ONTARIO CLEAN WATER AGENCY
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2025 Annual Performance Report for the Val Gagne 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	**Val Gagne Drinking Water System**
Drinking-Water System Number	210001674
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.	204-102 (Issue 8 - March 14, 2022)
Drinking Water Works Permit No.	204-202 (Issue 6 - March 14, 2022)
Permit to Take Water No.	300-1077256711 (Issued October 1, 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 Val Gagne Drinking Water System

The Val Gagne Drinking Water System provides all of its drinking water to the community of Val Gagne, 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 Val Gagne Drinking Water System and provided a copy to the system owner; the Corporation of the Township of Black River - Matheson. The Val Gagne 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. Val Gagne Drinking Water System (DWS No. 210001674)

The Val Gagne Drinking Water System is owned by the Corporation of the Township of Black River-Matheson and consists of a Class 1 water treatment subsystem. It is a groundwater system that services the community of Val Gagne. 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 the main production well and is located near Highway 11 on the south side of Country Lane Road. It is a deep drilled groundwater well that is 150 mm in diameter and 22.9 m deep. The well is pumped at the rate of 158.9 L/min by a 2.23 kW submersible deep well pump. The water is pumped to the Val Gagne water treatment via a 1027-meter long watermain. The sodium levels in the well have been increasing over the last 15 to 20 years; the cause of this is being investigated.

Well 6 is a backup well located within the water treatment plant building. It is a drilled groundwater well that is 200 mm in diameter and 56.4 m deep. It is equipped with a submersible pump, rated at 46 L/min at a TDH of 62 m, with a 50 mm diameter discharge line connected to a common well pump header. This well is for emergency use only but it is run at least monthly for testing and sampling.

Water Treatment

The water treatment plant houses the disinfection system. Sodium hypochlorite is injected directly into the well pump discharge header by two pace-to-flow metering pumps (one duty and one standby). The sodium hypochlorite is stored in a 275 L double-walled tank equipped with secondary spill containment. Water is pumped into the distribution system by 3hp submersible high lift pumps with VFD's, each rated at 2.5 L/s with a TDH of 62 m. A diesel driven high flow pump is also available to deliver water at the rate of 2270 L/min during emergencies.

Water Storage

An in-ground reservoir with a storage capacity of 550 m3 serves as the chlorine contact chamber and provides water storage for the distribution system. A baffled contact tank is used during scheduled cleaning of the reservoir. The chlorinated water is directed to the tank to provide sufficient contact time before entering the distribution system.

Control System

The Val Gagne 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 Val Gagne 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 60 kW 3-phase generator is available at the water treatment plant to ensure continued operation of the facility during a power outage.

Distribution System

The distribution system for the Val Gagne Drinking Water system serves a population of 175 people with a total of 88 service connections (74 in Val Gagne North and 14 in Val Gagne South). In Val Gagne North, the distribution system consists primarily of six (6) inch water main, 75% of which are asbestos concrete construction and the remainder being PVC construction. In Val Gagne South, the distribution system consists primarily of singular straight length six (6) inch ductile water main. A valve is located at the terminal end of the water main and is used during system flushing.

3. List of Water Treatment Chemicals Used

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

- Sodium Hypochlorite – disinfection

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.
- Chart recorder replacement
- Fire suppression pump and motor replacement

- Generator servicing.
- Sodium Hypochlorite pump spare parts kit.
- Spring and fall watermain flushing.
- Watermain leak detection.
- Updated distribution mapping.
- Highway 11 watermain repairs and replacements.

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, three (3) adverse water quality incidents were reported to the Ministry's Spills Action Centre in 2025.

Incident #1: Loss of Pressure / Boil Water Advisory (BWA) – AWQI No. 169132	
Date:	July 23rd, 2025
Details:	OCWA performed planned maintenance on HWY 11 in the Val Gagne area to repair a 2" polyethylene watermain that has been leaking. The water was shut off to approximately 12 houses and 2 businesses in order to perform the repairs (4197 - 4269 ON-11, Val Gagne, ON). A boil water advisory was issued before beginning work.
Corrective Actions:	As directed by the Northeastern Public Health Unit (NEPH), mains/pipes were flushed when work was completed on Tuesday, July 29. Two sets of three samples were taken and results indicated 0 EC and 0 TC. Reports included in email submission. The BWA was lifted on August 1st.

