



2025 Annual Performance Report for the Ramore 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

Table of Contents

Introduction.....	1
Section 11 – Annual Report.....	2
1. Introduction	2
2. Ramore Drinking Water System (DWS No. 220002538).....	3
Raw Water Supply.....	3
Water Treatment	3
Water Storage.....	4
Control System.....	4
Emergency Power	4
Distribution System.....	4
3. List of Water Treatment Chemicals Used	4
4. Significant Expenses Incurred to the Drinking Water System	5
5. Details on Notices of Adverse Test Results and Other Problems Reported to & Submitted to the Spills Action Center	5
6. Microbiological Testing.....	6
7. Operational Testing.....	6
8. Chemical Testing.....	7
9. Additional Testing Performed in Accordance with a Legal Instrument.....	12
Schedule 22 – Summary Reports for Municipalities	12
10. Requirements the System Failed to Meet	12
11. Summary of Quantities and Flow Rates.....	13
11.1 Flow Monitoring.....	13
11.2 Rated Capacity and Flow Rates.....	13
11.3 System Performance.....	18
Conclusion	18

List of Tables

Table 1: Summary of Microbiological Data.....	6
Table 2: Summary of Raw Water Turbidity Results	6
Table 3: Continuous Monitoring in the Treatment Process	7

Table 4: Summary of Chlorine Residuals in the Distribution System 7

Table 5: Summary of Nitrate & Nitrite Data from the Water Treatment Plant 7

Table 6: Summary of Total Trihalomethane Results from the Distribution System..... 8

Table 7: Summary of Total Haloacetic Acid Results from the Distribution System..... 8

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

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

Table 10: Most Recent Schedule 24 Organic Results from the Water Treatment Plant 9

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

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

Table 13: Requirements the System Failed to Meet 12

Table 14: 2025 – Monthly Summary of Water Takings from the Source (Well No. 3)..... 15

Table 15: 2025 – Monthly Summary of Water Takings from the Source (Well No. 4)..... 15

Table 16: 2025 – Monthly Summary of Water Takings from the Source (Well No. 5)..... 15

Table 17: 2025 – Monthly Summary of Combined Water Takings from the Source..... 16

Table 18: 2025 – Monthly Summary of Treated Water Supplied to the Distribution System 17

Table 19: 2025 Historical Maximum Flows (2019 to 2025) 18

List of Figures

Figure 1: Comparison of Raw Water Flows to the Maximum Allowable Water Taking 16

Figure 2: Comparison of Treated Flows to the Maximum Rated Capacity 17

Appendices

Appendix A: Monthly Summary of Microbiological & Operational Test Results

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	Ramore Drinking Water System
Drinking-Water System Number	220002538
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.	204-104 (Issue 6 - March 14, 2022)
Drinking Water Works Permit No.	204-204 (Issue 4 - March 14, 2022)
Permit to Take Water No.	300-3085151154 (Issued December 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 Ramore Drinking Water System

The Ramore Drinking Water System provides all of its drinking water to the community of Ramore, 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 Ramore Drinking Water System and provided a copy to the system owner; the Corporation of the Township of Black River - Matheson. The Ramore 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. Ramore Drinking Water System (DWS No. 220002538)

The Ramore 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 Ramore. 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

The Ramore Drinking Water System is fed by three source wells, located in an easement approximately 335 m east of Ferguson Avenue and approximately 110 m south of Saint Joseph Street in the Town of Ramore. Each of the three wells has a discharge line connected to a well pump header, located in the pumphouse.

Well No. 5 is a main production well consisting of a 150 mm diameter, 48.11 m deep drilled groundwater production well. This well is equipped with a submersible deep well pump rated at 162 L/min at a total dynamic head (TDH) of 65 m. Discharge from this well is through a 50 mm diameter discharge line.

Well No. 4 is a main production well consisting of a 200 mm diameter, 45.36 m deep drilled groundwater production well, which is equipped with a submersible deep well pump rated at 318 L/min at a TDH of 65 m. Discharge from this well is through a 75 mm diameter discharge line.

