

St. Marys Drinking Water System

Waterworks # 220000521
System Category – Large Municipal Residential

Annual Drinking Water Report

Prepared For: The Corporation of the Town of St. Marys



Reporting Period of January 1st – December 31st, 2024

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Overview

This report fulfills requirements of Ontario Regulation 170/03 Section 11 and Schedule 22. Appendix A contains the Section 11 report utilizing the Ministry of Environment, Conservation and Parks (MECP) template. The report must be made available to anyone that requests a copy of the report. By March 31st, 2024, the report must be provided to members of municipal council.

Report Availability

This system does not serve more than 10,000 residence, however the annual reports are available on the municipal website. Notification is provided on the website on the availability of the annual report and copies are provided free of charge if requested. The Municipal Operations Center is located at 408 James St. South, St. Marys, ON.

System Process Description

Overview

The Corporation of the Town of St. Marys is the owner of a Large, Municipal, Drinking Water System supplied by a ground water source, which is operated by Ontario Clean Water Agency (OCWA). The system provides potable water to approximately 7,600 residential, industrial, institutional and commercial users.

A total of three (3) bedrock wells are connected to the water distribution system, each equipped with pumping, disinfection and monitoring components. The MECP has classified all three wells as Groundwater Under the Direct Influence of Surface Water (GUDI) with effective in-situ filtration. The remainder of the system consists of a booster pump station (used only during a fire emergency), reservoir pumping station and one elevated water storage tank facility for system pressure regulation.

Each of the well pump houses #1, 2A and 3 have a vertical turbine pump rated at 60 L/s capacity. These pumps draw ground water from each of the three wells. Water passes air release valves, a backflow check valve, pressure gauges, primary UV light disinfection, flow meter, the chlorine gas injection point, actuator control valve and then into the contact chamber piping located underground.

Well # 1

According to Well Record #5001709, Production Well # 1 ("PW1" – identified as Well # 1) was drilled on March 1, 1971 by International Water Supply Ltd. Well # 1 is located south of the Trout Creek watercourse and east of St. George Street within the Town of St. Marys, Ontario. Well # 1 is located within the 100-year flood plain of Trout Creek. The Well Record indicates that a steel casing was installed and cemented within the borehole annulus to a depth of approximately 12.3 metres below ground surface. Below the 12.3 m steel casing, the borehole was left open within the limestone bedrock. In 2005, a Pump house was constructed around Well # 1, at which time the well was extended to an elevation approximately 2 metres above the 100-year flood plain of Trout Creek.

A hydrogeological investigation was conducted by International Water Consultants Ltd. and International Water Supply Ltd. in 2002 for the Town of St. Marys. The hydrogeological investigation indicated that Production Well # 1 (Well # 1) is periodically under the influence of surface water, and has

partially effective in-situ filtration. A final technical evaluation of the hydrogeological investigation and peer review was conducted by the MECP and it was concluded that Well # 1 is GUDI with effective in-situ filtration.

The following is a summary of the appurtenances for Well # 1:

- A 406 millimetre (mm) diameter, 45.5 m deep drilled groundwater production well is located east of the intersection of Timms Lane and St. George Street, immediately south of Trout Creek (NAD83: UTM Zone 17: 0489966 m East, 4789866 m North). The well is equipped with a line-shaft type vertical turbine well pump with variable frequency drive and pump-to-waste functionality. It is rated at a maximum flow of 3,600 litres per minute (L/min), with a 200 mm discharge line connected to the well pump header in the Pumphouse described below;
- A well Pumphouse, housing Well # 1 and the following disinfection and control facilities, including:
 - A 200 mm diameter pump header from the well, with check valve, air relief valve, raw water flow meter, shutoff valves, and raw water and treated water sampling tap;
 - A 100 mm line to waste;
 - A 200 mm diameter treated water header having a continuous chlorine analyzer and turbidity analyzer complete with automatic shutdown of well pump capability, connected to a 200 mm diameter feeder-main supplying the distribution system
- A disinfection facility located approximately 20 m north of the well Pumphouse (inside former reservoir building), housing disinfection and control facilities including:
 - One (1) ultraviolet disinfection system capable of providing a minimum dosage of 40 mJ/cm² of 254 nm wavelength complete with well pump shutdown on lamp failure;
 - Gas chlorination disinfection system, rated at 24 kg/day, consisting of one dual cylinder scale, one chlorine booster pump, and duplex automatic switchover regulator;
 - 78 m of 600 mm diameter watermain, followed by 26 m of 300 mm diameter watermain to provide chlorine contact prior to first customer;

Well # 2A

According to the Well Record (A011221), Production Well #2A (PW2A, identified as Well # 2A) was drilled on September 29, 2005 by International Water Supply Ltd. Well # 2A is located to the south of the Trout Creek watercourse and west of the Wellington Street Right-of-Way (ROW) within the 100-year flood plain of Trout Creek. As such, the casing for Well # 2A has been significantly extended above the grade of the surrounding land to account for possible flooding issues. According to information presented on the Well Record, the well is 365 mm in diameter and was drilled to a depth of approximately 46 metres. The Well Record indicates that a steel casing was installed and sealed with bentonite and sand cement grout within the borehole annulus to a depth of approximately 18 metres below grade. Below the 18 metres in depth, the borehole was left open within the limestone bedrock. Well # 2A is classified as a GUDI well.