Incident #2: Loss of Pressure / Boil Water Advisory (BWA) – AWQI No. 169167	
Date:	July 25th, 2025
Details:	During the planned maintenance event listed in Incident #1 above, a separate watermain leak was noted that affected the same 12 houses and 2 businesses.
Corrective Actions:	As directed by the Northeastern Public Health Unit (NEPH), mains/pipes were flushed when work was completed on Tuesday, July 29. Two sets of three samples were taken and results indicated 0 EC and 0 TC. Reports included in email submission. The BWA was lifted on August 1st.

Incident #3: Sodium Exceedance – AWQI No. 170586	
Date:	October 30th, 2025
Details:	A sodium sample Taken on October 20th, 2025 from the Val Gagne WTP had a sodium result of 27.7mg/L. The resample, as per NEPH direction, was taken on October 30th, 2025 from the Val Gagne WTP POE and had a sodium result of 28.9mg/L.
Corrective Actions:	NEPH has issued a letter to local physicians to advise them of elevated sodium levels in drinking water.

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	13	0 to 0	0 to 0	N/A	N/A
Raw – Well 6	13	0 to 0	0 to 0	N/A	N/A
Distribution	26	0 to 0	0 to 0	26	<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.

7. Operational Testing

Table 2: Summary of Raw Water Turbidity Results

Parameter	No. of Samples	Range of Results *(min to max)*	Unit of Measure	Standard
Turbidity – Well 1	12	0.31 to 0.99	NTU	N/A
Turbidity – Well 6	12	0.47 to 0.98	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 Chorine Residual	8760	0.45 to 2.00	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 Val Gagne water plant if the free chlorine residual level drops below 0.25 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	256	0.54 to 1.74	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	1.10	<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	0.75	<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 4	22.7	ug/L	Q1 = 19.5	No
April 11	13.3	ug/L	Q2 = 20.8	No
July 17	14.0	ug/L	Q3 = 20.7	No
October 10	33.4	ug/L	Q4 = 20.9	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 Val Gagne 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)	HAA Result	Unit of Measure	Running Average	Exceedance
January 3	8	ug/L	Q1 = 8.25	No
April 3	9	ug/L	Q2 = 8.5	No
July 4	8	ug/L	Q3 = 8.5	No
October 10	8	ug/L	Q4 = 8.25	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 Val Gagne 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	8.51	3.7	297	N/A
October 7	1	9.10	13.1	302	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 0.9 ug/L sampled on April 13th and <0.1 ug/L sampled on October 4th. 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	1.0	ug/L	10	No	No
Barium	62	ug/L	1000	No	No
Boron	12	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	0.5	ug/L	50	No	No
Uranium	4.5	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	<0.26	ug/L	5	No	No
Atrazine + N-dealkylated metobolites	<0.5	ug/L	5	No	No

Parameter	Result Value	Unit of Measure	Standard	MAC Exceedance	½ MAC Exceedance
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
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)	<0.43	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	<0.13	ug/L	50	No	No
Metribuzin	<0.13	ug/L	80	No	No
Monochlorobenzene	<0.50	ug/L	80	No	No
Paraquat	<0.40	ug/L	10	No	No

Parameter	Result Value	Unit of Measure	Standard	MAC Exceedance	½ MAC Exceedance
Polychlorinated Biphenyls (PCBs)	<0.07	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
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)	<7.11	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	27.7	mg/L	20	Yes – AWQI 170586
October 30, 2025	1	28.9	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	<0.05	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 Val Gagne 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 128/04, Section 27 (1) to (5).	Logbooks were not properly maintained and/or did not contain the required information. On several occasions, logbooks did not document explanations for CT calculations or alarm set-point adjustments.	N/A	Training was delivered to operators to review the requirements outlined in O. Regulation 128/04, Section 27 (1) to (5).
O. Regulation 170/03, Schedule 6, Section 6-5(1)10 (i)	On 3 instances during in-house chlorine analyzer verifications, hand-held readings were taken and showed the analyzer to be reading more than 5% difference but no calibration was performed.	April 3, 2025 June 18, 2025 July 14, 2025	Training was delivered to operators to review the requirements outlined in O. Regulation 170/03, Schedule 6, Section 6-5(1)10 (i).