Well No. 3 is a standby well consisting of a 400 mm diameter, 43.26 m deep drilled groundwater production well. This well is equipped with a submersible deep well pump rated at 180 L/min at a TDH of 65 m. Discharge from this well is through a 50 mm diameter discharge line.

Water Treatment

The pumphouse contains the disinfection equipment, system controls and two 500 litre (L) pressure tanks. The sodium hypochlorite disinfection system consists of one 60 L chemical storage tank and three chemical metering pumps (two duty and one standby). The feed of sodium hypochlorite is directed into the well pump discharge header immediately downstream from the pump. The sodium silicate injection system consists of one 60 L chemical storage tank and two metering pumps (one duty and one standby). The sodium silicate feed is directed into the well pump discharge header immediately downstream from the pump. The sodium silicate injection system is usually only used when Well No. 3 is operating. Chlorine contact is provided by a below-

ground contact chamber consisting of a 35 m (105 feet) x 750 mm (24 inch) HDPE (high density polyethylene) water main before discharge to the distribution system.

Water Storage

There is currently no clearwell to provide water storage. As mentioned above, two 500 L pressure tanks provide limited storage and chlorine contact is provided by a below-ground contact chamber before discharge to the distribution system.

Control System

The Ramore 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 Ramore 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 35 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 distribution system serves an approximate population of 300 people residing in approximately 50 private residences. The total number of service connections is estimated to be 98, the difference of which being commercial properties and serviced undeveloped properties. The distribution system piping consists mainly of four (4) inch asbestos concrete constructed watermain.

3. List of Water Treatment Chemicals Used

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

- Sodium Hypochlorite – disinfection
- Sodium Silicate - Iron & Manganese Sequestering (Well 3 only)

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.
- Sodium hypochlorite pump spare parts kit.
- Generator servicing.
- Well 5 pump and motor replacement.
- Update to distribution mapping.
- Spring and fall watermain flushing.
- Water hydrant rebuilds.

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: Loss of Pressure / Boil Water Advisory (AWQI No. 169828)

Date: September 10th, 2025

Details: A power outage in the area caused a loss of pressure in the system. The generator failed to provide emergency power to the system due to multiple power bumps, which drained the battery.

Corrective Actions: Northeastern Public Health Unit (NEPHU) recommended a Boil Water Advisory (BWA) be issued. When pressure was restored, the area was flushed until an acceptable free chlorine residual was achieved. Bacteriological samples were taken, with acceptable results (no E.coli and total coliforms). The BWA was lifted on September 13th.

6. Microbiological Testing

Table 1: Summary of Microbiological Data

Sample Type	# of Samples	Range of <i>E.coli</i> Results (min to max)	Range of Total Coliform Results (min to max)	# of HPC Samples	Range of HPC Results (min to max)
Raw – Well 3	13	0 to 0	0 to 0	N/A	N/A
Raw – Well 4	13	0 to 0	0 to 0	N/A	N/A
Raw – Well 5	13	0 to 0	0 to 4	N/A	N/A
Distribution	28	0 to 0	0 to 0	26	<10 to 360

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.

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 3	13	0.41 to 0.97	NTU	N/A
Turbidity – Well 4	13	0.24 to 0.78	NTU	N/A
Turbidity – Well 5	13	0.20 to 0.94	NTU	N/A

Notes:

1. Raw water turbidity sampling is required once every month.

Table 3: Continuous Monitoring in the Treatment Process

Parameter	No. of Samples	Range of Results (min to max)	Unit of Measure	Standard
Free Chlorine Residual	8760	0.77 to 1.98	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 Ramore water plant if the free chlorine residual level drops below 0.275 mg/L if temperature is <5.0 °C and 0.183 mg/L if temperature is ≥5.0 °C.

