ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

2025 Annual Performance Report for the Holtyre Drinking Water System

January 1, 2025 to December 31, 2025

PREPARED BY

Ontario Clean Water Agency
on behalf of the Township of Black River-Matheson

Date: February 20, 2026
Rev: 0

Revision History

Rev. No.	Date	Prepared by:	Approved by:	Description
0	February 20, 2026	Alex Leclerc, PCT	Chris Ciarrocca, Senior Operations Manager	Revision 0 Issued

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Introduction

Municipalities throughout Ontario are required to comply with Ontario Regulation 170/03 made under the Safe Drinking Water Act (SDWA) since June 2003. The Act was passed following recommendations made by Commissioner O'Conner after the Walkerton Inquiry. The Act's purpose is to protect human health through the control and regulation of drinking-water systems. O. Reg. 170/03 regulates drinking water testing, use of licensed laboratories, treatment requirements and reporting requirements.

O. Reg. 170/03 requires the owner to produce an Annual Report, under Section 11. This report must include the following:

1. Description of system and chemical(s) used
2. Summary of any adverse water quality reports and corrective actions
3. Summary of all required testing
4. Description of any major expenses incurred to install, repair or replace equipment

This Annual Report must be completed by February 28 of each year.

The regulation also requires a Summary Report which must be presented and accepted by Council by March 31 of each year for the preceding calendar year reporting period.

The report must list the requirements of the Act, its regulations, the system's Drinking Water Works Permit (DWWP), Municipal Drinking Water Licence (MDWL), Certificate of Approval (if applicable), and any regulatory requirement the system failed to meet during the reporting period. The report must also specify the duration of the failure, and for each failure referred to, describe the measures that were taken to correct the failure.

The Safe Drinking Water Act, 2002 and the drinking water regulations can be viewed at the following website: http://www.e-laws.gov.on.ca.

To enable the Owner to assess the rated capacity of their system to meet existing and future planned water uses, the following information is also required in the report.

1. A summary of the quantities and flow rates of water supplied during the reporting period, including the monthly average and the maximum daily flows.
2. A comparison of the summary to the rated capacity and flow rates approved in the systems approval, drinking water works permit or municipal drinking water licence or a written agreement if the system is receiving all its water from another system under an agreement.

The reports have been prepared by the Ontario Clean Water Agency (OCWA) on behalf of the Owner and presented to council as the 2025 Annual/Summary Report.

Section 11 – Annual Report

1. Introduction

Drinking-Water System Name	**Holtyre Drinking Water System**
Drinking-Water System Number	220002565
Drinking-Water System Owner	The Corporation of the Township of Black River - Matheson
Drinking-Water System Category	Small Municipal, Residential System
Municipal Drinking Water License No.	204-101 (Issue 6 - March 14, 2022)
Drinking Water Works Permit No.	204-201 (Issue 3 - March 14, 2022)
Permit to Take Water No.	300-6090341906 (Issued October 2, 2020)
Reporting Period	January 1, 2025 to December 31, 2025

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 at: https://www.twpbrm.ca/your-township-government/ocwa-reports/

Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection:

Black River - Matheson Municipal Office
367 Fourth Avenue,
Matheson ON P0K 1N0

Drinking-Water Systems that receive drinking water from the Holtyre Drinking Water System

The Holtyre Drinking Water System provides all of its drinking water to the community of Holtyre, within the township of Black River-Matheson.

The Annual Report was not provided to any other Drinking Water System Owners

The Ontario Clean Water Agency prepared the 2025 Annual/Summary Report for the Holtyre Drinking Water System and provided a copy to the system owner; the Corporation of the Township of Black River - Matheson. The Holtyre Drinking Water System is a stand-alone system that does not receive water from or send water to another system.

Notification to system users that the Annual Report is available for viewing is accomplished through:

- Notice on the Township's website
- Notice in the local newspaper

2. Holtyre Drinking Water System (DWS No. 220002565)

The Holtyre Drinking Water System is owned by the Corporation of the Township of Black River-Matheson and consists of a Class 1 water treatment subsystem and a Class 1 water distribution subsystem. It is a groundwater system that services the community of Holtyre. The Ontario Clean Water Agency is the accredited operating authority and is designated as the Overall Responsible Operator for both the water treatment and water distribution facilities.

Raw Water Supply

Well No. 1 is located 17.5 metres south of Cain Street and 12 metres west of Euclid Street. It is a 200 mm diameter, 57 metre deep drilled groundwater well equipped with a 1.2 kW submersible deep well pump, rated at 47 litres per minute at a Total Dynamic Head of 50.7 metres with a 50 mm diameter discharge line connected to the pump header located in the pumphouse. It is considered the secondary production well for the Holtyre Drinking Water System.

Well No. 3 is the main production well for the system and is located 19.6 metres west of the road allowance between Concessions 1 and 2, Township of Hislop and 594 metres south of the intersection with Highway 572. It is a 150 mm diameter, 37 metre deep drilled groundwater well equipped with a 1.2 kW submersible deep well pump, rated at 100.8 litres per minute at a Total Dynamic Head of 34 metres with a 50 mm diameter discharge line connected to the pump header located in the pumphouse.

Water Treatment

The water treatment plant is located within the village of Holtyre at 644 Euclid Avenue. It receives raw groundwater from Wells 1 & 3. Within the water treatment plant, the individual well discharge pipes are metered for flow and then join one common header. An iron and manganese sequestering agent is added to the water prior to being injected with 12% sodium hypochlorite. Treated water is then discharged to the clearwell.

