Pumphouse; TW2= Jenetta Pumphouse. 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).

<sup>1C</sup>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 2022, the population of the Town of Wasaga Beach is 24,862 persons (as confirmed with the Owner on November 8, 2022- based on the 2021 Statistics Canada Census Data) and thus requires at the minimum 32 monthly distribution samples. Proactively, to account for population increases to the Sunnidale Trails new development area, the Operating Authority (OCWA) has been routinely taking 9 weekly (36-45 monthly) distribution samples as of May 9, 2023.

<sup>1D</sup>Well P-4 and Well J-1 raw water weekly samples were not taken for the months of November and December, 2023 as the wells were offline for maintenance activities.

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)).

	Number	Range of	Results
Parameter & Location	of	Min.	Max.
	Samples		
Turbidity, Raw Water Powerline Well P-2 (Grab) [NTU] 2A	12	0.10	0.40
Turbidity, Raw Water Powerline Well P-3 (Grab) [NTU] <sup>2A</sup>	12	0.08	0.36
Turbidity, Raw Water Powerline Well P-4 (Grab) [NTU] <sup>2A</sup>	10 <sup>2D</sup>	0.11	0.40
Turbidity, Raw Water Jenetta Well J-1 (Grab) [NTU] <sup>2A</sup>	10 <sup>2D</sup>	0.07	0.59
Turbidity, Raw Water Jenetta Well J-2 (Grab) [NTU] <sup>2A</sup>	12	0.14	0.54
Turbidity, Raw Water Jenetta Well J-3 (Grab) [NTU] <sup>2A</sup>	12	0.06	0.51
Free Chlorine Residual, Continuous- Powerline [mg/L]-TW <sup>2B</sup>	8760	0.91	2.43
Free Chlorine Residual, Continuous- Jenetta [mg/L] <sup>2B</sup>	8760	0.67	2.78
Free Chlorine Residual, Distribution Water [mg/L] <sup>2C</sup>	8760	0.51	2.35

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

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 $^{2A}O.Reg~170/03$  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.

<sup>2B</sup>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.

<sup>2C</sup>O.Reg 170/03 Schedule 7-2.(3) 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. Sampling for distribution free chlorine residual at Wasaga Beach Drinking Water is taken via continuous monitoring, as permitted under O.Reg 170/03, Schedule 6-4.

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

Legal Instrument & Issue Date (yyyy/mm/dd)	Parameter	Date Sampled (yyyy/mm/dd)	Result	Unit of Measure
N/A	N/A	N/A	N/A	N/A

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

Parameter & Location	Sample Date <sup>4A</sup> (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Antimony: Sb (μg/L) - TW1	2021/01/28	<mdl 0.9<="" td=""><td>6.0</td><td>No</td></mdl>	6.0	No
Antimony: Sb (μg/L) - TW2	2021/01/28	<mdl 0.9<="" td=""><td>6.0</td><td>No</td></mdl>	6.0	No
Arsenic: As (μg/L) - TW1	2021/01/28	<mdl 0.2<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Arsenic: As (μg/L) - TW2	2021/01/28	<mdl 0.2<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Barium: Ba (μg/L) - TW1	2021/01/28	48.9	1000.0	No
Barium: Ba (μg/L) - TW2	2021/01/28	63.5	1000.0	No
Boron: B (μg/L) - TW1	2021/01/28	23.0	5000.0	No
Boron: B (μg/L) - TW2	2021/01/28	41.0	5000.0	No
Cadmium: Cd (μg/L) - TW1	2021/01/28	0.007	5.0	No
Cadmium: Cd (μg/L) - TW2	2021/01/28	<mdl 0.003<="" td=""><td>5.0</td><td>No</td></mdl>	5.0	No
Chromium: Cr (µg/L) - TW1	2021/01/28	0.31	50.0	No
Chromium: Cr (µg/L) - TW2	2021/01/28	0.25	50.0	No
Mercury: Hg (μg/L) - TW1	2021/01/28	<mdl 0.01<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No

<sup>&</sup>lt;sup>2D</sup>In November and December 2023, Powerline Well P-4 and Jenetta Well J-1 were offline for maintenance activities. No raw water turbidity sample were taken.