It should be noted that three (3) adverse water quality incidents were 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. 204-102 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. 300-1077256711 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 Val Gagne Drinking Water System has a total of 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. 300-1077256711 allows the plant to withdraw a total combined volume of 295.2 cubic meters (m^3) each day. Well No. 1 is permitted to take 229 m^3 per day, and well No. 6 is permitted to withdraw 66.24 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 181 m^3, the maximum taking from Well No. 6 was 55 m^3 and the combined maximum was 218 m^3.

The Permit also allows a maximum flow rate of 159 L/minute from well No. 1. Well No. 6 is permitted a maximum flow rate of 46 L/minute. Well No. 1 and Well No. 6 operated within their allowable flow rates, having a maximum flow rate of 154 and 46 L/minute, respectively.

Condition 1.0 (1.1) to Schedule C of MDWL No. 204-102 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 233 m^3 on any calendar day. The Val Gagne DWS complied with this limit, having recorded a daily maximum volume of 224 m^3/day, which is 96% of the rated capacity. Treated flows entering the distribution system approached the rated capacity of the system from March to July due to a leak in a watermain. The leak was repaired in July, and treated flows returned to normal operating levels. The annual average for 2025 was 110.3 m^3/day, which is 47% of the rated capacity.

The following tables (Tables 14 – 17) 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 18 lists historical maximum raw and treated flows from 2019 to 2025.

Table 14: 2025 – Monthly Summary of Water Takings from the Source (Well No. 1)

Regulated by Permit to Take Water (PTTW) #P-300-1077256711, Issued October 1, 2020

Well No. 1	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Annual***
Total Volume (m^3)	1837	1541	5075	5134	5195	4826	4477	2020	2014	1856	1813	2021	37809
Average Volume (m^3/d)	59.3	55.0	163.7	171.1	167.6	160.9	144.4	65.2	67.1	59.9	60.4	65.2	103.3
Maximum Volume (m^3/d)	73	84	181	176	174	169	170	87	126	80	81	85	181
PTTW - Maximum Allowable Volume (m^3/day)	229	229	229	229	229	229	229	229	229	229	229	229	229
Maximum Flow Rate (L/min)	131	133	148	147	150	151	154	136	148	153	131	131	154
PTTW - Maximum Allowable Flow Rate (L/min)	159	159	159	159	159	159	159	159	159	159	159	159	159

Table 15: 2025 – Monthly Summary of Water Takings from the Source (Well No. 6)

Regulated by Permit to Take Water (PTTW) #P-300-1077256711, Issued October 1, 2020

Well No. 6	***Jan***	***Feb***	***Mar***	***Apr***	***May***	***Jun***	***Jul***	***Aug***	***Sep***	***Oct***	***Nov***	***Dec***	***Annual***
Total Volume (m^3)	1	1	244	672	1108	1578	1465	1	1	1	1	2	5075
Average Volume (m^3/d)	0.03	0.04	7.87	22.40	35.74	52.60	47.26	0.03	0.03	0.03	0.03	0.06	13.84
Maximum Volume (m^3/d)	1.00	1.00	23.00	51.00	51.00	55.00	55.00	1.00	1.00	1.00	1.00	1.00	55.00
PTTW - Maximum Allowable Volume (m^3/day)	66.24	66.24	66.24	66.24	66.24	66.24	66.24	66.24	66.24	66.24	66.24	66.24	66.24
Maximum Flow Rate (L/min)	37	37	46	46	43	46	41	40	41	46	43	44	46
PTTW - Maximum Allowable Flow Rate (L/min)	46	46	46	46	46	46	46	46	46	46	46	46	46

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

Regulated by Permit to Take Water (PTTW) #P-300-1077256711, Issued October 1, 2020

Combined (Well 1 & 6)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m^3)	1838	1542	5319	5806	6303	6404	5942	2021	2015	1857	1814	2023	40726
Average Volume (m^3/d)	58.0	53.9	168.3	177.2	189.3	200.7	176.0	64.1	66.0	58.8	59.2	63.7	111.3
Maximum Volume (m^3/d)	73.0	84.0	196.0	218.0	217.0	218.0	218.0	86.0	125.0	80.0	81.0	85.0	218.0
PTTW - Maximum Allowable Volume (m^3/day)	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2