The disinfection system consists of two chemical metering pumps (one duty and one on standby) and one chemical solution tank. The iron sequestering system consists of two chemical metering pumps (one duty and one on standby) and one chemical solution tank. Other equipment located within the water treatment plant includes two 0.45 m^3 pressure tanks and three 3HP submersible high lift pumps (2 duty, 1 standby), each with variable frequency drives and a capacity of 3 L/second.

Water Storage

Located under the floor slab of the water treatment plant, the clearwell is a 151 m^3 un-baffled storage reservoir. The high lift pumps transfer the treated water from the reservoir to the pressure tank and subsequently to the distribution system. One 2255 L chlorine contact tank is also available to be utilized when the clearwell is not in operation.

Control System

The Holtyre Water Treatment System is controlled by a dedicated Programmable Logic Controller (PLC) and monitored through a Control System Supervisory Control and Data Acquisition (SCADA) system. All analyzing, monitoring and control module equipment information is routed through the SCADA system for operator monitoring and control. Control of equipment can be accomplished locally using the computer at the Holtyre water treatment plant. Operators can also access the system using their own computers and cell phones. Alarm capability and set point adjustment along with trend monitoring are also available through SCADA system controls.

Emergency Power

An emergency stand-by 12.5 kW diesel-powered generator is available at the water treatment plant to ensure continued operation of the facility during a power outage.

Distribution System

The system serves an approximate population of 255 persons in 75 private residences with an estimated total of 99 service connections. The distribution system itself consists primarily of four-inch asbestos concrete constructed water main. There is no elevated storage in this system. There are three hydrants which are used only for distribution system flushing, not fire protection. In late 2007 the municipality installed two automatic flushing devices in strategic locations in the distribution system as a measure to improve the aesthetic water quality.

Note: The other hydrants located within the village are not part of the drinking water system. Prior to the establishment of the drinking water system, the Ross Mine provided water for fire protection through a system of hydrants. With the closure of the mine, this water system was abandoned. These non-functional hydrants and associated water mains were/are not connected to the existing drinking water system.

3. List of Water Treatment Chemicals Used

The following chemicals were used in the Holtyre Drinking Water System treatment process:

- Sodium Hypochlorite – disinfection
- ENV PROQUEST (tetrapotassium pyrophosphate solution) - Iron & Manganese Sequestering

All treatment chemicals meet AWWA and NSF/ANSI standards.

4. Significant Expenses Incurred to the Drinking Water System

OCWA is committed to maintaining the assets of the drinking water system and sustains a program of scheduled inspection and maintenance activities using a computerized Work Management System (WMS).

Significant expenses incurred in the drinking water system include the following:

- Quality and Environmental Management System (QEMS) external surveillance audit conducted by Intertek-SAI Global.
- Purchasing of enhanced sequestering chemical.
- Well #3 capacity investigation and acid wash.
- Generator servicing.
- Sodium Hypochlorite pump spare parts kit.
- Manganese removal (FILOX pilot project).
- Additional sampling for iron and manganese.
- Spring and fall watermain flushing.
- Hydrant winterization.
- Updated distribution mapping.
- Water hydrant repairs.
- Water service and curb-stop repairs.

5. Details on Notices of Adverse Test Results and Other Problems Reported to & Submitted to the Spills Action Center

Based on information kept on record by OCWA, one (1) adverse water quality incident was reported to the Ministry's Spills Action Centre in 2025.

Incident #1: Treated Water Sodium Exceedance	
Date:	October 20th, 2025
Details:	The sample taken on October 20th, 2025 at 12:35pm from Holtyre WTP had a sodium result of 27.3 mg/L. Sodium sampling is required every five

(5) years and a result of greater than 20 mg/L is considered an adverse water quality result.

Corrective Actions: The Northeastern Public Health Unit (NEPHU) was notified and a resample was taken on October 27th, 2025 at 14:06 from Holtyre WTP, which had a sodium result of 23.3mg/L. The NEPHU issued a letter to local physicians so that people requiring sodium-restricted diets could be notified of the elevated sodium levels.

6. Microbiological Testing

Table 1: Summary of Microbiological Data

Sample Type	# of Samples	*Range of E.coli* Results *(min to max)*	Range of Total Coliform Results *(min to max)*	# of HPC Samples	Range of HPC Results *(min to max)*
Raw – Well 1	12	0 to 0	0 to 0	N/A	N/A
Raw – Well 3	14	0 to 0	0 to 0	N/A	N/A
Distribution	28	0 to 0	0 to 0	28	<10 to 20

Maximum Acceptable Concentration (MAC) for treated and distribution samples: *E. coli* = 0 CFUs/100 mL and MAC for Total Coliforms = 0 CFUs/100 mL

"<" denotes less than the laboratory's method detection limit

Notes:

1. One microbiological sample is collected and tested each month from the raw supply and once every two weeks from the distribution system.
2. Well 1 was not operational in December due to maintenance, and therefore sampling was not conducted.