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Parameter & Location	Sample Date <sup>4A</sup> (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Mercury: Hg (μg/L) - TW2	2021/01/28	<mdl 0.01<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Selenium: Se (μg/L) - TW1	2021/01/28	0.06	50.0	No
Selenium: Se (μg/L) - TW2	2021/01/28	0.05	50.0	No
Uranium: U (μg/L) - TW1	2021/01/28	0.095	20.0	No
Uranium: U (μg/L) - TW2	2021/01/28	0.012	20.0	No
Fluoride (mg/L) - TW1	2023/07/18	0.11 <sup>4B</sup>	1.5	No
Fluoride (mg/L) - TW2	2023/07/18	$0.17^{4B}$	1.5	No
Nitrite (mg/L) - TW1	2023/01/17	<mdl 0.003<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Nitrite (mg/L) - TW1	2023/04/18	<mdl 0.003<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Nitrite (mg/L) - TW1	2023/07/18	<mdl 0.003<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Nitrite (mg/L) - TW1	2023/10/18	<mdl 0.003<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Nitrite (mg/L) - TW2	2023/01/17	<mdl 0.003<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Nitrite (mg/L) - TW2	2023/04/18	<mdl 0.003<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Nitrite (mg/L) - TW2	2023/07/25	<mdl 0.003<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Nitrite (mg/L) - TW2	2023/10/18	<mdl 0.003<="" td=""><td>1.0</td><td>No</td></mdl>	1.0	No
Nitrate (mg/L) - TW1	2023/01/17	<mdl 0.006<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Nitrate (mg/L) - TW1	2023/04/18	<mdl 0.006<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Nitrate (mg/L) - TW1	2023/07/18	<mdl 0.006<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Nitrate (mg/L) - TW1	2023/10/18	<mdl 0.006<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Nitrate (mg/L) - TW2	2023/01/17	<mdl 0.006<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Nitrate (mg/L) - TW2	2023/04/18	<mdl 0.006<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Nitrate (mg/L) - TW2	2023/07/18	<mdl 0.006<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No
Nitrate (mg/L) - TW2	2023/10/18	<mdl 0.006<="" td=""><td>10.0</td><td>No</td></mdl>	10.0	No

Note: TW1 refers to the Powerline Treatment Pumphouse located at 700 Veterans Way in Wasaga Beach, Ontario; TW2 refers to the Jenetta Treatment Pumphouse located at 17 Spruce Street, Wasaga Beach, Ontario.

Parameter & Location	Sample Date	Sample	Sample Aesthetic		eedance
Parameter & Location	(yyyy/mm/dd)	Result	Objective (AO)	AO	> 20 mg/L
Sodium: Na (mg/L) – TW1	2023/07/18 <sup>4C</sup>	8.24	200 <sup>4D</sup>	No	No
Sodium: Na (mg/L) – TW2	2023/07/18 <sup>4C</sup>	14.0	200 <sup>4D</sup>	No	No

<sup>&</sup>lt;sup>4A</sup>Inorganic Parameters (Schedule 23) are required to be tested every 36 months for a Large Municipal Residential system if the system obtains water from a raw water supply that is ground water (O. Reg 170/03 Schedule 12-2.(b)). 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.

<sup>&</sup>lt;sup>4B</sup>Fluoride is reportable every 60 months. The most recent Fluoride samples were tested in July, 2023, the next set of samples is scheduled to be tested in July, 2028.

<sup>&</sup>lt;sup>4C</sup>Sodium is reportable every 60 months. The most recent Sodium samples were tested in July, 2023, the next set of samples is scheduled to be tested in July, 2028.

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<sup>4D</sup>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.