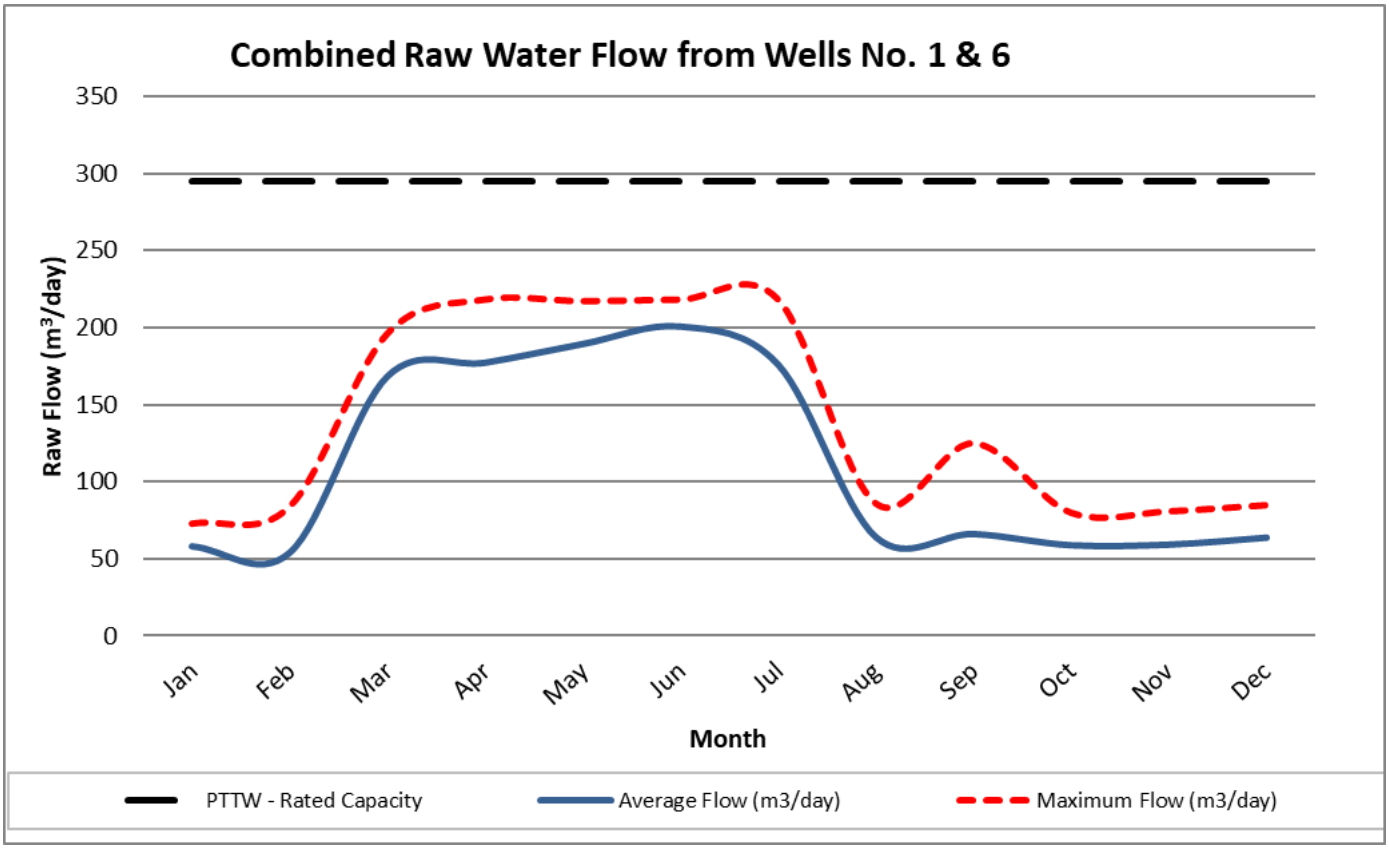

Figure 1: Comparison of Raw Water Flows to the Maximum Allowable Water Taking

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

Regulated by Municipal Drinking Water Licence (MDWL) #204-102 - Issue 8 (Issued March 14, 2022)

Treatment Plant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Volume (m^3)	1569	1399	5335	5692	6159	6149	5645	1721	1743	1609	1565	1785	40371
Average Volume (m^3/d)	51	50	172	190	199	205	182	56	58	52	52	58	110
Maximum Volume (m^3/d)	60	76	203	209	208	224	206	70	162	65	79	82	224
MDWL - Rated Capacity (m^3/day)	233	233	233	233	233	233	233	233	233	233	233	233	233
% Rated Capacity	26	33	87	90	89	96	88	30	70	28	34	35	47