7. Operational Testing

Table 2: Summary of Raw Water Turbidity Results

Parameter	# of Samples	Range of Results *(min to max)*	Unit of Measure	Standard
Turbidity – Well 1	12	0.37 to 0.96	NTU	N/A
Turbidity – Well 3	12	0.41 to 4.18	NTU	N/A

Notes:

1. Raw water turbidity sampling is required once every month.
2. In March, well 3 was disturbed while flushing causing high colour and turbidity readings. The well was flushed for 4 hours to resolve the issue.

Table 3: Continuous Monitoring in the Treatment Process

Parameter	No. of Samples	Range of Results *(min to max)*	Unit of Measure	Standard
Free Chorine Residual	8760	0.32 to 2.01	mg/L	CT**

Notes:

1. For continuous monitors, 8760 is used as the number of samples.
2. ** CT is the concentration of chlorine in the water times the time of contact that the chlorine has with the water. It is used to demonstrate the level of disinfection treatment in the water. CT calculations are performed for the Holtyre water plant if the free chlorine residual level drops below 0.30 mg/L to ensure primary disinfection is achieved.

Table 4: Summary of Chlorine Residuals in the Distribution System

Parameter	No. of Samples	Range of Results (min to max)	Unit of Measure	Standard
Free Chlorine Residual	258	0.54 to 1.73	mg/L	$\geq$ 0.05

Note: A total of two operational checks for chlorine residual in the distribution system are collected each week. The samples are collected at least 48-hours apart within the same week.

Refer to *Appendix A* for a monthly summary of the above microbiological and operational data.

8. Chemical Testing

Table 5: Summary of Nitrate & Nitrite Data from the Water Treatment Plant

Date of Sample	Nitrate Result	Nitrite Result	Unit of Measure	Exceedance
January 13	<0.10	<0.01	mg/L	No
April 22	0.20	<0.01	mg/L	No
July 14	<0.10	<0.01	mg/L	No
October 20	<0.05	<0.05	mg/L	No

Note: Maximum Allowable Concentration (MAC) for Nitrate = 10 mg/L and for Nitrite = 1 mg/L

Table 6: Summary of Total Trihalomethane Results from the Distribution System

Date of Sample (2023)	THM Result	Unit of Measure	Running Average	Exceedance
January 3	30.5	ug/L	Q1 = 26.2	No
April 3	35.1	ug/L	Q2 = 29.1	No
July 4	27.0	ug/L	Q3 = 29.0	No
October 10	41.7	ug/L	Q4 = 33.6	No

Notes:

1. Maximum Allowable Concentration (MAC) for Total Trihalomethanes = 100 ug/L (Four Quarter Running Average).
2. Reduced sampling for small systems applied to the Holtyre DWS in 2025. The most recent sampling was completed in 2023 and is next scheduled for 2026.

Table 7: Summary of Total Haloacetic Acid Results from the Distribution System

Date of Sample (2023)	THM Result	Unit of Measure	Running Average	Exceedance
January 3	15	ug/L	Q1 = 17.5	No
April 3	26	ug/L	Q2 = 22.0	No
July 4	18	ug/L	Q3 = 21.0	No
October 10	27	ug/L	Q4 = 21.5	No

Notes:

1. Maximum Allowable Concentration (MAC) for Total Trihalomethanes = 100 ug/L (Four Quarter Running Average).
2. Reduced sampling for small systems applied to the Holtyre DWS in 2025. The most recent sampling was completed in 2023 and is next scheduled for 2026.

Table 8: Summary of Lead Results under Schedule 15.1 (from the distribution system)

Date of Sample	# of Samples	Field pH	Field Temperature (°C)	Alkalinity (mg/L)	Lead (ug/L)
April 9	1	8	6.4	195	N/A
October 10	1	8.3	12.7	289	N/A

Note: *The system is required to test for total alkalinity and pH in one distribution sample collected during the period of December 15 to April 15 (winter period) and one distribution sample during the period of June 15 to October 15 (summer period). This testing is required in every 12-month period with lead testing in every third 12-month period. Lead testing was last performed in 2023, and the results were <0.1 ug/L sampled on April 13th and <0.1 ug/L sampled on October 3rd. The next lead sampling events are scheduled for 2026.*

Table 9: Most Recent Schedule 23 Inorganic Results from the Water Treatment Plant

Parameter	Result Value	Unit of Measure	MAC	MAC Exceedance	½ MAC Exceedance
Antimony	<0.5	ug/L	6	No	No
Arsenic	2.2	ug/L	10	No	No
Barium	48	ug/L	1000	No	No
Boron	213	ug/L	5000	No	No
Cadmium	<0.1	ug/L	5	No	No
Chromium	3.0	ug/L	50	No	No
Mercury	<0.1	ug/L	1	No	No
Selenium	<0.2	ug/L	50	No	No
Uranium	<0.5	ug/L	20	No	No

Note: Sampling required every 60 months (sample date = *October 20, 2025). Next sampling scheduled for October 2030.*

Table 10: Most Recent Schedule 24 Organic Results from the Water Treatment Plant

Parameter	Result Value	Unit of Measure	Standard	MAC Exceedance	½ MAC Exceedance
Alachlor	<0.261	ug/L	5	No	No
Atrazine + N-dealkylated metobolites	<0.5	ug/L	5	No	No
Azinphos-methyl	<0.195	ug/L	20	No	No
Benzene	<0.1	ug/L	1	No	No
Benzo(a)pyrene	<0.01	ug/L	0.01	No	No
Bromoxynil	<0.11	ug/L	5	No	No
Carbaryl	<0.5	ug/L	90	No	No
Carbofuran	<0.5	ug/L	90	No	No
Carbon Tetrachloride	<0.2	ug/L	2	No	No
Chlorpyrifos	<0.2	ug/L	90	No	No
Diazinon	<0.2	ug/L	20	No	No
Dicamba	<0.1	ug/L	120	No	No