The following is a summary of the appurtenances for Well # 2A:

- A 305 mm diameter, 44.5 m deep drilled groundwater production well located between the Wellington and Water Street Right-of-Ways (ROWS), north of the Queen Street ROW and immediately south of the Trout Creek watercourse (NAD 83: UTM Zone 17: 0488390 m East, 4789710 m North). Well # 2A is equipped with a line-shaft type vertical turbine well pump, rated at 3,636 L/min at 89.2 m Total Dynamic Head (TDH), with a 200 mm discharge line connected to the well pump header in the Pumphouse described below.
- A well Pumphouse, housing disinfection and control facilities including:

- A 200 mm diameter pump header from the well, with check valve, air relief valve, raw water flow meter, shutoff valves, and raw and treated water sampling tap;
- A 100 mm line to waste;
- A gas chlorination disinfection system, consisting of one dual cylinder scale, one chlorine booster pump, one chlorine regulator, rated at 22.7 kg/day with feed line discharging into the common well pump header in the Pumphouse, and one continuous chlorine residual analyzer;
- One ultraviolet disinfection system capable of providing a minimum dosage of 40 mJ/cm² of 254 nm wavelength complete with pump shutdown on lamp failure;
- A 200 mm diameter treated water header having a continuous chlorine analyzer and turbidity analyzer complete with automatic shutdown of well pump capability, connected to a 200 mm diameter feeder-main supplying the distribution system.
- 79 metres of 600 mm diameter watermain to provide chlorine contact time prior to the first customer.

Well #3

According to Well Record #5003118, Production Well # 3 (PW3, identified as Well #3) was drilled on June 10, 1984 by International Water Supply Ltd. This well is located within approximately 50 metres of the western bank of the Thames River, located to the east of Thomas Street and to the north and south of Westover Street and Park Street respectively. The well is within the confines of Pumphouse #3. According to the information presented within the Engineer's Report, the well is 406 mm in diameter and was drilled to a depth of approximately 47.4 m. The Well Record indicates that a steel casing was installed and sealed with grout within the borehole annulus to a depth of approximately 12.3 metres below grade, below which the borehole was left open within the limestone bedrock.

The hydrogeological investigation concluded that Well # 3 is not considered a GUDI well, and is receiving effective in-situ filtration. The hydrogeological investigation did indicate that this conclusion is tempered by a lack of particle count data during significant precipitation events and more elevated total coliforms in 2002. The peer review that was conducted assessed Well # 3 to be a GUDI well with effective in-situ filtration. It is inferred that the peer review reclassification of Well #3 to a GUDI well was based on a lack of particle count data during significant precipitation events.

The following is a summary of the appurtenances for Well #3:

- A 406 mm diameter, 47.4m deep drilled groundwater production well located on the southeast side of Thomas Street, southwest of Park Street, adjacent to the Thames River (NAD 83: UTM Zone 17: 0488010 East, 4789040 North). Well # 3 is equipped with a line-shaft type vertical turbine well pump with variable frequency drive and pump-to-waste functionality. Well # 3 is rated at a maximum flow of 3,636 L/min at 89.2 TDH, with a 200 mm discharge line connected to the well pump header in the Pumphouse described below;
- A well Pumphouse, housing disinfection and control facilities including:
 - A 200 mm diameter pump header from the well, with check valve, air relief valve, raw water flow meter, shutoff valves and raw water and treated water sampling taps;
 - A 200 mm discharge to waste line with pressure relief valve and orifice plate for flow measurement;
 - One (1) ultraviolet disinfection system capable of providing a minimum dosage of 40 mJ/cm² of 254 nm wavelength complete with well pump shut down on lamp failure;
 - Gas chlorination disinfection system, rated at 24 kg/day, consisting of one (1) dual cylinder scale, one (1) chlorine booster pump and duplex automatic switchover regulator;

- A 200 mm diameter treated water header having a continuous chlorine analyzer and turbidity analyzer complete with automatic shutdown of well pump capability, connected to a 200 mm diameter feeder main supplying the distribution system.
- 171 m of 400 mm diameter watermain, followed by 40 m of 300 mm diameter watermain to provide chlorine contact prior to first customer.

Booster Station

The James Street Booster Station provides additional system pressure to the south industrial lands when private fire systems are activated. It has a rated capacity of 154L/s at 52 m TDH. This facility serves industrial lands within the southeast area of the Town.

Reservoir

A ground level reservoir and booster pumping station was completed in 2019 to add an additional 1,600 m³ of water storage to the system. The reservoir is located next to the existing Well #1.

Water Tower

The St. Marys elevated water storage facility is located on the Southern side of the Victoria Street Right-Of-Way (ROW), approximately 250 m west of James Street South in the Town of St. Marys, Ontario. It has a storage capacity of 1,820 m³ and was constructed in 1986 and put into service in 1987. The static water head from the ground level to the overflow is 37.9 m. The facility includes a valve chamber, yard piping and tele-metering control system. The water tower is for system pressure regulation.