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

	Number	Range o	f Results	Number of
Location/Type & Parameter	of Samples <sup>5C</sup>	Min.	Max.	Lead Exceedances (MAC = 10 μ/L)
Period: Jai	nuary 1 to Ap	ril 15		
Plumbing – Lead (μg/L) <sup>5A</sup>	N/A	N/A	N/A	0
Distribution – Lead (μg/L) <sup>5B</sup>	4	0.34	1.68	0
Distribution – Alkalinity (mg/L as CaCO₃)	4	177	188	N/A
Distribution – pH	4	7.62	7.99	N/A
Period: Jun	e 15 to Octo	ber 15		
Plumbing – Lead (μg/L) <sup>5A</sup>	N/A	N/A	N/A	0
Distribution – Lead (μg/L) <sup>5B</sup>	4	0.56	3.13	0
Distribution – Alkalinity (mg/L as CaCO₃)	4	174	184	N/A
Distribution – pH	4	7.77	7.94	N/A
Period: D	ecember 15 t	to 31		
Plumbing – Lead (μg/L) <sup>5A</sup>	N/A	N/A	N/A	0
Distribution – Lead (μg/L) <sup>5B</sup>	N/A	N/A	N/A	0
Distribution – Alkalinity (mg/L as CaCO <sub>3</sub> )	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.

<sup>&</sup>lt;sup>5A</sup>Plumbing samples are not applicable as this system qualifies for the plumbing exemption per O. Reg 170/03 Schedule 15.1-5 (9) (10).

<sup>&</sup>lt;sup>58</sup>Distribution lead samples are taken every 36 months. The most recent set of distribution lead samples were collected within the winter period of December 15, 2022 to April 15, 2023 and summer period of June 15, 2023 to October 15, 2023. 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.

<sup>&</sup>lt;sup>5C</sup>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 24,862 persons (as confirmed with the Owner on November 8, 2022- based on the 2021 Statistics Canada Census Data) and therefore requires four (4) distribution sampling points per sampling period.

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

Parameter & Location	Sample Date <sup>6A</sup> (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Alachlor (μg/L) - TW1	2021/01/28	<mdl 0.02<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
Alachlor (μg/L) - TW2	2021/01/28	<mdl 0.02<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
Atrazine + N-dealkylated metabolites (µg/L) - TW1	2021/01/28	<mdl 0.01<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
Atrazine + N-dealkylated metabolites (μg/L) - TW2	2021/01/28	<mdl 0.01<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
Azinphos-methyl (μg/L) - TW1	2021/01/28	<mdl 0.05<="" td=""><td>20.00</td><td>No</td></mdl>	20.00	No
Azinphos-methyl (μg/L) - TW2	2021/01/28	<mdl 0.05<="" td=""><td>20.00</td><td>No</td></mdl>	20.00	No
Benzene (μg/L) - TW1	2021/01/28	<mdl 0.32<="" td=""><td>1.00</td><td>No</td></mdl>	1.00	No