Parameter	Result Value	Unit of Measure	Standard	MAC Exceedance	½ MAC Exceedance
1,2-Dichlorobenzene	<0.20	ug/L	200	No	No
1,4-Dichlorobenzene	<0.30	ug/L	5	No	No
1,2-Dichloroethane	<0.20	ug/L	5	No	No
1,1-Dichloroethylene (vinylidene chloride)	<0.30	ug/L	14	No	No
Dichloromethane	<1.0	ug/L	50	No	No
2-4 Dichlorophenol	<0.20	ug/L	900	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	<0.41	ug/L	100	No	No
Diclofop-methyl	<0.14	ug/L	9	No	No
Dimethoate	<0.20	ug/L	20	No	No
Diquat	<0.40	ug/L	70	No	No
Diuron	<0.5	ug/L	150	No	No
Glyphosate	<10	ug/L	280	No	No
Malathion	<0.20	ug/L	190	No	No
Metolachlor	<0.13	ug/L	50	No	No
Metribuzin	<0.13	ug/L	80	No	No
Monochlorobenzene	<0.50	ug/L	80	No	No
Paraquat	<0.20	ug/L	10	No	No
Polychlorinated Biphenyls (PCBs)	<0.06	ug/L	3	No	No
Pentachlorophenol	<0.30	ug/L	60	No	No
Phorate	<0.13	ug/L	2	No	No
Picloram	<0.10	ug/L	190	No	No
Prometryne	<0.07	ug/L	1	No	No
Simazine	<0.20	ug/L	10	No	No
Terbufos	<0.13	ug/L	1	No	No
Tetrachloroethylene	<0.30	ug/L	10	No	No

Parameter	Result Value	Unit of Measure	Standard	MAC Exceedance	½ MAC Exceedance
2,3,4,6-Tetrachlorophenol	<0.20	ug/L	100	No	No
Triallate	<0.13	ug/L	230	No	No
Trichloroethylene	<0.20	ug/L	5	No	No
2,4,6-Trichlorophenol	<0.20	ug/L	5	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA)	<0.41	ug/L	100	No	No
Trifluralin	<0.13	ug/L	45	No	No
Vinyl Chloride	<0.10	ug/L	1	No	No

Note: Sampling required every 60 months (sample date = *October 20, 2025). Next sampling scheduled for October 2030.*

Inorganic or Organic Parameter(s) that Exceeded Half the Standard Prescribed in Schedule 2 of Ontario Drinking Water Quality Standards

No inorganic or organic parameter(s) listed in Schedule 23 and 24 of Ontario Regulation 170/03 (parameters listed in Table 9 and Table 10 of this report) exceeded half the standard found in Schedule 2 of the Ontario Drinking Water Standard (O. Reg.169/03) during the reporting period.

Table 11: Most Recent Sodium Data (from the Water Treatment Plant)

Date of Sample	Number of Samples	Result Value	Unit of Measure	MAC	Exceedance
October 20, 2025	1	27.3	mg/L	20	Yes – AWQI 170546
October 27, 2025	1	23.3	mg/L	20	Yes - Resample

Note: Sample required every 60 months. Next sampling scheduled for October 2030.

The aesthetic objective for sodium in drinking water is 200 mg/L at which it can be detected by a salty taste. It is required that the local Medical Officer of Health be notified when the concentration exceeds 20 mg/L so that persons on sodium restricted diets can be notified by their physicians. Refer to *Section 5* - Details on Notices of Adverse Test Results and Other Problems Reported to & Submitted to the Spills Action Center on page 5 of this report for details.

Table 12: Most Recent Fluoride Data Sampled at the Water Treatment Plant

Date of Sample	Number of Samples	Result Value	Unit of Measure	MAC	Exceedance
October 20, 2025	1	0.11	mg/L	1.5	No

Note: Sample required every 60 months. Next sampling scheduled for October 2030.

9. Additional Testing Performed in Accordance with a Legal Instrument

No additional testing was required in 2025.

Schedule 22 – Summary Reports for Municipalities

10. Requirements the System Failed to Meet

The requirements of the Safe Drinking Water Act (2002), the drinking water regulations, the Permit to Take Water (PTTW), the Municipal Drinking Water Licence (MDWL), the Drinking Water Works Permit (DWWP), and any other orders applicable to the system that were all met during the reporting period.

According to information kept on record by OCWA, there were no non-compliance issues for the Holtyre Drinking Water System during 2025.

It should be noted that one (1) adverse water quality incident was reported to the Ministry's Spills Action Center during the reporting period. Refer to *Section 5 - Details on Notices of Adverse Test Results and Other Problems Reported to & Submitted to the Spills Action Center* on page 5 of this report for details.

11. Summary of Quantities and Flow Rates

11.1 Flow Monitoring

Municipal Drinking Water Licence (MDWL) No. 204-101 requires the owner to install a sufficient number of flow-measuring devices to permit the continuous measurement and recording of:

- the flow rate and daily volume of water conveyed from the treatment system to the distribution system, and
- the flow rate and daily volume of water conveyed into the treatment system.