Treatment Chemicals

Chlorine gas is used to achieve primary and secondary disinfection in the St. Marys Drinking Water System. Refer to Table 1 below for supplier information.

Table 1: Treatment Chemicals in the St. Marys DWS

Chemical Name	Use	Supplier
Chlorine Gas	Disinfection	Brenntag

Summary of Non-Compliance

Adverse Water Quality Incidents

Under the *Safe Drinking Water Act*, O.Reg 170/03, any adverse water quality incidents (AWQI) are required to be reported to the Ministry of the Environment, Conservation and Parks (MECP) and corrective action taken. Refer to Table 2 below for a summary of AWQI incidents in 2024.

Table 2: AWQI Incidents

Date	AWQI #	Location	Problem	Details	Legislation	Corrective Action Taken
May 24, 2024	165019	Hydrant #234	Total Coliform of 2 CFU/100mL	Regulatory distribution bacti samples returned a Total Coliform count of 2 CFU/100mL	Safe Drinking Water Act Section 18; O.Reg. 170/03 Schedule 16-3 (1) & Schedule 17-6; 2020 Watermain Disinfection Procedure	Disinfected hydrant #234 and flushed system. Re-sampled at source hydrant #234, upstream at hydrant #238 and downstream at hydrant #299. All Total Coliform samples returned 0 CFU/100mL.

Non-Compliance

Under the *Safe Drinking Water Act*, O.Reg 170/03, any events where legislative requirements were not met are required to be reported to the MECP and corrective actions taken. Refer to Table 3 below for a summary of non-compliance incidents in 2024 that the operating authority reported to the MECP.

Table 3: Summary of Non-Compliance Incidents

Legislation	Requirement(s) system failed to meet	Duration of the failure (i.e. date(s))	Corrective Action Taken	Status
2020 Watermain Disinfection Procedure; Drinking Water Works Permit 056-201 – Issue #5 and Issue #6, Schedule B, Section 2.3	Schedule B of the DWWP, states “All parts of the drinking water system in contact with drinking water that are added, modified, replaced, extended shall be disinfected in accordance with a procedure approved by the Director or in accordance with: a) The ministry’s Watermain Disinfection Procedure, dated August 1, 2020; b) Subject to condition 2.3.2, any updated version of the ministry’s Watermain Disinfection Procedure	During replacement of a “T” stub on May 22, 2024, hydrogen peroxide was inadvertently used as a disinfectant, instead of a 1% sodium hypochlorite solution, as required by the 2020 Watermain Disinfection Procedure.	Flushed the system after the replacement and obtained microbiological samples. Revised regional disinfection forms to include identification of the Trade Name of the sodium hypochlorite used and to confirm NSF 60 certification.	Complete

Non-Compliance Identified in a Ministry Inspection

The routine MECP Inspections have an Inspection Rating Record. This record evaluates the system to provide information for the owner/operator on areas that need to be improved. The particular areas that were evaluated for the St. Marys Drinking Water System were: Capacity Assessment, Distribution

System, Source, Treatment Processes, Operations Manuals, Logbooks, Certification and Training, Water Quality Monitoring, and Reporting and Corrective Actions. This system received 14 out of 644 non-compliance ratings and as such received 92.46% for the Final Inspection Rating.

Table 4: Non-Compliances Identified in a Ministry Inspection

Legislation	Requirement(s) system failed to meet	Duration of the failure (i.e. date(s))	Corrective Action Required	Status
O. Reg 170/03 Schedule 7-2 (3)	The owner of a large municipal residential system that provides secondary disinfection and the operating authority for the system shall ensure that at least seven distribution samples are taken each week in accordance with subsection (4) and are tested immediately for free chlorine residual.	Three (3) of the seven (7) required distribution residual samples scheduled for collection the week of December 17 th – 23 rd , 2023 were not collected until December 24 th , 2023.	From herein the Owner / Operating Authority shall ensure that free chlorine residual testing from the distribution system is conducted as prescribed by Ontario Regulation 170/03 – Schedule 7-2.	Complete
2020 Watermain Disinfection Procedure; Drinking Water Works Permit 056-201 – Issue #5 and Issue #6, Schedule B, Section 2.3	Schedule B of the DWWP, states “All parts of the drinking water system in contact with drinking water that are added, modified, replaced, extended shall be disinfected in accordance with a procedure approved by the Director or in accordance with: a) The ministry’s Watermain Disinfection Procedure, dated August 1, 2020; b) Subject to condition 2.3.2, any updated version of the ministry’s Watermain Disinfection Procedure; c) Subject to condition 2.3.3, i. AWWA C652 – Standard for Disinfection of Water-Storage Facilities; ii. AWWA C653 – Standard for Disinfection of Water Treatment Plants; and, iii. AWWA C654 – Standard for Disinfection of Wells.”	Well 2A and its appurtenances were disinfected during pump rehabilitation on September 13, 2023. Chlorine residuals were not taken following disinfection to confirm a residual of at least 100 mg/L.	From herein the Owner / Operating Authority shall ensure all parts of the drinking water system that come in contact with the drinking water are disinfected in accordance with the requirements prescribed by Drinking Water Works Permit #056-201, Issues #5 and #6, Schedule B - Section 2.3. Compliance with this requirement will be assessed during the next inspection of the water system.	Complete

Flows

Raw and Treated Water Flows

The raw water flows are regulated under the Permit to Take Water, in which the rated capacity for the system is 60 L/s (3,600L/min) and the maximum total combined taking is 10,368 m³/d. The 2024 daily raw flow was submitted to the Ministry electronically under permit #5303-AASQEC. A copy of the data that was submitted are attached in Appendix B. Refer to Figure 1 for a comparison of the maximum

daily flow taken from each of the three wells to the maximum flow rate permitted by the PTTW. Refer to Figure 2 for the maximum total daily flow taken and the average daily flow taken from all three wells combined.