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	260	0.95 to 1.51	mg/L	≥ 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	0.70	<0.01	mg/L	No
April 22	1.00	<0.01	mg/L	No
July 14	0.70	<0.01	mg/L	No
October 20	0.56	<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	7.5	ug/L	Q1 = 6.6	No
April 3	7.8	ug/L	Q2 = 7.1	No
July 4	10	ug/L	Q3 = 7.83	No
October 10	9.7	ug/L	Q4 = 8.75	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 Ramore 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	< 8	ug/L	Q1 = 8.25	No
April 3	< 8	ug/L	Q2 = 8.25	No
July 4	9	ug/L	Q3 = 8.5	No
October 10	9	ug/L	Q4 = 8.5	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 Ramore 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	7.81	7.9	327	N/A
October 10	1	8.29	12.2	337	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 0.4 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	1.9	ug/L	10	No	No
Barium	23	ug/L	1000	No	No
Boron	30	ug/L	5000	No	No
Cadmium	<0.1	ug/L	5	No	No
Chromium	5.0	ug/L	50	No	No
Mercury	<0.1	ug/L	1	No	No
Selenium	0.4	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	<0.27	ug/L	5	No	No
Atrazine + N-dealkylated metabolites	<0.5	ug/L	5	No	No
Azinphos-methyl	<0.2	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

Parameter	Result Value	Unit of Measure	Standard	MAC Exceedance	½ MAC Exceedance
Diazinon	<0.2	ug/L	20	No	No
Dicamba	<0.1	ug/L	120	No	No
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	<0.30	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	<0.14	ug/L	50	No	No
Metribuzin	<0.14	ug/L	80	No	No
Monochlorobenzene	<0.50	ug/L	80	No	No
Paraquat	<0.40	ug/L	10	No	No
Polychlorinated Biphenyls (PCBs)	<0.07	ug/L	3	No	No
Pentachlorophenol	<0.30	ug/L	60	No	No
Phorate	<0.14	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	<0.14	ug/L	1	No	No

Parameter	Result Value	Unit of Measure	Standard	MAC Exceedance	½ MAC Exceedance
Tetrachloroethylene	<0.30	ug/L	10	No	No
2,3,4,6-Tetrachlorophenol	<0.20	ug/L	100	No	No
Triallate	<0.14	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)	<6.78	ug/L	100	No	No
Trifluralin	<0.14	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	13.9	mg/L	20	No

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.

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	0.07	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 following table lists 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 not met at any time during the reporting period.

According to information kept on record by OCWA, the Ramore Drinking Water System failed to meet the following requirements which were identified by an MECP inspection on November 11, 2025

Table 13: Requirements the System Failed to Meet

Legislation	Requirement(s) not Met	Duration	Corrective Action(s)
O. Regulation 170/03, Schedule 16-9	Within 30 days of issue resolution, notices for an AWQI were not issued to the designated facility, Ecole Catholique St. Therese.	September 10, 2025	OCWA has an SOP outlining reporting requirements for designated facilities. Operators were delivered training to outline the reporting requirements to designated facilities for AWQIs.

Legislation	Requirement(s) not Met	Duration	Corrective Action(s)
O. Regulation 170/03, Schedule 7, Section 7-3 (1.1) Section 6-1.1 (3)	On two occasions, raw turbidity samples were not collected within the allotted sampling window of 20-40 days since the previous sampling event. Samples were taken 14 days apart in January 2025, and 54 days apart in July/August due to a scheduling error.	December 2024 – January 2025 July – August, 2025	Sampling was adjusted for 2026 to ensure all sampling events fall 20-40 days apart. Training was delivered to operators to review the relevant sections of O. Regulation 170/03.

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. 204-104 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. 300-3085151154 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 Ramore Drinking Water System has a total of three 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. 300-3085151154 allows the plant to withdraw a total combined volume of 799.1 cubic meters (m³) each day. Well No. 3 is permitted to take 109.1 m³ per day, well No. 4 is permitted to take 460 m³ per day and well No. 5 is permitted to withdraw 230 m³ 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. 3 was 26 m³, the maximum taking from Well No. 4 was

110 m³ and the maximum taking from Well No. 5 was 26 m³. The combined maximum daily water taking from all wells was 154 m³.