The flow monitoring equipment identified in the MDWL is present and operating as required.

The system's Permit to Take Water (PTTW) No. 300-6090341906 requires that on each day water is taken from the source, the date, the volume of water taken on that date and the rate at which it was taken be recorded.

The Holtyre Drinking Water System has two flow meters to monitor the raw water from each well entering the treatment plant and one to monitor the treated water entering the distribution system. These flow metering devices were calibrated in accordance to manufacturers' specifications on an annual basis and are operating as required.

11.2 Rated Capacity and Flow Rates

The system's PTTW No. 300-6090341906 allows the plant to withdraw a total combined volume of 230.4 cubic meters (m^3) each day. Well No. 1 is permitted to take 100.8 m^3 per day, and well No. 3 is permitted to withdraw 129.6 m^3 per day. A review of the raw water flow data indicates that the system did not exceed these allowable limits. The maximum water taking from Well No. 1 was 82.5 m^3, the maximum taking from Well No. 3 was 62 m^3 and the combined maximum was 105.7 m^3.

The Permit also allows a maximum flow rate of 70 L/minute from well No. 1. Well No. 3 is permitted a maximum flow rate of 90 L/minute. Well No. 1 and Well No. 3 operated within their allowable flow rates having a maximum flow rate of 63.6 and 84.6 L/minute, respectively.

Condition 1.0 (1.1) to Schedule C of MDWL No. 204-101 states that the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system must not exceed a maximum flow of 259 m^3 on any calendar day. The Holtyre DWS complied with this limit, having recorded a daily maximum volume of 103.8 m^3/day, which is 40% of the rated capacity.

The following tables (Tables 13 – 16) indicate the quantities and flow rates of water taken and produced during the reporting period, including monthly average flows, maximum daily flows and total monthly volumes. A comparison of the water data is made to the rated capacity and flow rates specified in the system's Permit to Take Water and the Municipal Drinking Water License.

Figure 1 is a comparison of the maximum allowed water taking identified in the system's PTTW to the average and maximum raw water flows entering the water treatment plant.

Figure 2 is a comparison of the maximum rate specified in the system's MDWL to the average and maximum flows entering the treatment system.

Table 17 lists historical maximum raw and treated flows from 2019 to 2025.

Table 13: 2025 – Monthly Summary of Water Takings from the Source (Well No. 1)

Regulated by Permit to Take Water (PTTW) # P-300-6090341906, Issued October 2, 2020

Well No. 1	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Annual***
Total Volume (m^3)	27.4	0.9	7.0	434.2	1298.1	1183.7	64.1	828.2	515.5	14.1	0.2	1.1	4374.4
Average Volume (m^3/d)	0.88	0.0	0.2	14.5	41.9	39.5	2.1	26.7	17.2	0.5	0.0	0.0	12.0
Maximum Volume (m^3/d)	17.1	0.9	5.6	47.5	49.7	52.5	34.6	82.5	55.6	11.2	0.2	1.0	82.5
PTTW - Maximum Allowable Volume (m^3/day)	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8
Maximum Flow Rate (L/min)	62.4	62.4	63.6	62.4	62.4	63.0	61.8	63.6	63.6	63.0	63.0	63.0	63.6
PTTW - Maximum Allowable Flow Rate (L/min)	70	70	70	70	70	70	70	70	70	70	70	70	70

Table 14: 2025 – Monthly Summary of Water Takings from the Source (Well No. 3)

Regulated by Permit to Take Water (PTTW) #P-300-6090341906, Issued October 2, 2020

Well No. 3	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Annual***
Total Volume (m^3)	1659	1475	1640	1594	1695	1596	1495	973	830	1152	1257	1372	16739
Average Volume (m^3/d)	53.5	52.7	52.9	53.1	54.7	53.2	48.2	31.4	27.7	37.2	41.9	44.3	45.9
Maximum Volume (m^3/d)	60.4	59.9	59.6	59.4	55.3	54.0	58.7	56.4	62.0	42.1	61.1	59.8	62.0
PTTW - Maximum Allowable Volume (m^3/day)	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6
Maximum Flow Rate (L/min)	63.0	63.0	63.6	69.0	57.0	45.6	76.2	62.4	84.6	69.6	68.4	64.8	84.6
PTTW - Maximum Allowable Flow Rate (L/min)	90	90	90	90	90	90	90	90	90	90	90	90	90

Table 15: 2025 – Monthly Summary of Combined Water Takings from the Source

Regulated by Permit to Take Water (PTTW) # P-300-6090341906, Issued October 2, 2020

Combined (Well 1 & 3)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m^3)	1686.6	1476.2	1647.1	2028.2	2993.3	2780.1	1558.7	1801.4	1345.9	1166.1	1256.8	1373.0	21113.4
Average Volume (m^3/d)	54.4	52.7	53.1	67.6	96.6	92.7	50.3	58.1	36.9	37.6	41.9	44.3	57.2
Maximum Volume (m^3/d)	74.8	60.3	59.6	104.5	104.7	105.7	87.4	83.3	85.9	45.7	61.1	59.8	105.7
PTTW - Maximum Allowable Volume (m^3/day)	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4

