

## 2021 Year End Report: Gravenhurst Potable Water Plant (PWP)



Drinking Water Works Permit: 143-209

Municipal Drinking Water License: 143-109

Ministry of Environment and Climate Change Waterworks #: 220002100

Engineering and Public Works Department

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## Introduction

The Gravenhurst Potable Water Plant (PWP) services the community of Gravenhurst and is owned and operated by the District Municipality of Muskoka.

It was constructed in 1983 and has an initial design capacity of 9,996 meters cubed per day. The water system currently serves a population of approximately 7,800 people.

The plant operates under license 143-109 and permit 143-209, issued in September 2021 under the Municipal Drinking Water Licensing Program. The plant also presently operates under Ministry of Environment, Conservation and Parks Ministry of the Environment Conservation and Parks (MECP) permit to take water #2320-8G2MLQ (expires February 23, 2031), which permits the operation of up to 9,996 meters cubed per day.

The Raw Water intake structure is located near Brydon's Bay on Lake Muskoka approximately 11.5 meters deep and 1,000 meters from shore.

The plant process is a direct filtration plant, with supplementary pH adjustment. The facility includes an intake crib, intake pipe, fixed screen, and a low lift pumping station. The treatment plant consists of flash mixing, four variable speed flocculators, and four dual media filters. Also located at the treatment plant are two backwash holding tanks, two contact chambers, two clear wells, four high lift pumps, two backwash pumps, chemical storage, preparation, and feed equipment.

The distribution system includes two elevated storage tanks supplying the Town of Gravenhurst and an in-ground reservoir servicing Corrections Canada Institutions.

All treatment control systems use a Supervisory Control and Data Acquisition (SCADA) system for process control and monitoring.

## Legislation Requirements

### Safe Drinking Water Act

In the Part Two Report of the Walkerton Inquiry, Commissioner Dennis O'Connor recommended that the Ontario Government enact a Safe Drinking Water Act to deal with matters related to treatment and distribution of drinking water. The Safe Drinking Water Act (SDWA) received royal assent in December, 2002.

The purpose of the Act is to gather in one place all legislation and regulations relating to the treatment and distribution of drinking water. The Act serves to protect human health through the control and regulation of drinking water systems and drinking water testing.

The foundation provisions of the Safe Drinking Water Act include:

- Purpose of the Act
- Definitions
- Minister's Powers and Duties
- Inspections
- Compliance and Enforcement
- Appeals and Offences

#### Ontario Regulations

The Ontario Government has enacted several supporting regulations under the SDWA (2002). These regulations combine previous requirements under the Ontario Water Resources Act and the new requirements under the SDWA. Key components of the regulations include:

- System Categories
- Groundwater Under Direct Influence Of Surface Water (GUDI)
- Exemptions
- Approval of Systems
- Treatment
- Testing and Operational Checks (General Rules)
- Operational Checks
- Microbiological Testing
- Chemical Testing
- Adverse Conditions
- Corrective Action
- Engineer's and Summary Reports

## Municipal Drinking Water Licenses / Certificates of Approval

The Municipal Drinking Water Licensing Program has replaced the Certificate of Approval program for municipal residential drinking water systems. The Ontario Government has implemented the Municipal Drinking Water Licensing Program (MDWLP) as recommended by Justice O'Connor in the Part II Report of the Walkerton Inquiry. Justice O'Connor recommended a new approvals framework for municipal drinking water systems, which would require owners to obtain a license to operate their systems as well as incorporate the concept of quality management into their operations.

A municipal drinking water license is an approval that is issued by the MECP to owners under the Safe Drinking Water Act, 2002 for the operation of municipal residential drinking water systems. The District of Muskoka operated under various Certificates of Approval until October 2010 when the operating licenses were issued.