The Permit also allows a maximum flow rate of 182 L/minute from well No. 3. Well No. 4 is permitted a maximum flow rate of 318 L/minute, and well No. 5 is permitted a maximum flow rate of 162 L/minute. Well No. 3, No. 4, and No. 5 all operated within their allowable flow rates having a maximum flow rate of 175, 262 and 160 L/minute, respectively.

Condition 1.0 (1.1) to Schedule C of MDWL No. 204-104 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 864 m³ on any calendar day. The Ramore DWS complied with this limit, having recorded a daily maximum volume of 143 m³/day, which is 17% of the rated capacity.

The following tables (Tables 14 – 18) 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 19 lists historical maximum raw and treated flows from 2019 to 2025.

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

Regulated by Permit to Take Water (PTTW) #P-300-3085151154, issued December 2, 2020

Well No. 3	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m ³)	3	3	8	10	4	4	18	9	34	5	9	22	129
Average Volume (m ³ /d)	0.10	0.11	0.26	0.33	0.13	0.13	0.58	0.29	1.13	0.16	0.30	0.71	0.35
Maximum Volume (m ³ /d)	3.00	3.00	8.00	10.00	3.00	3.00	9.00	9.00	26.00	5.00	9.00	17.00	26.00
PTTW - Maximum Allowable Volume (m ³ /day)	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1
Maximum Flow Rate (L/min)	149	165	163	163	152	165	157	175	166	155	154	149	175
PTTW - Maximum Allowable Flow Rate (L/min)	182	182	182	182	182	182	182	182	182	182	182	182	182

Table 15: 2025 – Monthly Summary of Water Takings from the Source (Well No. 4)

Regulated by Permit to Take Water (PTTW) #P-300-3085151154, issued December 2, 2020

Well No. 4	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m ³)	2618	2365	2607	2151	2239	1932	2156	2001	1745	1732	1801	1972	25319
Average Volume (m ³ /d)	84.5	84.5	84.1	71.7	72.2	64.4	69.6	64.6	58.2	55.9	60.0	63.6	69.4
Maximum Volume (m ³ /d)	105.0	102.0	110.0	80.0	88.0	87.0	100.0	81.0	102.0	68.0	79.0	83.0	110.0
PTTW - Maximum Allowable Volume (m ³ /day)	460	460	460	460	460	460	460	460	460	460	460	460	460
Maximum Flow Rate (L/min)	195	193	191	184	179	188	176	177	256	193	180	262	262
PTTW - Maximum Allowable Flow Rate (L/min)	318	318	318	318	318	318	318	318	318	318	318	318	318

Table 16: 2025 – Monthly Summary of Water Takings from the Source (Well No. 5)

Regulated by Permit to Take Water (PTTW) #P-300-3085151154, issued December 2, 2020

Well No. 5	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m ³)	1	3	5	6	2	1	7	1	29	3	5	13	76
Average Volume (m ³ /d)	0.0	0.1	0.2	0.2	0.1	0.0	0.2	0.0	1.0	0.1	0.2	0.4	0.2
Maximum Volume (m ³ /d)	1.0	3.0	5.0	6.0	1.0	1.0	3.0	1.0	26.0	2.0	5.0	9.0	26.0
PTTW - Maximum Allowable Volume (m ³ /day)	230	230	230	230	230	230	230	230	230	230	230	230	230
Maximum Flow Rate (L/min)	160	145	160	152	137	110	160	58	154	109	158	159	160
PTTW - Maximum Allowable Flow Rate (L/min)	162	162	162	162	162	162	162	162	162	162	162	162	162

Table 17: 2025 – Monthly Summary of Combined Water Takings from the Source

Regulated by Permit to Take Water (PTTW) #P-300-3085151154, issued December 2, 2020