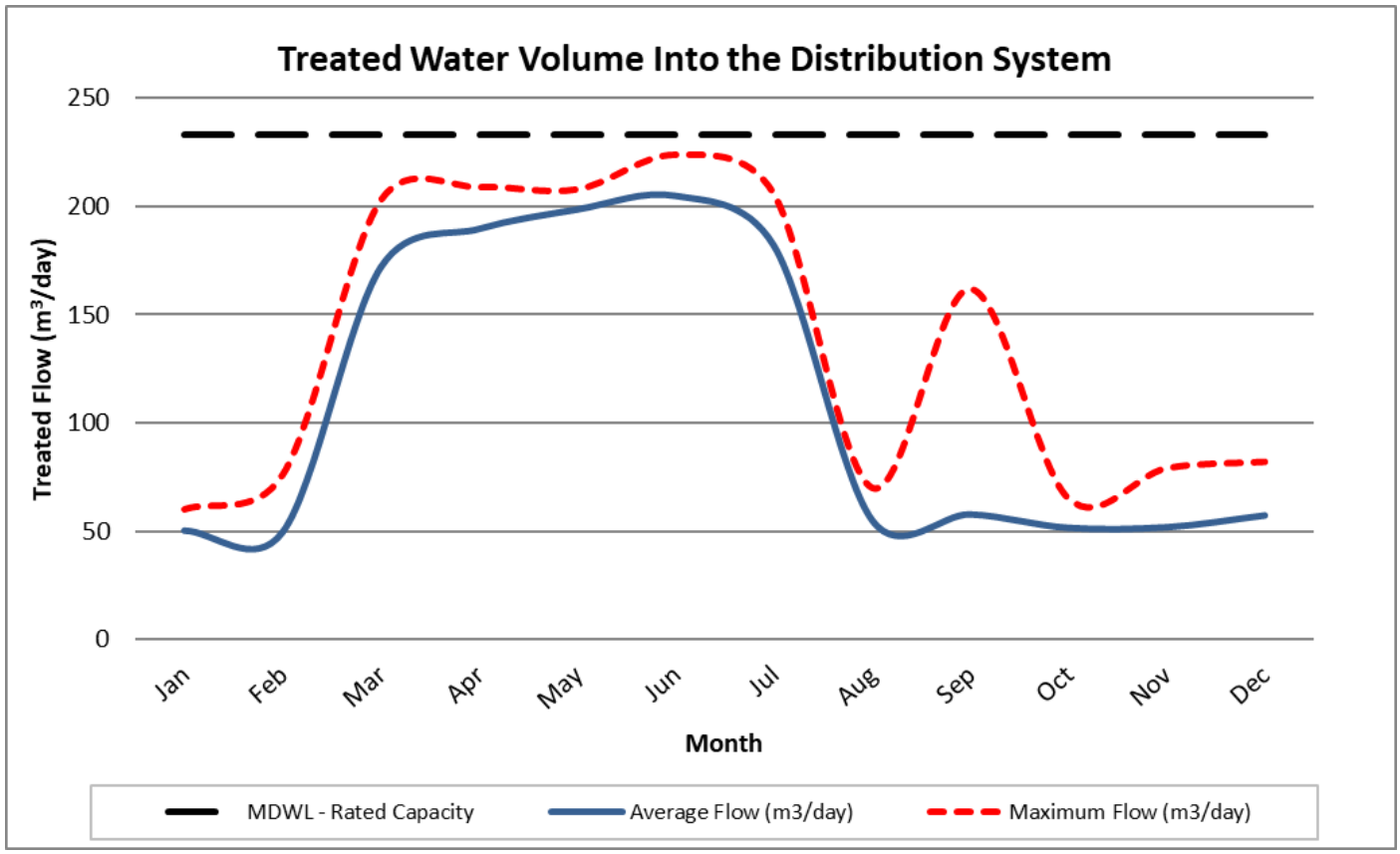

Figure 2: Comparison of Treated Flows to the Maximum Rated Capacity

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)	233 m^3/day	
Average Daily Flow for 2025	110.3 m^3/day	47 % of the rated capacity
Maximum Daily Flow for 2025	224.0 m^3/day	96 % of the rated capacity
Total Treated Water Produced in 2025	40,371 m^3	