Benzene (μg/L) - TW2	2021/01/28	<mdl 0.32<="" td=""><td>1.00</td><td>No</td></mdl>	1.00	No
Benzo(a)pyrene (μg/L) - TW1	2021/01/28	<mdl 0.004<="" td=""><td>0.01</td><td>No</td></mdl>	0.01	No
Benzo(a)pyrene (μg/L) - TW2	2021/01/28	<mdl 0.004<="" td=""><td>0.01</td><td>No</td></mdl>	0.01	No
Bromoxynil (μg/L) - TW1	2021/01/28	<mdl 0.33<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
Bromoxynil (μg/L) - TW2	2021/01/28	<mdl 0.33<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
Carbaryl (μg/L) - TW1	2021/01/28	<mdl 0.05<="" td=""><td>90.00</td><td>No</td></mdl>	90.00	No
Carbaryl (μg/L) - TW2	2021/01/28	<mdl 0.05<="" td=""><td>90.00</td><td>No</td></mdl>	90.00	No
Carbofuran (µg/L) - TW1	2021/01/28	<mdl 0.01<="" td=""><td>90.00</td><td>No</td></mdl>	90.00	No
Carbofuran (μg/L) - TW2	2021/01/28	<mdl 0.01<="" td=""><td>90.00</td><td>No</td></mdl>	90.00	No
Carbon Tetrachloride (μg/L) - TW1	2021/01/28	<mdl 0.17<="" td=""><td>2.00</td><td>No</td></mdl>	2.00	No
Carbon Tetrachloride (μg/L) - TW2	2021/01/28	<mdl 0.17<="" td=""><td>2.00</td><td>No</td></mdl>	2.00	No
Chlorpyrifos (µg/L) - TW1	2021/01/28	<mdl 0.02<="" td=""><td>90.00</td><td>No</td></mdl>	90.00	No
Chlorpyrifos (µg/L) - TW2	2021/01/28	<mdl 0.02<="" td=""><td>90.00</td><td>No</td></mdl>	90.00	No
Diazinon (μg/L) - TW1	2021/01/28	<mdl 0.02<="" td=""><td>20.00</td><td>No</td></mdl>	20.00	No
Diazinon (μg/L) - TW2	2021/01/28	<mdl 0.02<="" td=""><td>20.00</td><td>No</td></mdl>	20.00	No
Dicamba (μg/L) - TW1	2021/01/28	<mdl 0.2<="" td=""><td>120.00</td><td>No</td></mdl>	120.00	No
Dicamba (μg/L) - TW2	2021/01/28	<mdl 0.2<="" td=""><td>120.00</td><td>No</td></mdl>	120.00	No
1,2-Dichlorobenzene (μg/L) - TW1	2021/01/28	<mdl 0.41<="" td=""><td>200.00</td><td>No</td></mdl>	200.00	No
1,2-Dichlorobenzene (μg/L) - TW2	2021/01/28	<mdl 0.41<="" td=""><td>200.00</td><td>No</td></mdl>	200.00	No
1,4-Dichlorobenzene (μg/L) - TW1	2021/01/28	<mdl 0.36<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
1,4-Dichlorobenzene (µg/L) - TW2	2021/01/28	<mdl 0.36<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
1,2-Dichloroethane (μg/L) - TW1	2021/01/28	<mdl 0.35<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
1,2-Dichloroethane (μg/L) - TW2	2021/01/28	<mdl 0.35<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
1,1-Dichloroethylene (μg/L) - TW1	2021/01/28	<mdl 0.33<="" td=""><td>14.00</td><td>No</td></mdl>	14.00	No
1,1-Dichloroethylene (μg/L) - TW2	2021/01/28	<mdl 0.33<="" td=""><td>14.00</td><td>No</td></mdl>	14.00	No