Combined (Well 1 & 3)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m ³)	2622	2371	2620	2167	2245	1937	2181	2011	1808	1740	1815	2007	25524
Average Volume (m ³ /d)	84.6	84.7	84.5	72.2	72.4	64.6	70.4	64.9	60.3	56.1	60.5	64.7	69.9
Maximum Volume (m ³ /d)	105.0	103.0	110.0	88.0	88.0	87.0	112.0	81.0	154.0	68.0	79.0	83.0	154.0
PTTW - Maximum Allowable Volume (m ³ /day)	799.1	799.1	799.1	799.1	799.1	799.1	799.1	799.1	799.1	799.1	799.1	799.1	799.1

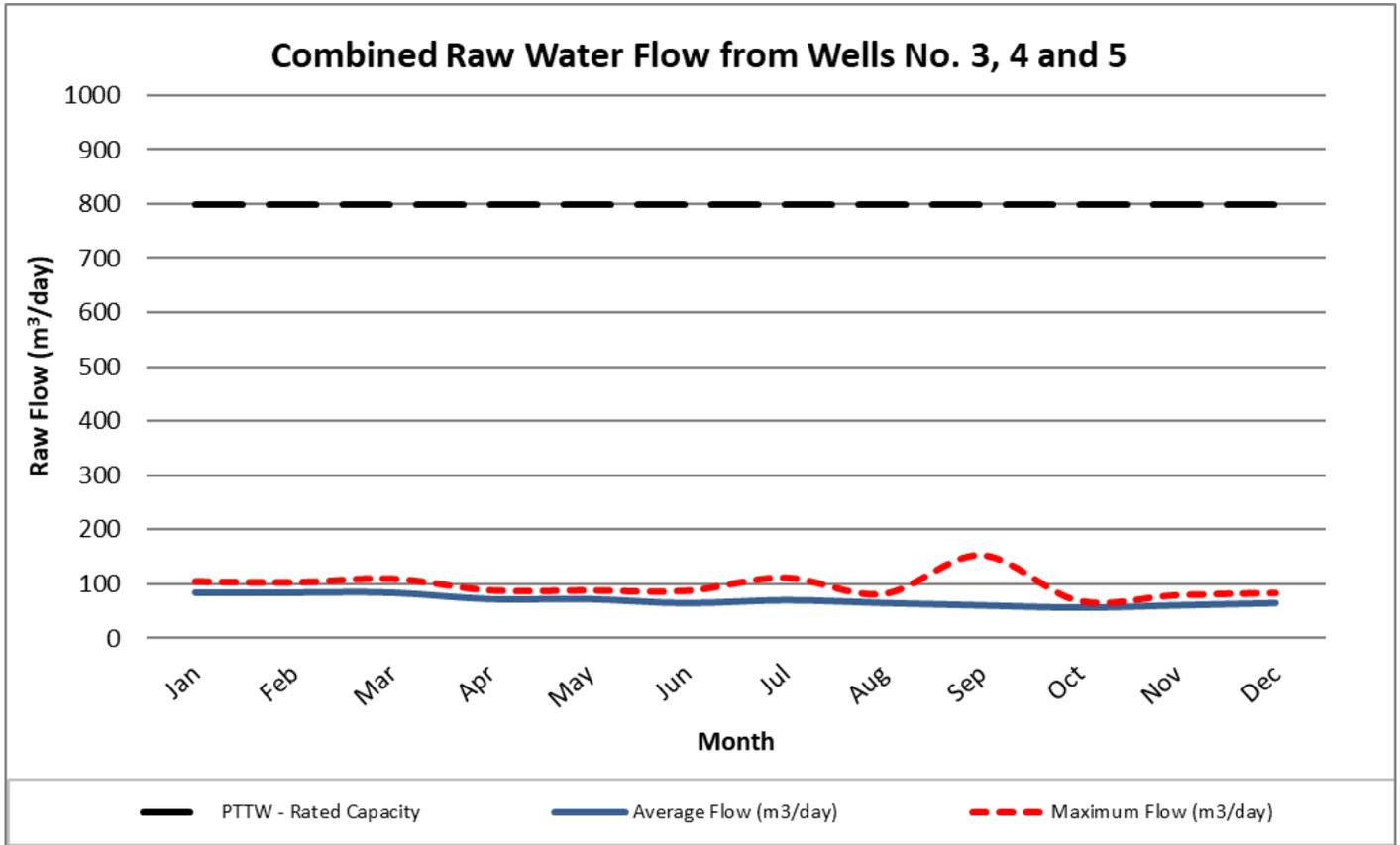


Figure 1: Comparison of Raw Water Flows to the Maximum Allowable Water Taking

Table 18: 2025 – Monthly Summary of Treated Water Supplied to the Distribution System