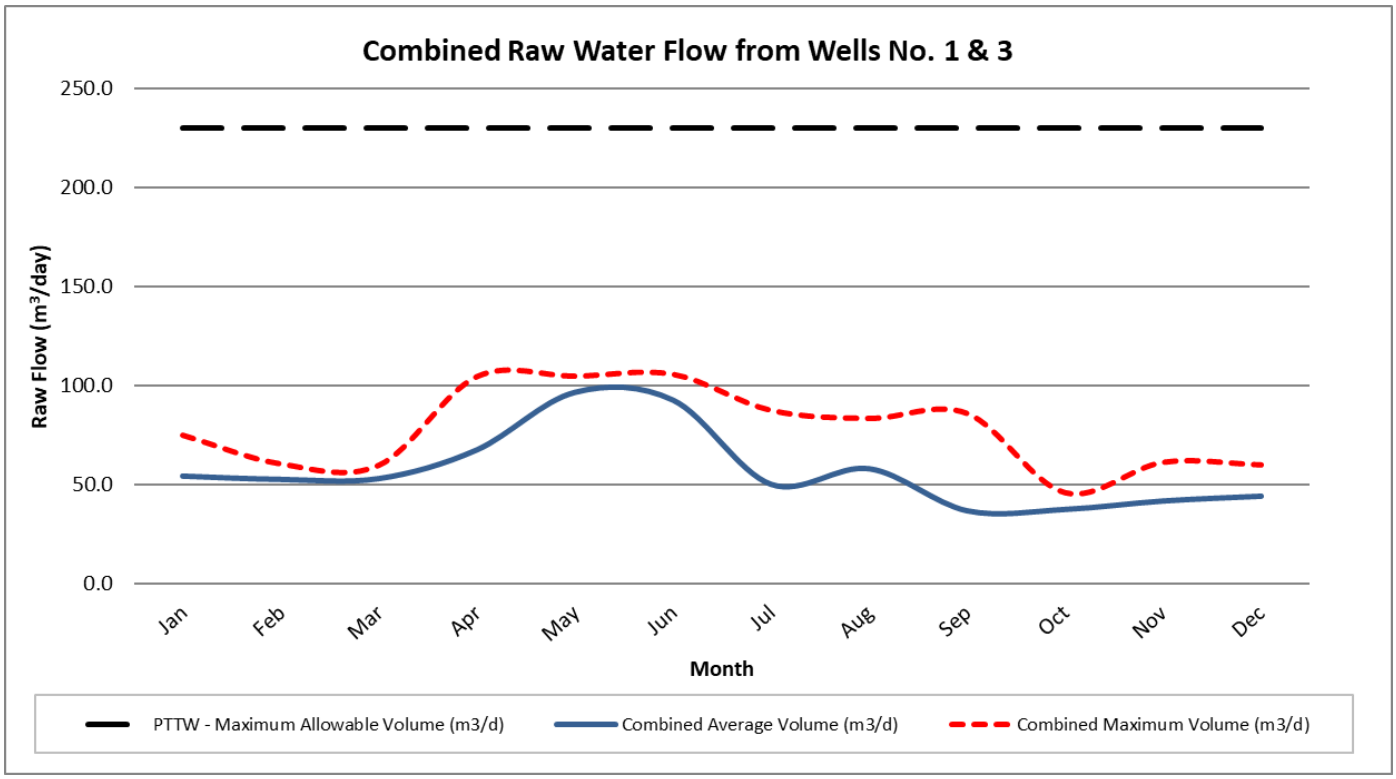

Figure 1: Comparison of Raw Water Flows to the Maximum Allowable Water Taking

Table 16: 2025 – Monthly Summary of Treated Water Supplied to the Distribution System

Regulated by Municipal Drinking Water Licence (MDWL) 204-103 - Issue 5, issued January 5, 2022

Treatment Plant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m^3)	1615	1402.9	1562.5	1941.3	2882.1	2689.5	1218.8	1160.5	1061.9	1058.2	1184.6	1320.2	19097.5
Average Volume (m^3/d)	52.1	50.1	50.4	64.7	93.0	89.7	39.3	37.4	35.4	34.1	39.5	42.6	52.36
Maximum Volume (m^3/d)	68.8	56.8	57.9	99.9	97.8	103.8	84.6	52.4	85.9	43.4	53.6	53.0	103.82
MDWL - Rated Capacity (m^3/day)	259	259	259	259	259	259	259	259	259	259	259	259	259
% Rated Capacity	27	22	22	39	38	40	33	20	33	17	21	20	40