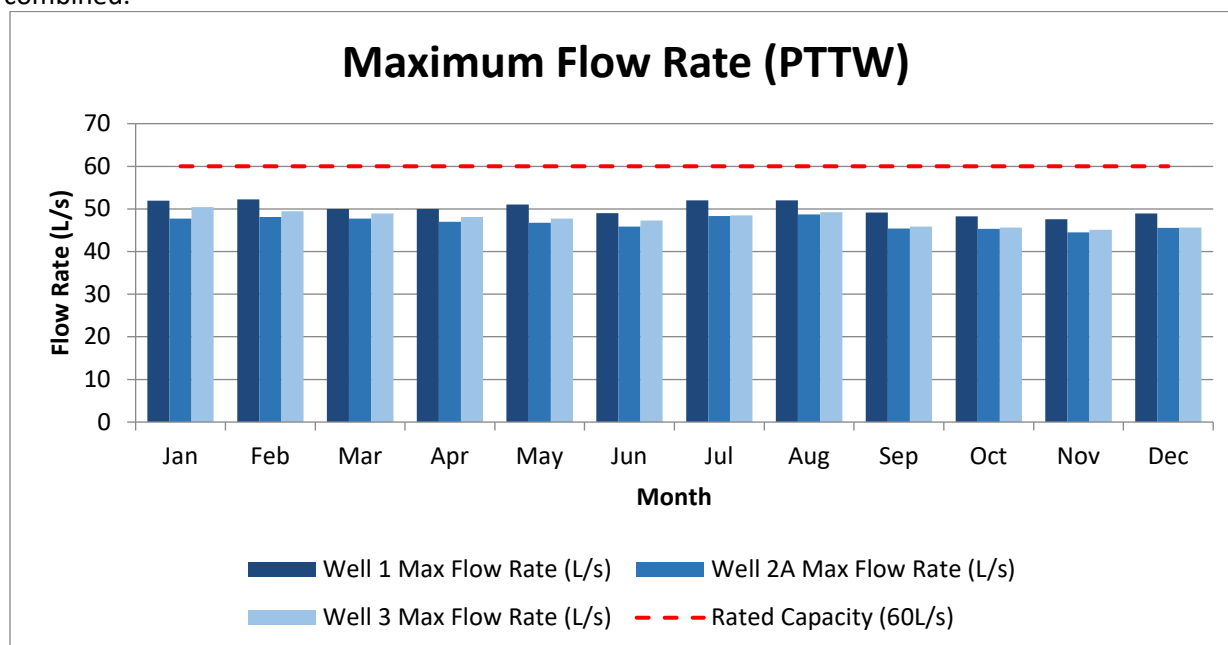


Figure 1. Maximum Flow Rate from Each Well Compared to the Permitted Maximum Flow by the PTTW