Previous Certificates of Approval were required for the establishment, replacement or alteration of all municipal drinking water systems. The MECP issued Certificates of Approval to ensure that all undertakings comply with the legislation (i.e. Acts and Regulations) and the Ministry's Environmental Guidelines and Procedures developed to provide consistency of approach to various aspects of environmental protection throughout the province. Municipal Drinking Water Licenses and Permits similar to previous Certificates of Approval provide specific details about the drinking water system including:

- Drinking Water System Description
- Definitions and Information
- General Information – Compliance, Other Legal Requirements, Adverse Effects, Inspections
- Performance – Rated Capacity, Management of Residue
- Monitoring and Recording – Flow Measuring Devices, Sampling
- Operations and Maintenance

## Comparison to Rated Capacity and Flow Rates

The Gravenhurst Potable Water Plant has a rated capacity of 10,000 meters cubed per day. In 2021, the total monthly average flow for the year was 2,993 meters cubed per day. The maximum day flow for the year was 4,349 meters cubed per day, however the 3-year average for maximum day flow is 4,234 meters cubed per day. This represents 42% of the plant design capacity. There are process issues associated with this flow and providing potable water in excess of the historical maximum day values is presently impossible; upgrades are ongoing that will

correct this situation.

Monthly flows are shown in the attached table.

The Permit to Take Water (PTTW #2320-8G2MLQ) permits 10,000 meters per day; therefore there were no exceedances of this permit.

### Summary of Analytical Results

A total of 414 microbiological regulatory tests were performed in 2021 and compliance with Provincial standards was achieved throughout the entire year.

There were 650 free chlorine residual tests performed in the distribution system and all results were satisfactory except for one free chlorine residual which was reported and immediately corrected. Staff continue to routinely sample all areas of the system to ensure adequate free chlorine residuals are available throughout the distribution system.

A summary of other analytical results is also shown in this report.

### Summary of Treatment Chemicals

The following chemicals are used for the treatment of drinking water at the Gravenhurst PWP:

- Polyaluminum Chloride : Coagulant
- Sodium Hydroxide: pH Adjustment
- Cationic Polymer: Filter Aid
- Hydrofluosilicic Acid: Fluoride Dental supplement
- Hydrated Lime: Alkalinity
- Carbon Dioxide: pH Adjustment
- Sodium Hypochlorite: Disinfectant

A table summarizing the chemical use and average dosages is included in this report.

### Documentation of System Repairs, Upgrades and Service Disruptions

There was significant capital upgrades performed in 2021. Contract 18-432-257 was substantially completed to convert the existing direct filtration water treatment plant to conventional drinking water treatment by the addition of a settling process prior to filtration.

On November 27, 2021 there was an alarm call for a low treated water Fluoride residual. A certified operator found upon responding that there was an unlabeled 200 L drum of Fluoride connected to the system. While the Fluoride drum contents



were investigated, the Simcoe Muskoka District Health Unit placed a Do Not Use Order on the Gravenhurst water system, this was rescinded the same day Saturday November 27 and followed up with a Boil Water Order (BWO). Testing of the distribution water in the system was completed over the next two days with the BWO rescinded Tuesday November 30, 2021

## External Audits

### MECP Inspection

A MECP inspection was completed on August 20, 2021. The overall rating was 100%.

### DWQMS Audit

In 2021, all drinking water systems within the District had an external reaccreditation audit performed. There were no minor non-conformances reported and all drinking water systems have been recertified. Overall, all drinking water systems are performing satisfactorily.

## Gravenhurst Water Distribution Summary 2021

### New Services:

A total of 22 customers connected to existing serviced properties in 2021.

### Broken Watermains:

Zero watermain breaks occurred in 2021

### Service Leaks:

21 municipal service leaks was reported and repaired in 2021.

### Service Relocation:

3 service relocations to report in 2021.

### Frozen Services:

No municipal water services were frozen in 2021.

### Replacement Watermains:

There was no watermain replacement in Gravenhurst in 2021.

### New Watermains:

Approximately 250 meters of both 150 millimeters PVC and 50 millimeters poly watermain was installed on Daffodil Court in Loon Call-Hutton Subdivision Phase 2.

Approximately 32 meters of 150 mm and 64 meters of 50 mm watermain was installed at the Skyline development on Talisman Dr.

### Valve Replacement:

2 mainline valves were replaced in 2021. Valve 85 of 300 mm on Muskoka Rd North and

Valve 801 of 200 mm on Kinister Rd.

#### Fire Hydrants:

There are 517 Municipality assumed hydrants maintained by the District in the Town of Gravenhurst. All hydrants were pumped dry in the fall, and scoped during the winter months to ensure they are not susceptible to freezing. 2 additional hydrants were added in 2021.