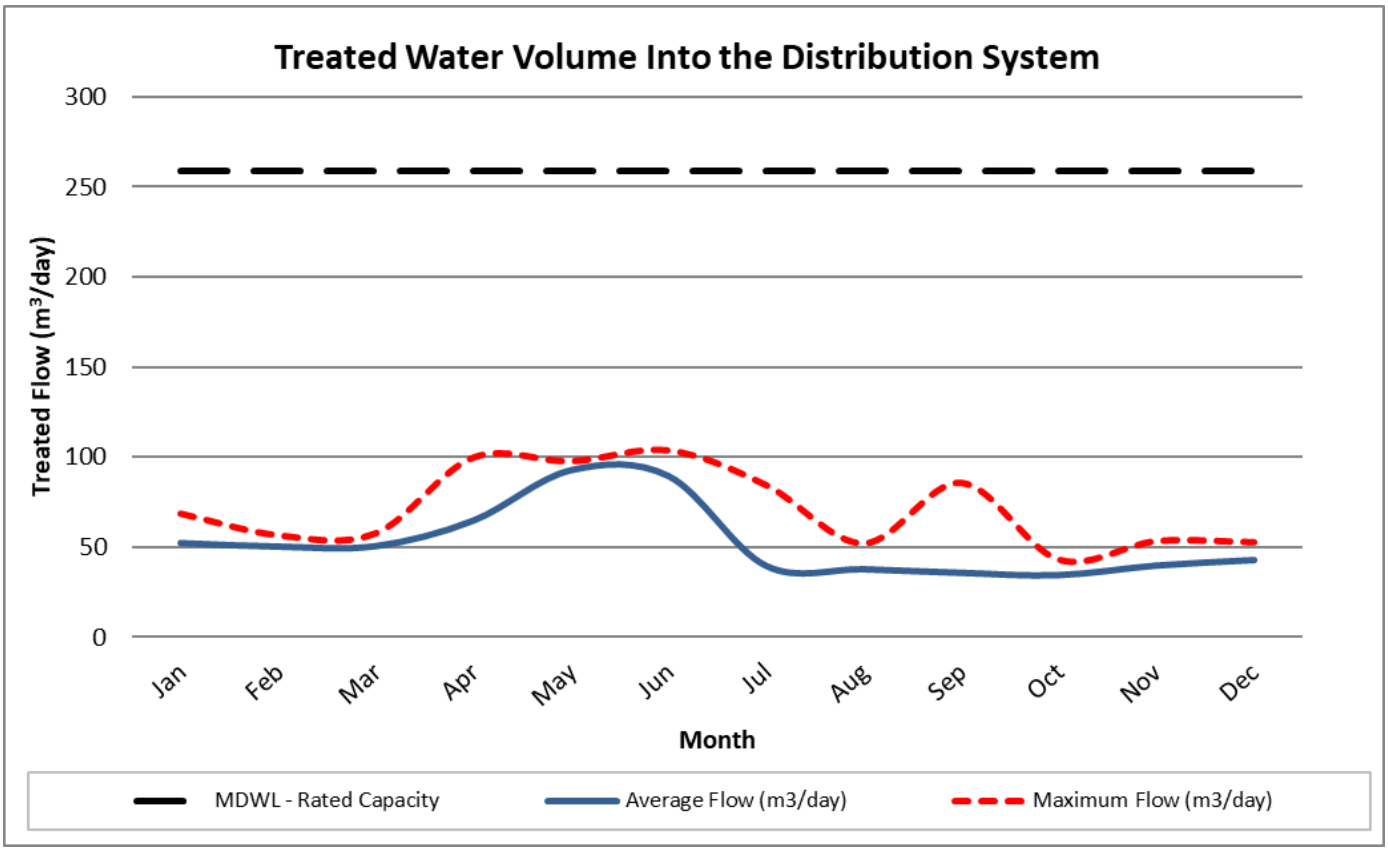

Figure 2: Comparison of Treated Flows to the Maximum Rated Capacity

11.3 System Performance

The following information is provided to enable the Owner to assess the capability of the system to meet existing and future water usage needs:

Rated Capacity of the Plant (MDWL)	259 m^3/day	
Average Daily Flow for 2025	52.3 m^3/day	20 % of the rated capacity
Maximum Daily Flow for 2025	103.8 m^3/day	40 % of the rated capacity
Total Treated Water Produced in 2025	19,097.5 m^3	

Table 17: 2025 – Historical Maximum Flows (2019 to 2025)

Year	Maximum Raw Flow (m^3/d)	Max. Day % of PTTW Allowable (230.4 m3/d)	Maximum Treated Flow (m^3/d)	Max. Day % of MDWL Capacity (259 m^3/d)
2025	105.6	46 %	103.8	40 %
2024	156.3	68 %	138.4	53 %
2023	91.6	40 %	105.3	41 %
2022	153.4	67 %	137.1	53 %
2021	63.7	28 %	80.7	31 %
2020	94.4	41 %	92.7	36 %
2019	83.2	36 %	90.7	35 %

Conclusion

The water quality data collected in 2025 demonstrates that the Holtyre drinking water system provided high quality drinking water to its users.

The system was able to operate in accordance with the terms and conditions of the Permit to Take Water and in accordance with the rated capacity of the Municipal Drinking Water Licence while meeting the community's demand for water use.

Any non-compliances that were identified during the reporting period were addressed promptly and effectively. All Adverse Water Quality Incidents and events that occurred were reported to the Local Health Unit and the Ministry's Spills Action Center as required. All corrective actions were completed and the incidents were resolved as soon as possible.