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

Year	Maximum Raw Flow (m^3/d)	Max. Day % of PTTW Allowable (295.2 m3/d)	Maximum Treated Flow (m^3/d)	Max. Day % of MDWL Capacity (233 m^3/d)
2025	218	74 %	224	96 %
2024	126	43 %	113	48 %
2023	129	44 %	106	45 %
2022	200	68 %	449	193 %
2021	141	48 %	119	51 %
2020	156	53 %	158	68 %
2019	170	58 %	248	106 %

Conclusion

The water quality data collected in 2025 demonstrates that the Val Gagne 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: VAL GAGNE DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 5624
Facility Owner: Municipality: Black River - Matheson
Service Population: 200

Works: 210001674
Facility Classification: Class 1 Water Treatment
Total Design Capacity: 233 m3/day

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Distribution Water

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	2025 Total	2025 Avg	2025 Max	2025 Min
Cl Residual: Free - mg/L																
Count	9.00	8.00	9.00	7.00	9.00	9.00	8.00	9.00	9.00	9.00	8.00	8.00	102.00			
IH Month.Max	0.94	0.98	1.21	1.08	1.02	1.11	1.11	1.24	0.79	1.03	0.88	0.91			1.24	
IH Month.Mean	0.80	0.91	1.05	0.84	0.75	0.91	0.81	0.92	0.67	0.86	0.74	0.67		0.83		
IH Month.Min	0.64	0.64	0.86	0.68	0.54	0.71	0.56	0.67	0.55	0.70	0.55	0.57				0.54
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	3.00	26.00			
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	3.00	26.00			
Lab Month.Max	< 10.00	< 10.00	< 10.00	< 10.00	10.00	< 10.00	< 10.00	20.00	< 10.00	10.00	10.00	< 10.00			20.00	
Lab Month.Mean	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 15.00	< 10.00	< 10.00	< 10.00	< 10.00		< 10.40		
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	3.00	26.00			
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	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	2025 Total	2025 Avg	2025 Max	2025 Min
Cl Residual: Free - mg/L																
Count	13.00	12.00	14.00	13.00	13.00	13.00	13.00	13.00	13.00	15.00	11.00	11.00	154.00			
IH Month.Max	1.16	1.17	1.42	1.48	1.39	1.36	1.39	1.74	1.04	1.28	1.05	1.02			1.74	
IH Month.Mean	0.98	1.10	1.27	1.13	1.10	1.24	1.22	1.23	0.95	1.03	0.98	0.90		1.10		
IH Month.Min	0.89	1.01	1.15	0.83	0.78	0.94	1.00	0.90	0.78	0.91	0.81	0.77				0.77

3rd Bacti/Residual	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	2025 Total	2025 Avg	2025 Max	2025 Min
Cl Residual: Free - mg/L									
Count	0.00	0.00	0.00	1.00	0.00	1.00			
IH Month.Max				0.65				0.65	
IH Month.Mean				0.65			0.65		
IH Month.Min				0.65					0.65

Raw Water

Well 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	2025 Total	2025 Avg	2025 Max	2025 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	0.00	2.00	1.00	1.00	1.00	1.00	1.00	12.00				
IH Month.Max	0.31	0.39	0.59	0.95	0.63		0.99	0.98	0.94	0.32	0.46	0.85				0.99	
IH Month.Mean	0.31	0.39	0.59	0.95	0.63		0.88	0.98	0.94	0.32	0.46	0.85			0.68		
IH Month.Min	0.31	0.39	0.59	0.95	0.63		0.76	0.98	0.94	0.32	0.46	0.85					0.31

													2025				
Well 6	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	0.00	2.00	1.00	1.00	1.00	1.00	1.00	12.00				
IH Month.Max	0.92	0.96	0.87	0.84	0.90		0.63	0.91	0.92	0.80	0.98	0.88				0.98	
IH Month.Mean	0.92	0.96	0.87	0.84	0.90		0.55	0.91	0.92	0.80	0.98	0.88			0.84		
IH Month.Min	0.92	0.96	0.87	0.84	0.90		0.47	0.91	0.92	0.80	0.98	0.88					0.47

													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	2.00	1.28	1.44	1.60	1.69	2.00	1.42	1.85	2.00	1.35	1.19	1.15				2.00	
OL Month.Mean	0.98	1.06	1.25	1.14	1.09	1.25	1.23	1.24	0.94	1.03	0.96	0.88			1.09		
OL Month.Min	0.80	0.61	1.07	0.54	0.70	0.91	0.91	0.54	0.45	0.61	0.57	0.57					0.45