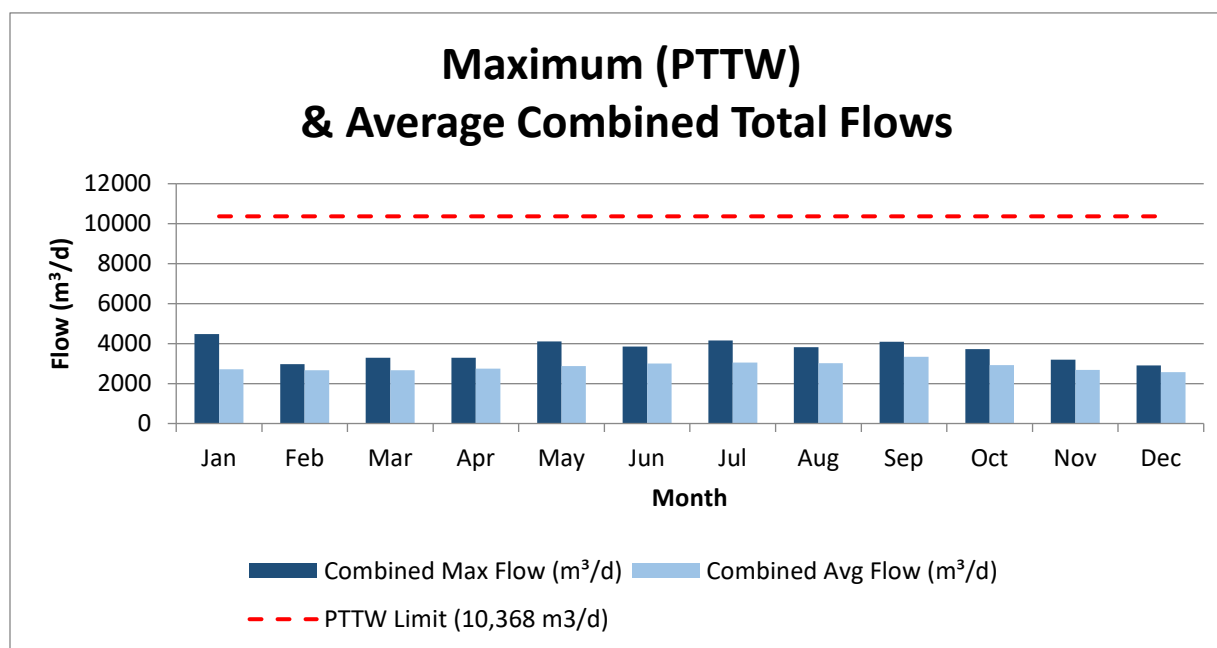


Figure 2. Maximum and Average Combined Total Flows

The water that is treated is regulated under the Municipal Drinking Water Licence #056-101, in which the rated capacity for each of the three (3) treatment subsystems is 5,184m³/d, with a total combined taking of 10,368 m³/d across all treatment subsystems under permit to take water #5303-AASQEC. The St. Marys Drinking Water System is operating at 27.5% of the rated capacity. Note: the raw and treated flows are one in the same as there is only one flowmeter. Refer to Figure 3 for the total volume of water treated at each well.

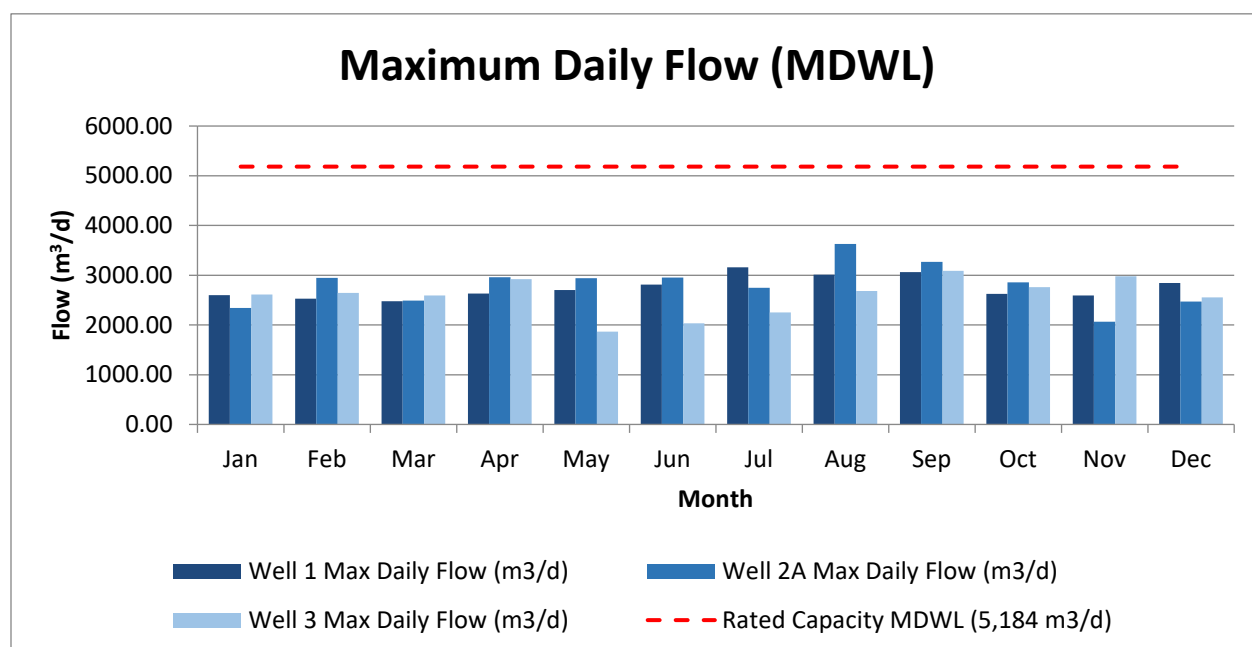


Figure 3. Total Daily Volume of Water Taken at Each Well

The PTTW requires weekly levels of the well to be taken at either static level (i.e., while the well is not pumping) or dynamic level (i.e., while the well is pumping). Figures 4 through 6 identify the static and dynamic water levels in each well compared against at the total volume of water taken each month.