#### Meter Installations:

A total of 46 water meters were replaced in Gravenhurst in 2021 as part of the aged meter change out program.

#### Turn on/off:

District field staff responded to 230 water turn on/off requests in 2021.

#### Air-Vacuum Release Valves:

15 air release valves were inspected and tested for proper operation in 2021. Each of the chambers was inspected and pumped out as required.

#### Locates:

The District operations completed 685 buried utility locate requests in 2021 to comply with Ontario OneCall requests.

Table 1 Water Flow Summary - 2021

Month	Total Monthly (m <sup>3</sup> )	Average Day Flow (m <sup>3</sup> /d)	Maximum Day Flow (m <sup>3</sup> /d)	Minimum Day Flow (m <sup>3</sup> /d)
January	81,305	2,623	2,962	2,076
February	78,385	2,799	3,154	2,473
March	88,675	2,860	3,408	2,524
April	82,049	2,735	3,157	2,423
May	96,723	3,120	3,949	2,032
June	102,673	3,422	4,349	2,666
July	99,317	3,204	3,726	2,688
August	106,845	3,447	4,045	2,801
September	94,293	3,143	3,701	2,723
October	93,449	3,014	3,789	2,359
November	80,129	2,671	2,993	2,070
December	90,465	2,918	3,443	2,304

Total Flow: 1,094,308m<sup>3</sup>  
Average Day: 2,996  
Maximum Day: 4,349  
Minimum Day: 2,032



*Table 2 Raw Water Monthly Analysis Summary 2021 Part 1*

<b>Month</b>	<b>Alkalinity (mg/L)</b>	<b>Hardness (mg/L)</b>	<b>pH</b>	<b>Turbidity (ntu)</b>	<b>True Colour (tcu)</b>	<b>Temperature (Celsius)</b>
<b>January</b>	7.8	13	6.99	0.40	24	1.9
<b>February</b>	8.3	12	7.04	0.33	20	1.5
<b>March</b>	8.4	12	7.02	0.27	26	1.9
<b>April</b>	7.9	13	6.84	0.39	18	5.9
<b>May</b>	8.0	14	6.88	0.36	16	8.8
<b>June</b>	7.6	12	6.75	0.26	12	10.8
<b>July</b>	7.6	14	6.71	0.34	24	10.0
<b>August</b>	8.4	12	6.75	0.35	19	10.8
<b>September</b>	8.0	12	6.73	0.30	17	11.5
<b>October</b>	8.3	14	6.61	0.44	26	13.9
<b>November</b>	8.6	14	6.78	0.42	17	10.0
<b>December</b>	8.2	13	6.92	0.38	21	6.2
<b>Average</b>	8.1	13	6.84	0.35	20.0	7.8

Table 3 Raw Water Monthly Analysis Summary 2021 Part 2

Month	Microcystin (ug/L)	TDS (mg/L)	Langliers Saturation Index	Total Coliforms (CFU/100mL)	E. Coli (CFU/100mL)	Total Number of Samples
January	Not Sampled	Not Sampled	Not Sampled	1	0	4
February	Not Sampled	48.6	-2.8	2	0	4
March	Not Sampled	Not Sampled	Not Sampled	2	0	5
April	Not Sampled	Not Sampled	Not Sampled	4	0	4
May	Not Sampled	Not Sampled	Not Sampled	3	0	5
June	<0.1 MDL	Not Sampled	Not Sampled	3	0	4
July	<0.1 MDL	Not Sampled	Not Sampled	4	1	4
August	<0.1 MDL	Not Sampled	Not Sampled	4	0	5
September	<0.1 MDL	Not Sampled	Not Sampled	9	1	4
October	<0.1 MDL	Not Sampled	Not Sampled	4	1	4
November	Not Sampled	51.2	-2.8	4	0	5
December	Not Sampled	Not Sampled	Not Sampled	9	1	4
Average	Not Sampled	Not Sampled	Not Sampled	4	0	4

*Table 4 Chemical Usage Summary: CO2*

Month	Average Dosage mg/L	Total kg
January	45.2	3,915.5
February	45.5	3,809.8
March	41.0	3,147.0
April	42.8	3,147.1
May	45.8	3,976.8
June	38.4	4,709.7
July	40.0	4,124.2
August	41.6	4,628.4
September	38.9	3,828.9
October	40.9	4,000.3
November	43.1	3,613.9
December	44.4	4,184.4
Average	42.3	3923.8