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Parameter & Location	Sample Date <sup>6A</sup> (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Dichloromethane (Methylene Chloride) (μg/L) - TW1	2021/01/28	<mdl 0.35<="" td=""><td>50.00</td><td>No</td></mdl>	50.00	No
Dichloromethane (Methylene Chloride) (µg/L) - TW2	2021/01/28	<mdl 0.35<="" td=""><td>50.00</td><td>No</td></mdl>	50.00	No
2,4-Dichlorophenol (μg/L) - TW1	2021/01/28	<mdl 0.15<="" td=""><td>900.00</td><td>No</td></mdl>	900.00	No
2,4-Dichlorophenol (μg/L) - TW2	2021/01/28	<mdl 0.15<="" td=""><td>900.00</td><td>No</td></mdl>	900.00	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (μg/L) - TW1	2021/01/28	<mdl 0.19<="" td=""><td>100.00</td><td>No</td></mdl>	100.00	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (μg/L) - TW2	2021/01/28	<mdl 0.19<="" td=""><td>100.00</td><td>No</td></mdl>	100.00	No
Diclofop-methyl (μg/L) - TW1	2021/01/28	<mdl 0.4<="" td=""><td>9.00</td><td>No</td></mdl>	9.00	No
Diclofop-methyl (µg/L) - TW2	2021/01/28	<mdl 0.4<="" td=""><td>9.00</td><td>No</td></mdl>	9.00	No
Dimethoate (μg/L) - TW1	2021/01/28	<mdl 0.06<="" td=""><td>20.00</td><td>No</td></mdl>	20.00	No
Dimethoate (μg/L) - TW2	2021/01/28	<mdl 0.06<="" td=""><td>20.00</td><td>No</td></mdl>	20.00	No
Diquat (μg/L) - TW1	2021/01/28	<mdl 1.0<="" td=""><td>70.00</td><td>No</td></mdl>	70.00	No
Diquat (μg/L) - TW2	2021/01/28	<mdl 1.0<="" td=""><td>70.00</td><td>No</td></mdl>	70.00	No
Diuron (μg/L) - TW1	2021/01/28	<mdl 0.03<="" td=""><td>150.00</td><td>No</td></mdl>	150.00	No
Diuron (μg/L) - TW2	2021/01/28	<mdl 0.03<="" td=""><td>150.00</td><td>No</td></mdl>	150.00	No
Glyphosate (μg/L) - TW1	2021/01/28	<mdl 1.0<="" td=""><td>280.00</td><td>No</td></mdl>	280.00	No
Glyphosate (μg/L) - TW2	2021/01/28	<mdl 1.0<="" td=""><td>280.00</td><td>No</td></mdl>	280.00	No
Malathion (μg/L) - TW1	2021/01/28	<mdl 0.02<="" td=""><td>190.00</td><td>No</td></mdl>	190.00	No
Malathion (μg/L) - TW2	2021/01/28	<mdl 0.02<="" td=""><td>190.00</td><td>No</td></mdl>	190.00	No
Metolachlor (μg/L) - TW1	2021/01/28	<mdl 0.01<="" td=""><td>50.00</td><td>No</td></mdl>	50.00	No
Metolachlor (μg/L) - TW2	2021/01/28	<mdl 0.01<="" td=""><td>50.00</td><td>No</td></mdl>	50.00	No
Metribuzin (μg/L) - TW1	2021/01/28	<mdl 0.02<="" td=""><td>80.00</td><td>No</td></mdl>	80.00	No
Metribuzin (μg/L) - TW2	2021/01/28	<mdl 0.02<="" td=""><td>80.00</td><td>No</td></mdl>	80.00	No
Monochlorobenzene (Chlorobenzene) (μg/L) - TW1	2021/01/28	<mdl 0.3<="" td=""><td>80.00</td><td>No</td></mdl>	80.00	No
Monochlorobenzene (Chlorobenzene) (μg/L) - TW2	2021/01/28	<mdl 0.3<="" td=""><td>80.00</td><td>No</td></mdl>	80.00	No
Paraquat (μg/L) - TW1	2021/01/28	<mdl 1.0<="" td=""><td>10.00</td><td>No</td></mdl>	10.00	No
Paraquat (μg/L) - TW2	2021/01/28	<mdl 1.0<="" td=""><td>10.00</td><td>No</td></mdl>	10.00	No
PCB (μg/L) - TW1	2021/01/28	<mdl 0.04<="" td=""><td>3.00</td><td>No</td></mdl>	3.00	No
PCB (μg/L) - TW2	2021/01/28	<mdl 0.04<="" td=""><td>3.00</td><td>No</td></mdl>	3.00	No
Pentachlorophenol (μg/L) - TW1	2021/01/28	<mdl 0.15<="" td=""><td>60.00</td><td>No</td></mdl>	60.00	No
Pentachlorophenol (μg/L) - TW2	2021/01/28	<mdl 0.15<="" td=""><td>60.00</td><td>No</td></mdl>	60.00	No
Phorate (µg/L) - TW1	2021/01/28	<mdl 0.01<="" td=""><td>2.00</td><td>No</td></mdl>	2.00	No
Phorate (μg/L) - TW2	2021/01/28	<mdl 0.01<="" td=""><td>2.00</td><td>No</td></mdl>	2.00	No
Picloram (μg/L) - TW1	2021/01/28	<mdl 1.0<="" td=""><td>190.00</td><td>No</td></mdl>	190.00	No
Picloram (μg/L) - TW2	2021/01/28	<mdl 1.0<="" td=""><td>190.00</td><td>No</td></mdl>	190.00	No
Prometryne (μg/L) - TW1	2021/01/28	<mdl 0.03<="" td=""><td>1.00</td><td>No</td></mdl>	1.00	No