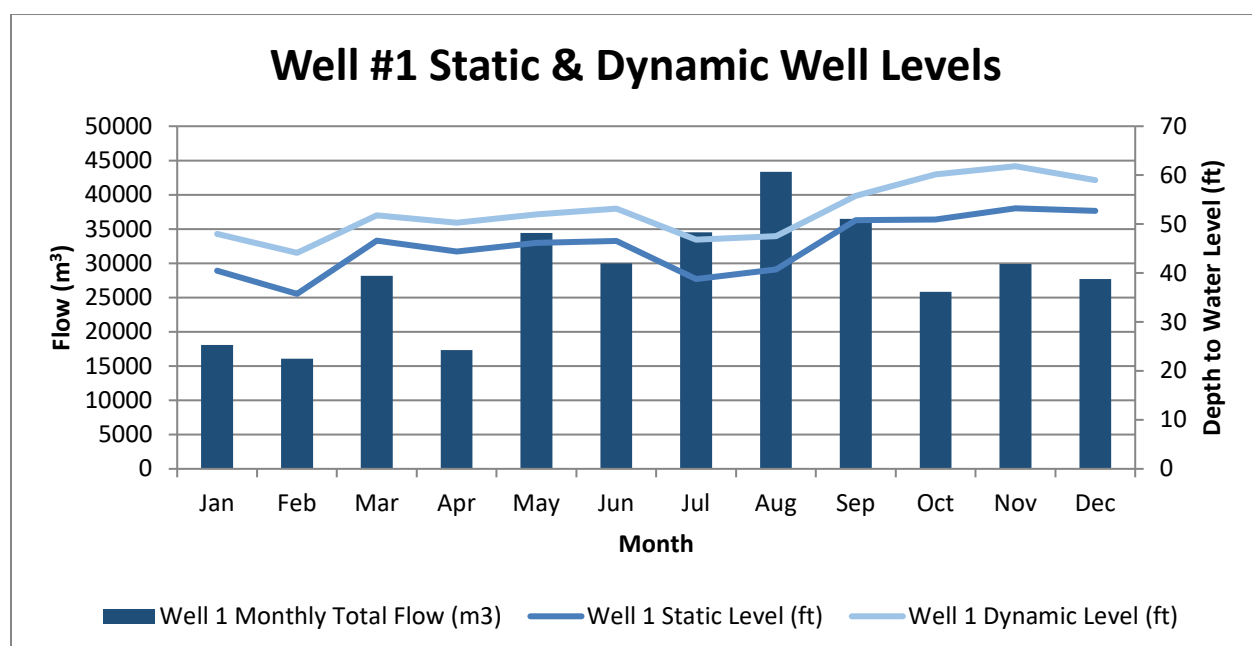


Figure 4. Well 1 Static and Dynamic Well Levels and Total Volume Taken

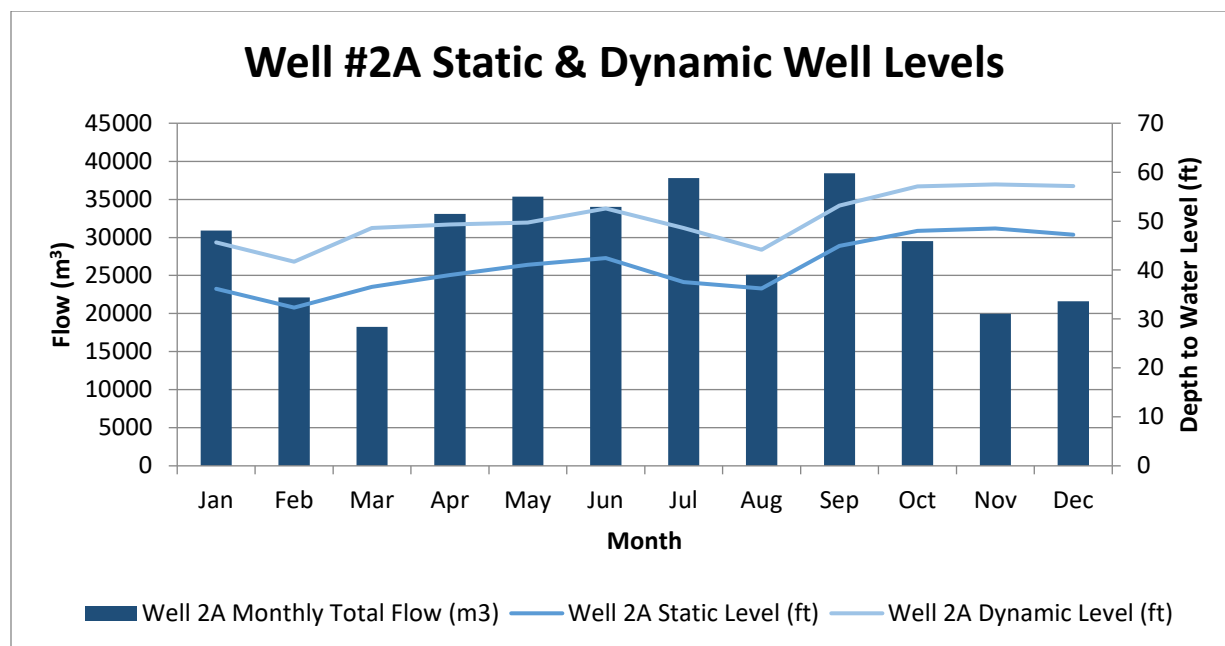


Figure 5. Well 2A Static and Dynamic Well Levels and Total Volume Taken

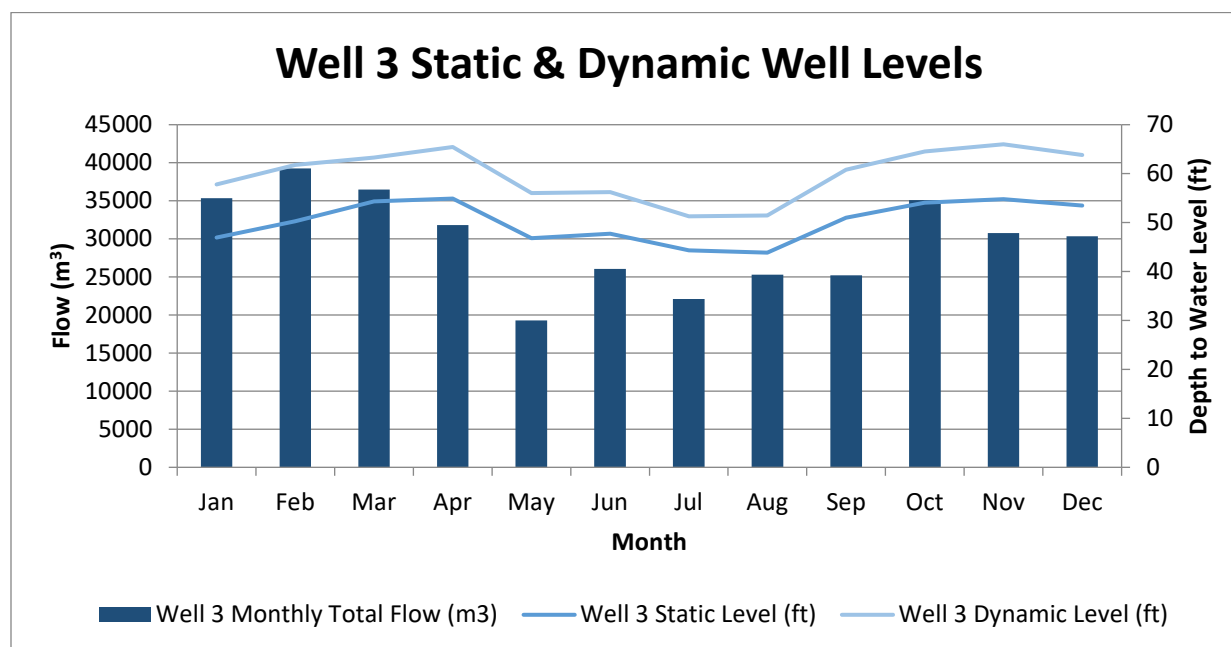


Figure 6. Well 3 Static and Dynamic Well Levels and Total Volume Taken

Regulatory Sample Results Summary

Microbiological Testing

The raw water from each well is sampled on a weekly basis and tested for *E.coli* and Total Coliforms to meet regulatory requirements. There is no regulatory limit for raw water samples. The St. Marys DWS uses ground water that is periodically under the influence of surface water and therefore concentrations of total coliform and *E. coli* are expected occasionally, especially after heavy precipitation or snowmelt. Refer to Table 5 for the number of samples taken along with the range of results.

The treated water from each well is sampled on a weekly basis and tested for *E. coli*, Total Coliforms and heterotrophic plate count (HPC) to meet regulatory requirements. The regulatory limit for Total Coliform and *E. coli* is zero. Heterotrophic Plate Count (HPC) does not have a limit, this is used as an operational guide to initiate an action plan if HPC results are continuously high. Refer to Table 5 for the number of samples taken along with the range of results.

The distribution system is sampled on a weekly basis at various locations for *E. coli*, Total Coliforms and heterotrophic plate count (HPC) to meet regulatory requirements. The regulatory limit for Total Coliform and *E. coli* is zero; Heterotrophic Plate Count (HPC) does not have a limit. This is an operational guide to initiate an action plan if HPC results are continuously high. Refer to Table 5 for the number of samples taken along with the range of results.