Total Yearly Kilograms: 47,086kg

*Table 5 Chemical Usage Summary: Hydrated Lime*

Month	Average Dosage mg/L	Total kg
January	20.9	1,809.2
February	19.6	1,643.6
March	18.3	1,712.4
April	21.3	1,800.0
May	23.9	2,418.1
June	22.8	2,445.1
July	24.1	2,490.9
August	24.2	2,689.6
September	23.7	2,326.1
October	24.4	2,393.7
November	24.3	2,039.7
December	24.2	2,282.6
Average	23	2170.9

Total Yearly Kilograms: 26,051kg

*Table 6 Chemical Usage Summary: Coagulant*

Month	Average Dosage mg/L	Total kg
January	16.0	1,385
February	16.0	1,339
March	16.1	1,497
April	16.0	1,352
May	16.0	1,605
June	16.1	1,723
July	16.0	1,654
August	16.1	1,793
September	16.0	1,576
October	16.0	1,572
November	16.0	1,339
December	16.1	1,517
Average	16.0	1529

Total Yearly Kilograms: 18,351kg

*Table 7 Chemical Usage Summary: Sodium Hydroxide*

Month	Average Dosage mg/L	Total kg
January	14.1	1,232
February	15.4	1,309
March	15.3	1,435
April	17.4	1,480
May	15.9	1,604
June	12.9	1,406
July	14.4	1,478
August	14.9	1,671
September	13.8	1,368
October	13.6	1,345
November	14.8	1,234
December	14.3	1,365
Average	14.7	1411

Total Yearly Kilograms: 16,928kg



*Table 8 Chemical Usage Summary: Fluoride*

Month	Average Dosage mg/L	Total kg
January	0.45	36.6
February	0.41	31.9
March	0.45	39.6
April	0.45	36.6
May	0.44	42.8
June	0.44	45.0
July	0.41	40.9
August	0.45	47.8
September	0.45	42.2
October	0.45	41.7
November	0.39	31.2
December	0.00	0.0
Average	0.40	36

Total Yearly Kilograms: 436kg

*Table 9 Chemical Usage Summary: Chlorine*

Month	Average Dosage mg/L	Total kg
January	2.91	255.1
February	1.73	146.1
March	2.84	264.4
April	3.10	264.6
May	3.08	313.5
June	3.35	366.0
July	2.37	244.2
August	2.65	294.6
September	3.82	378.8
October	4.07	403.0
November	4.14	345.4
December	3.78	357.4
Average	3.37	330

Total Yearly Kilograms: 3,633kg

## Gravenhurst Certification of Reports

I certify that the information in this document and all attachments are correct, accurate, and complete to the best of my knowledge

Michael Spicer  
Director, Water and Wastewater Services

Mark Pringle, C.E.T.  
Manager of Water and Wastewater Operations

Disclaimer: The following pages are not in an accessible format.

**Part III Form 2  
Section 11. ANNUAL REPORT.**

<b>Drinking-Water System Number:</b>	220002100
<b>Drinking-Water System Name:</b>	Muskoka Beach Water Treatment Plant
<b>Drinking-Water System Owner:</b>	District Municipality of Muskoka
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 01 to December 31, 2021

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <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.</p> <div style="border: 1px solid black; padding: 5px;">                 District Municipality of Muskoka                  70 Pine Street                  Bracebridge, Ontario                  P1H 1N3                  (705) 645-6764                  www.muskoka.on.ca             </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served: <input type="text" value="N.A."/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</p> <p>Number of Interested Authorities you report to: <input type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]</p>
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List Drinking-Water Systems, if any, which receive all of their drinking water from your system:

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?