Regulated by Municipal Drinking Water Licence (MDWL) 204-104 - Issue 6, issued March 14, 2022

Treatment Plant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m ³)	2446	2229	2519	2010	2045	1774	748	1740	1722	1791	1873	2017	23914
Average Volume (m ³ /d)	78.9	79.6	81.3	67.0	66.0	59.1	56.4	56.1	57.4	57.8	62.4	65.1	65.6
Maximum Volume (m ³ /d)	100.0	98.0	108.0	75.0	80.0	76.0	65.0	73.0	143.0	71.0	82.0	85.0	143.0
MDWL - Rated Capacity (m ³ /day)	864	864	864	864	864	864	864	864	864	864	864	864	864
% Rated Capacity	12	11	13	9	9	9	8	8	17	8	9	10	17

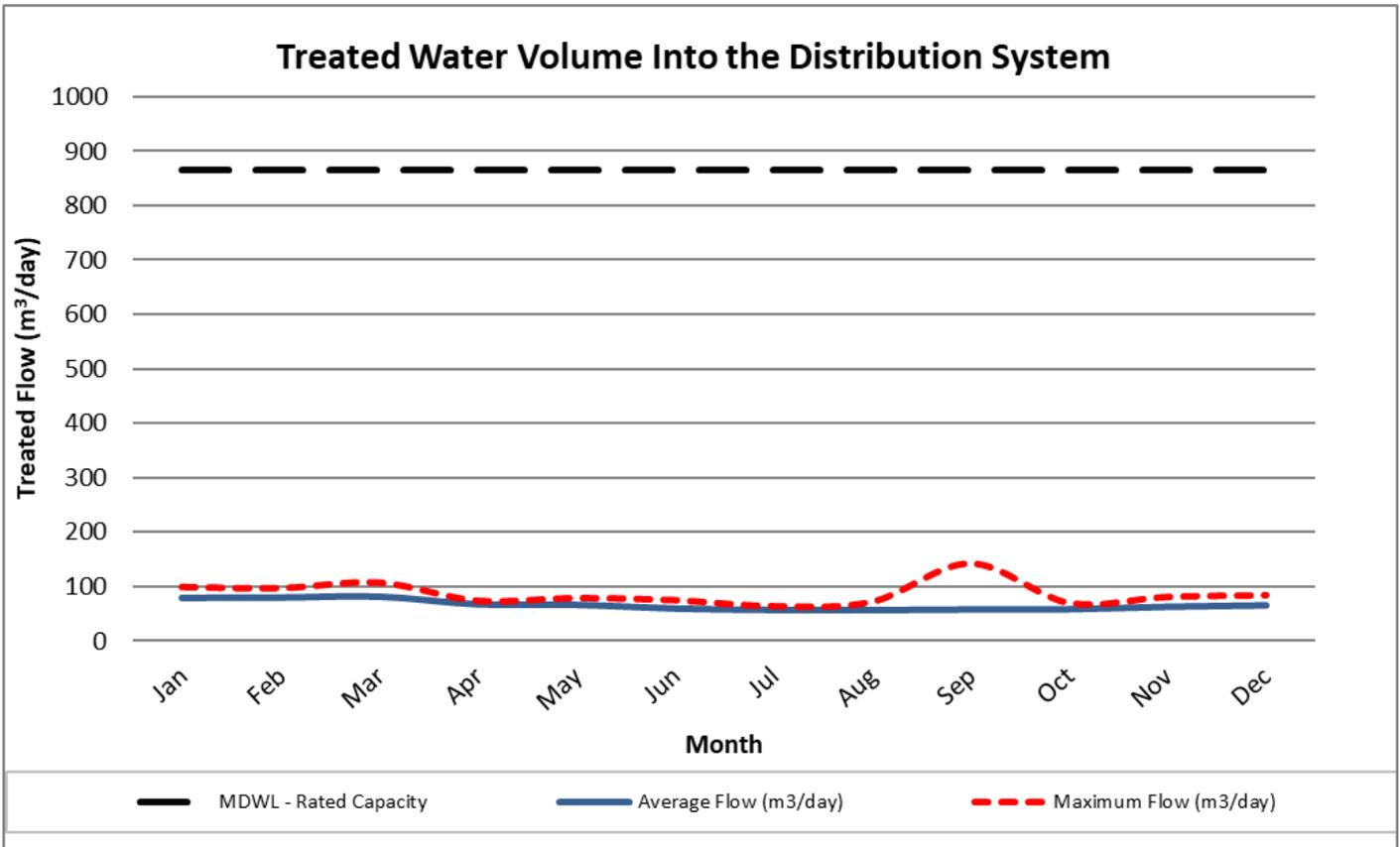


Figure 2: Comparison of Treated Flows to the Maximum Rated Capacity

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)	864 m ³ /day	
Average Daily Flow for 2025	65.6 m ³ /day	8 % of the rated capacity
Maximum Daily Flow for 2025	143.0 m ³ /day	17 % of the rated capacity
Total Treated Water Produced in 2025	23,914 m ³	

Table 19: 2025 Historical Maximum Flows (2019 to 2025)

Year	Maximum Raw Flow (m ³ /d)	Max. Day % of PTTW Allowable (230.4 m ³ /d)	Maximum Treated Flow (m ³ /d)	Max. Day % of MDWL Capacity (259 m ³ /d)
2025	154	19 %	143	17 %
2024	110	14 %	104	12 %
2023	202	25 %	90	10 %
2022	126	16 %	131	15 %
2021	133	17 %	122	14 %
2020	94	12 %	114	13 %
2019	115	14 %	99	11 %

Conclusion

The water quality data collected in 2025 demonstrates that the Ramore 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: RAMORE DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 5756
Facility Owner: Municipality: Township of Black River-Matheson
Service Population: 300

Works: 220002538
Facility Classification: Class 1 Water Treatment
Total Design Capacity: 864 m3/day



Distribution Water														2025			
	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	
1st Bacti/Residual																	
Cl Residual: Free - mg/L																	
Count	9.00	8.00	9.00	8.00	9.00	9.00	9.00	9.00	9.00	9.00	8.00	9.00	105.00				