Table 5: Microbiological Testing Summary

	No. of Samples Collected	Range of E.coli Results (cfu/100mL)		Range of Total Coliform Results (cfu/100mL)		No. of Samples Collected	Range of HPC Results (cfu/mL)	
		Min	Max	Min	Max		Min	Max
Raw Water – Well 1	53	0	1	0	23	n/a	n/a	n/a
Raw Water – Well 2A	53	0	0	0	0	n/a	n/a	n/a
Raw Water – Well 3	53	0	0	0	1	n/a	n/a	n/a
Treated Water #1	53	0	0	0	0	53	0	<10
Treated Water #2A	53	0	0	0	0	53	0	<10
Treated Water #3	53	0	0	0	0	53	0	<10
Distribution Water	218	0	0	0	2	53	0	<10

Operational Testing

The raw turbidity from each well is monitored by a grab sample at least monthly in accordance with O. Reg. 170/03. Refer to Table 6 for turbidity minimum and maximum turbidity values from each well.

The treated water is analyzed for free chlorine residual in order to meet primary disinfection requirements. This residual is continuously monitored by a chlorine analyzer at a minimum frequency of every 5 minutes. The minimum and maximum values for each well are identified in Table 6. Alarms are initiated when the residuals drop below a set point for operator response. The operator then confirms whether primary disinfection requirements have been met or whether an adverse water quality incident has occurred. This is done through a calculation using the conditions at the time of the incident for chlorine residual and flow rate. During the month of June, there was a low chlorine alarm due to a failure of the chlorine booster pump line that occurred at Well #3. Operational staff flushed to waste and collected a residual within distribution system, downstream of well house confirming untreated water was not directed to users.