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Parameter & Location	Sample Date <sup>6A</sup> (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration	Exceedance of MAC
			(MAC)	
Prometryne (μg/L) - TW2	2021/01/28	<mdl 0.03<="" td=""><td>1.00</td><td>No</td></mdl>	1.00	No
Simazine (μg/L) - TW1	2021/01/28	<mdl 0.01<="" td=""><td>10.00</td><td>No</td></mdl>	10.00	No
Simazine (μg/L) - TW2	2021/01/28	<mdl 0.01<="" td=""><td>10.00</td><td>No</td></mdl>	10.00	No
Terbufos (μg/L) - TW1	2021/01/28	<mdl 0.01<="" td=""><td>1.00</td><td>No</td></mdl>	1.00	No
Terbufos (μg/L) - TW2	2021/01/28	<mdl 0.01<="" td=""><td>1.00</td><td>No</td></mdl>	1.00	No
Tetrachloroethylene (μg/L) - TW1	2021/01/28	<mdl 0.35<="" td=""><td>10.00</td><td>No</td></mdl>	10.00	No
Tetrachloroethylene (μg/L) - TW2	2021/01/28	<mdl 0.35<="" td=""><td>10.00</td><td>No</td></mdl>	10.00	No
2,3,4,6-Tetrachlorophenol (μg/L) - TW1	2021/01/28	<mdl 0.2<="" td=""><td>100.00</td><td>No</td></mdl>	100.00	No
2,3,4,6-Tetrachlorophenol (μg/L) - TW2	2021/01/28	<mdl 0.2<="" td=""><td>100.00</td><td>No</td></mdl>	100.00	No
Triallate (μg/L) - TW1	2021/01/28	<mdl 0.01<="" td=""><td>230.00</td><td>No</td></mdl>	230.00	No
Triallate (μg/L) - TW2	2021/01/28	<mdl 0.01<="" td=""><td>230.00</td><td>No</td></mdl>	230.00	No
Trichloroethylene (μg/L) - TW1	2021/01/28	<mdl 0.44<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
Trichloroethylene (μg/L) - TW2	2021/01/28	<mdl 0.44<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
2,4,6-Trichlorophenol (μg/L) - TW1	2021/01/28	<mdl 0.25<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
2,4,6-Trichlorophenol (μg/L) - TW2	2021/01/28	<mdl 0.25<="" td=""><td>5.00</td><td>No</td></mdl>	5.00	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW1	2021/01/28	<mdl 0.12<="" td=""><td>100.00</td><td>No</td></mdl>	100.00	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW2	2021/01/28	<mdl 0.12<="" td=""><td>100.00</td><td>No</td></mdl>	100.00	No
Trifluralin (μg/L) - TW1	2021/01/28	<mdl 0.02<="" td=""><td>45.00</td><td>No</td></mdl>	45.00	No
Trifluralin (μg/L) - TW2	2021/01/28	<mdl 0.02<="" td=""><td>45.00</td><td>No</td></mdl>	45.00	No
Vinyl Chloride (μg/L) - TW1	2021/01/28	<mdl 0.17<="" td=""><td>1.00</td><td>No</td></mdl>	1.00	No
Vinyl Chloride (μg/L) - TW2	2021/01/28	<mdl 0.17<="" td=""><td>1.00</td><td>No</td></mdl>	1.00	No
Trihalomethane: Total Annual Average (μg/L) - DW	4 Quarters of 2023	25.25	100.00	No
Haloacetic Acid: Total Annual Average (μg/L) - DW	4 Quarters of 2023	<mdl 5.3<="" td=""><td>80.00</td><td>No</td></mdl>	80.00	No

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

Note: TW1 refers to the Powerline Treatment Pumphouse located at 700 Veterans Way in Wasaga Beach, Ontario; TW2 refers to the Jenetta Treatment Pumphouse located at 17 Spruce Street, Wasaga Beach, Ontario.

<sup>6A</sup>Organic Parameters (Schedule 24) are required to be tested every 36 months for a large municipal residential system, if the system obtains water from a raw water supply that is ground water (O. Reg 170/03 Schedule 13-4.(b)). 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.

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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
N/A	N/A	N/A