Yes [ ] No [ ]

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

- [ X ] Public access/notice via the web
- [ X ] Public access/notice via Government Office
- [ X ] Public access/notice via a newspaper
- [ X ] Public access/notice via Public Request

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

**Describe your Drinking-Water System**

The water treatment plant in Gravenhurst was originally constructed in 1983. Significant improvements to process monitoring, control, and chemical feed systems were completed in 2004. The treatment process consists of chemically assisted coagulation-flocculation and direct filtration using dual media filters with a combination of sand and anthracite coal. Disinfection in a chlorine contact chamber followed by final pH adjustment and fluoridation completes the treatment process. The water system currently serves a population of approximately 7,800 people. The rated water production of the plant is 9,996 cubic meters per day. Our raw water source is Lake Muskoka. Our intake is located approximately 11.5 meters deep, about 1000 meters from shore.

**List all water treatment chemicals used over this reporting period**

Sodium Hypochlorite, Sodium hydroxide, Polyaluminum Chloride, Carbon Dioxide, Hydrated Lime, Sodium Permanganate, Fluoride, Cationic Polymer

**Were any significant expenses incurred to?**

- Install required equipment
- Repair required equipment
- Replace required equipment

**Describe**

New Sedimentation tanks and associated equipment have been 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	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
Sept 7/21	EC/TC	NDOGT	cfu/100mL	Resamples (2x)	Sept 9/21 Sept 10/21
Oct 1/21	Free Chlorine	0.00	mg/L	Flushing & restore disinfection	Oct 1/21
Nov 27/21	Loss of Pressure	0	kPa	Flushing & Sampling	Nov 30/21

**Microbiological testing done under section 8-2 during this reporting period**

	Number of Samples	Range of E.Coli Or Fecal Results (#-#)	Range of Total Coliform Results (#-#)	Number of HPC Samples Or Background Colony Counts	Range of HPC Results (#-#) Or Background Colony Counts
<b>Raw</b>	52	0 - 3	0 - 18	0	N/A
<b>Treated</b>	52	0 - 0	0 - 0	52	0 - 1

<b>Distribution</b>	310	0 - 0	0 - 0	245	0 – 64
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**Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.**

	<b>Number of Grab Samples</b>	<b>Range of Results (min # - max #)</b>	<b>Geometric Mean</b>
<b>Turbidity</b>	<b>8760</b>	0.02– 0.09 NTU	0.03 NTU
<b>Chlorine</b>	<b>8760</b>	1.53 – 2.35	1.96
<b>Chlorine Residual Distribution System</b>	<b>8760</b>	0.00 – 1.72	1.11
<b>Fluoride (If the DWS provides fluoridation)</b>	<b>8760</b>	0.03 – 0.82	0.46

**NOTE:**  
For continuous monitors use 8760 as the number of samples.

**NOTE:** Record the unit of measure if it is **not** milligrams per litre.

**Summary of additional testing and sampling carried out in accordance with the requirement of an approval or order.**
**Summary of Inorganic parameters tested during this reporting period or most recent sample results.**

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Antimony	May 26/21	0.09<MDL	µg/L	No
Arsenic	May 26/21	0.2<MDL	µg/L	No
Barium	May 26/21	11.9	µg/L	No
Boron	May 26/21	7	µg/L	No
Cadmium	May 26/21	0.014	µg/L	No
Chromium	May 26/21	0.25	µg/L	No
Lead*	May 26/21		µg/L	No
Mercury	May 26/21	0.01<MDL	µg/L	No
Selenium	May 26/21	0.04	µg/L	No
Sodium	May 26/21	16.9	mg/L	No
Uranium	May 26/21	0.010	µg/L	No
Fluoride	May 26/21	0.53	mg/L	No
Nitrite	Feb 23/21	0.003<MDL	mg/L	No
Nitrate	Feb 23/21	0.232	mg/L	No
Nitrite	May 26/21	0.003<MDL	mg/L	No
Nitrate	May 26/21	0.224	mg/L	No
Nitrite	Aug 10/21	0.003<MDL	mg/L	No
Nitrate	Aug 10/21	0.240	mg/L	No
Nitrite	Nov 15/21	0.003<MDL	mg/L	No
Nitrate	Nov 15/21	0.168	mg/L	No

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential



systems, large non-municipal non-residential systems, and small non-municipal non-residential systems.