APPENDIX A
Monthly Summary of Operational Data

Customized Monthly Report

From 01/01/2025 to 12/31/2025

Facility Name: HOLTYRE DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 6517
Facility Owner: Municipality: Township of Black River - Matheson
Service Population: 255

Works: 220002565
Facility Classification: Class 1 Water Treatment
Total Design Capacity: 259 m3/day

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Distribution Water													2025			
1st Bacti/Residual	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Total	Avg	Max	Min
Cl Residual: Free - mg/L																
Count	9.00	8.00	9.00	8.00	8.00	9.00	9.00	9.00	9.00	9.00	8.00	9.00	104.00			
IH Month.Max	1.21	1.19	1.17	1.16	1.18	1.01	0.96	1.12	1.33	1.45	1.16	1.06			1.45	
IH Month.Mean	1.05	0.91	1.00	1.06	0.94	0.93	0.80	0.85	0.89	1.08	0.85	0.87		0.94		
IH Month.Min	0.75	0.74	0.67	0.97	0.67	0.80	0.64	0.56	0.56	0.83	0.68	0.61				0.56
E. Coli - cfu/100mL																
Count	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	5.00	28.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
HPC - cfu/mL																
Count	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	5.00	28.00			
Lab Month.Max	< 10.00	< 10.00	10.00	< 10.00	< 10.00	10.00	< 10.00	< 10.00	< 10.00	20.00	10.00	< 10.00			20.00	
Lab Month.Mean	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 15.00	< 10.00	< 10.00		< 10.37		
Lab Month.Min	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00				< 10.00
Total Coliform: TC - cfu/100mL																
Count	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	5.00	28.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00

													2025			
2nd Bacti/Residual	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Total	Avg	Max	Min
Cl Residual: Free - mg/L																
Count	13.00	12.00	13.00	12.00	14.00	13.00	13.00	13.00	13.00	14.00	12.00	12.00	154.00			
IH Month.Max	1.42	1.21	1.29	1.31	1.33	1.15	1.15	1.22	1.57	1.73	1.29	1.20			1.73	
IH Month.Mean	1.16	0.98	1.08	1.16	1.13	1.05	0.94	1.00	1.15	1.20	1.01	0.95		1.07		
IH Month.Min	0.86	0.79	0.72	1.02	0.64	0.89	0.74	0.78	0.78	0.87	0.75	0.54				0.54

Customized Monthly Report

From 01/01/2025 to 12/31/2025

Facility Name: HOLTYRE DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 6517
Facility Owner: Municipality: Township of Black River - Matheson
Service Population: 255

Works: 220002565
Facility Classification: Class 1 Water Treatment
Total Design Capacity: 259 m3/day

Ontario Clean Water Agency
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E. Coli - cfu/100mL																								
Count	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		2.00		2.00		
Lab Month.Max																					0.00				0.00	
Lab Month.Mean																					0.00			0.00		
Lab Month.Min																					0.00					0.00
HPC - cfu/mL																								
Count	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		2.00		2.00		
Lab Month.Max																				<	10.00			<	10.00	
Lab Month.Mean																				<	10.00		<	10.00		
Lab Month.Min																				<	10.00					< 10.00
Total Coliform: TC - cfu/100mL																								
Count	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		2.00		2.00		
Lab Month.Max																					0.00				0.00	
Lab Month.Mean																					0.00			0.00		
Lab Month.Min																					0.00					0.00

Raw Water

Well 1 (PW-1)	Jan 2025		Feb 2025		Mar 2025		Apr 2025		May 2025		Jun 2025		Jul 2025		Aug 2025		Sep 2025		Oct 2025		Nov 2025		Dec 2025		Total		2025 Avg		Max		Min
E. Coli: EC - cfu/100mL																														
Count	1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		1.00		1.00		0.00		12.00					
Lab Month.Max	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00								0.00	
Lab Month.Mean	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00						0.00			
Lab Month.Min	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00									0.00
Total Coliform: TC - cfu/100mL																														
Count	1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		1.00		1.00		0.00		12.00					
Lab Month.Max	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00								0.00	
Lab Month.Mean	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00						0.00			
Lab Month.Min	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00									0.00
Turbidity - NTU																														
Count	1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		1.00		1.00		0.00		12.00					
IH Month.Max	0.49		0.44		0.61		0.70		0.89		0.75		0.88		0.72		0.86		0.62		0.96								0.96	
IH Month.Mean	0.49		0.44		0.61		0.70		0.89		0.75		0.63		0.72		0.86		0.62		0.96						0.69			
IH Month.Min	0.49		0.44		0.61		0.70		0.89		0.75		0.37		0.72		0.86		0.62		0.96									0.37

Customized Monthly Report

From 01/01/2025 to 12/31/2025

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Service Population: 255

Works: 220002565
Facility Classification: Class 1 Water Treatment
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Ontario Clean Water Agency
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Well 3 (PW-3)	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Total	Avg	Max	Min
E. Coli: EC - cfu/100mL																
Count	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	14.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
Total Coliform: TC - cfu/100mL																
Count	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	14.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
Turbidity - NTU																
Count	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	13.00			
IH Month.Max	0.70	0.85	4.18	0.66	0.91	0.89	0.96	1.05	0.79	0.77	0.72	0.54			4.18	
IH Month.Mean	0.70	0.85	4.18	0.66	0.91	0.89	0.69	1.05	0.79	0.77	0.72	0.54		1.03		
IH Month.Min	0.70	0.85	4.18	0.66	0.91	0.89	0.41	1.05	0.79	0.77	0.72	0.54				0.41
													2025			
Treated Water	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
Cl Residual: Free - mg/L																
OL Month.Max	1.62	1.37	1.60	1.62	1.46	1.28	1.25	1.36	1.62	2.01	2.01	1.50			2.01	
OL Month.Mean	1.16	1.02	1.08	1.20	1.21	1.08	0.95	1.03	1.16	1.21	0.99	0.96		1.09		
OL Month.Min	0.82	0.71	0.35	0.96	0.66	0.88	0.72	0.78	0.67	0.77	0.49	0.32				0.32