IH Month.Max	1.42	1.26	1.51	1.36	1.45	1.31	1.23	1.16	1.13	1.11	1.21	1.24			1.51		
IH Month.Mean	1.24	1.21	1.31	1.32	1.30	1.26	1.17	1.09	1.01	1.05	1.11	1.19		1.19			
IH Month.Min	0.95	1.11	1.05	1.28	1.22	1.22	1.11	1.00	0.96	0.97	1.01	1.13				0.95	
E. Coli - cfu/100mL																	
Count	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	5.00	2.00	2.00	3.00	29.00				
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.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	3.00	26.00				
Lab Month.Max	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	50.00	360.00	< 10.00	< 10.00			360.00	
Lab Month.Mean	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	30.00	< 185.00	< 10.00	< 10.00	<	25.60		
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			< 10.00	
Total Coliform: TC - cfu/100mL																	
Count	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	5.00	2.00	2.00	3.00	29.00				
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	
2nd Bacti/Residual																	
Cl Residual: Free - mg/L																	
Count	13.00	12.00	14.00	12.00	14.00	13.00	13.00	13.00	13.00	13.00	14.00	12.00	12.00	155.00			
IH Month.Max	1.50	1.45	1.79	1.51	1.51	1.41	1.43	1.30	1.12	1.20	1.19	1.32			1.79		
IH Month.Mean	1.33	1.35	1.48	1.44	1.38	1.34	1.30	1.16	1.08	1.08	1.14	1.30		1.28			
IH Month.Min	0.97	1.25	1.39	1.37	1.20	1.24	1.25	1.10	1.00	1.00	1.04	1.26				0.97	
E. Coli - cfu/100mL																	
Count	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00			3.00				
Lab Month.Max									0.00						0.00		
Lab Month.Mean									0.00					0.00			
Lab Month.Min									0.00							0.00	
Total Coliform: TC - cfu/100mL																	
Count	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00			3.00				
Lab Month.Max									0.00						0.00		
Lab Month.Mean									0.00					0.00			
Lab Month.Min									0.00							0.00	