**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 small non-municipal non-residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) -(max#)	Geometric Mean Average	Unit of Measure	Number of Exceedances
Plumbing	0	N.A.	N.A.	N.A.	N.A.
Distribution	6	0.01 – 0.18	0.05	µg/L	0

**Summary of Organic parameters sampled during this reporting period or most recent**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	May 26/21	0.02<MDL	µg/L	No
Atrazine + N-dealkylated metabolites	May 26/21	0.01<MDL	µg/L	No
Azinphos-methyl	May 26/21	0.05<MDL	µg/L	No
Benzene	May 26/21	0.32<MDL	µg/L	No
Benzo(a)pyrene	May 26/21	0.004<MDL	µg/L	No
Bromoxynil	May 26/21	0.33<MDL	µg/L	No
Carbaryl	May 26/21	0.05<MDL	µg/L	No
Carbofuran	May 26/21	0.01<MDL	µg/L	No
Carbon Tetrachloride	May 26/21	0.17<MDL	µg/L	No
Chlorpyrifos	May 26/21	0.02<MDL	µg/L	No
Diazinon	May 26/21	0.02<MDL	µg/L	No
Dicamba	May 26/21	0.20<MDL	µg/L	No
1,2-Dichlorobenzene	May 26/21	0.41<MDL	µg/L	No
1,4-Dichlorobenzene	May 26/21	0.36<MDL	µg/L	No
1,2-Dichloroethane	May 26/21	0.35<MDL	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	May 26/21	0.33<MDL	µg/L	No
Dichloromethane	May 26/21	0.35<MDL	µg/L	No
2,4 Dichlorophenol	May 26/21	0.15<MDL	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	May 26/21	0.19<MDL	µg/L	No
Diclofop-methyl	May 26/21	0.40<MDL	µg/L	No
Dimethoate	May 26/21	0.06<MDL	µg/L	No
Diquat	May 26/21	1<MDL	µg/L	No
Diuron	May 26/21	0.03<MDL	µg/L	No
Glyphosate	May 26/21	1<MDL	µg/L	No
Malathion	May 26/21	0.02<MDL	µg/L	No
MCPA	May 26/21	0.00012<MDL	µg/L	No
Metolachlor	May 26/21	0.01<MDL	µg/L	No
Metribuzin	May 26/21	0.02<MDL	µg/L	No
Monochlorobenzene	May 26/21	0.30<MDL	µg/L	No
Paraquat	May 26/21	1<MDL	µg/L	No
Pentachlorophenol	May 26/21	0.15<MDL	µg/L	No

<b>Phorate</b>	May 26/21	0.01<MDL	µg/L	No
<b>Picloram</b>	May 26/21	1.0<MDL	µg/L	No
<b>Polychlorinated Biphenyls(PCB)</b>	May 26/21	0.04<MDL	µg/L	No
<b>Prometryne</b>	May 26/21	0.03<MDL	µg/L	No
<b>Simazine</b>	May 26/21	0.01<MDL	µg/L	No
<b>THM</b> (NOTE: annual average from Distribution – 9 samples)	Feb 23/21 May 26/21 Aug 10/21 Nov 15/21	72.9	µg/L	No
<b>Terbufos</b>	May 26/21	0.01<MDL	µg/L	No
<b>Tetrachloroethylene</b>	May 26/21	0.35<MDL	µg/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	May 26/21	0.20<MDL	µg/L	No
<b>Triallate</b>	May 26/21	0.01<MDL	µg/L	No
<b>Trichloroethylene</b>	May 26/21	0.44<MDL	µg/L	No
<b>2,4,6-Trichlorophenol</b>	May 26/21	0.25<MDL	µg/L	No
<b>Trifluralin</b>	May 26/21	0.02<MDL	µg/L	No
<b>Vinyl Chloride</b>	May 26/21	0.17<MDL	µg/L	No
<b>HAA5</b> (NOTE: annual average from Distribution)	Feb 23/21	70.5	µg/L	No
	May 26/21		µg/L	No
	Aug 10/21		µg/L	No
	Nov 15/21		µg/L	No

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

Parameter	Result Value	Unit of Measure	Date of Sample
<b>THM</b> (NOTE: annual average from Distribution – 13 samples)	72.9	ug/L	Feb 23/21 May 26/21 Aug 10/21 Nov 15/21
<b>HAA5</b> (NOTE: annual average from Distribution – 13 samples)	70.5	ug/L	Feb 23/21 May 26/21 Aug 10/21 Nov 15/21