Customized Monthly Report

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

Facility Name: RAMORE DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 5756
Facility Owner: Municipality: Township of Black River-Matheson
Service Population: 300

Works: 220002538
Facility Classification: Class 1 Water Treatment
Total Design Capacity: 864 m3/day



Raw Water														2025			
Well 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	1.00	1.00	1.00	1.00	1.00	13.00				
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	1.00	1.00	1.00	1.00	1.00	13.00				
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	0.85	0.94	0.62	0.66	0.80	0.97	0.84	0.97	0.67	0.61	0.82	0.78			0.97		
IH Month.Mean	0.85	0.94	0.62	0.66	0.80	0.97	0.63	0.97	0.67	0.61	0.82	0.78		0.76			
IH Month.Min	0.85	0.94	0.62	0.66	0.80	0.97	0.41	0.97	0.67	0.61	0.82	0.78				0.41	
														2025			
Well 4	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	1.00	1.00	1.00	1.00	1.00	13.00				
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	1.00	1.00	1.00	1.00	1.00	13.00				
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	0.46	0.73	0.34	0.70	0.53	0.78	0.64	0.67	0.72	0.24	0.41	0.61			0.78		
IH Month.Mean	0.46	0.73	0.34	0.70	0.53	0.78	0.56	0.67	0.72	0.24	0.41	0.61		0.56			
IH Month.Min	0.46	0.73	0.34	0.70	0.53	0.78	0.47	0.67	0.72	0.24	0.41	0.61				0.24	
														2025			
Well 5	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	1.00	1.00	1.00	1.00	1.00	13.00				
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		

Customized Monthly Report

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

Facility Name: RAMORE DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 5756
Facility Owner: Municipality: Township of Black River-Matheson
Service Population: 300

Works: 220002538
Facility Classification: Class 1 Water Treatment
Total Design Capacity: 864 m3/day



															2025																		
Treated Water															Total	Avg	Max	Min															
															Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025							
Cl Residual: Free - mg/L																																	
OL Month.Max															1.98	1.55	1.79	1.53	1.98	1.58	1.41	1.40	1.98	1.34	1.48	1.50			1.98				
OL Month.Mean															1.34	1.35	1.44	1.42	1.38	1.30	1.24	1.12	1.08	1.06	1.17	1.31			1.27				
OL Month.Min															0.93	0.99	1.11	1.07	1.12	0.84	1.11	0.96	0.00	0.85	0.91	1.11						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	1.00	13.00						
Lab Month.Max															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00			4.00			
Lab Month.Mean															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00			0.31			
Lab Month.Min															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	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	0.57	0.85	0.57	0.90	0.85	0.88	0.81	0.90	0.83	0.81	0.94			0.94				
IH Month.Mean															0.70	0.57	0.85	0.57	0.90	0.85	0.54	0.81	0.90	0.83	0.81	0.94			0.75				
IH Month.Min															0.70	0.57	0.85	0.57	0.90	0.85	0.20	0.81	0.90	0.83	0.81	0.94							0.20

Notes:

1. Treated Water Free Chlorine minimum of 0 mg/L in September 2025 was due to a complete loss of pressure in the system, which was reported as an AWQI as required. The true minimum value for the month during plant operation was 0.77 mg/L, as shown in Table 3.