Free chlorine residuals are monitored throughout the distribution system in order to ensure adequate secondary disinfection is provided. Table 6 provides the minimum and maximum readings of free chlorine residuals taken as grab samples throughout the distribution system. All results have met regulatory requirements.

Table 6: Monitoring Results

Parameter	No. of Samples Collected	Range of Results	
		Minimum	Maximum
Turbidity, grab (NTU) – RW 1	53	0.05	0.36
Turbidity, grab (NTU) – RW 2A	53	0.07	0.38
Turbidity, grab (NTU) – RW 3	53	0.06	0.37
Free Chlorine Residual, On-Line (mg/L) – TW 1	Continuously Monitored	0.74	1.77
Free Chlorine Residual, On-Line (mg/L) – TW 2A	Continuously Monitored	0.61	1.90
Free Chlorine Residual, On-Line (mg/L) – TW 3	Continuously Monitored	0.14*	2.04
Free Chlorine Residual, grab (mg/L) - DW	368	0.34	1.44

*low chlorine, no AWQI as the water was not directed to users

Inorganic Parameters

Inorganic parameters are tested annually as a requirement under O. Reg. 170/03. In the event any of the parameters exceed half of the maximum allowable concentration, the parameter is required to be sampled quarterly. Sodium and Fluoride are required to be tested every 60 months. Nitrate and Nitrite are tested quarterly as required under O. Reg. 170/03. Refer to Table 7 for the latest inorganic parameters monitoring results.

Sodium in the Town of St. Marys water supply is naturally occurring and is mostly attributed to the nature of the deep bedrock wells. The levels of sodium in the water are of interest because at higher levels it can impart a salty taste to the water and persons on sodium reduced diets need to know the sodium levels in the drinking water so that they can monitor their sodium intake. The aesthetic objective for sodium in drinking water is 200 mg/L at which it can be detected by a salty taste. Sodium is not toxic. Consumption of sodium in excess of 10 grams per day (g/day) by normal adults does not result in any apparent adverse health effects. In addition, the average intake of sodium from water is only a small fraction of that consumed in a normal diet. A maximum acceptable concentration for sodium in drinking water has, therefore, not been specified. Persons suffering from hypertension or congestive heart disease may require a sodium restricted diet, in which case, the intake of sodium from drinking water could become significant. It is therefore recommended that the measurement of sodium levels be included in routine monitoring programs of water supplies. The local Medical Officers of Health is notified when the sodium concentration exceeds 20 mg/L, so that this information may be passed on by local physicians. Softening using a domestic water softener increases the sodium level in drinking water and may contribute to a significant percentage to the daily sodium intake for a consumer on a sodium restricted diet. It is recommended that a separate unsoften supply be retained for cooking and drinking purposes. The latest available analytical results for sodium were conducted in January 2020. The results indicated that sodium concentrations ranged from 27.2 mg/L to 49.7 mg/L and are consistent with historical sampling.

Table 7: Inorganic Monitoring Results

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Antimony: Sb (ug/L) – TW 1	2024/01/11	< MDL 0.6	6	0	0
Antimony: Sb (ug/L) – TW 2	2024/01/10	< MDL 0.6	6	0	0
Antimony: Sb (ug/L) – TW 3	2024/01/10	< MDL 0.6	6	0	0
Arsenic: As (ug/L) – TW 1	2024/01/11	0.3	10	0	0
Arsenic: As (ug/L) – TW 2	2024/01/10	0.3	10	0	0
Arsenic: As (ug/L) – TW 3	2024/01/10	< MDL 0.2	10	0	0
Barium: Ba (ug/L) – TW 1	2024/01/11	164	1000	0	0
Barium: Ba (ug/L) – TW 2	2024/01/10	100	1000	0	0
Barium: Ba (ug/L) – TW 3	2024/01/10	110	1000	0	0
Boron: B (ug/L) – TW 1	2024/01/11	49	5000	0	0
Boron: B (ug/L) – TW 2	2024/01/10	55	5000	0	0
Boron: B (ug/L) – TW 3	2024/01/10	58	5000	0	0
Cadmium: Cd (ug/L) – TW 1	2024/01/11	0.108	5	0	0
Cadmium: Cd (ug/L) – TW 2	2024/01/10	0.026	5	0	0
Cadmium: Cd (ug/L) – TW 3	2024/01/10	0.039	5	0	0
Chromium: Cr (ug/L) – TW 1	2024/01/11	0.16	50	0	0
Chromium: Cr (ug/L) – TW 2	2024/01/10	0.14	50	0	0
Chromium: Cr (ug/L) – TW 3	2024/01/10	< MDL 0.08	50	0	0
Mercury: Hg (ug/L) – TW 1	2024/01/11	< MDL 0.01	1	0	0
Mercury: Hg (ug/L) – TW 2	2024/01/10	< MDL 0.01	1	0	0
Mercury: Hg (ug/L) – TW 3	2024/01/10	< MDL 0.01	1	0	0
Selenium: Se (ug/L) – TW 1	2024/01/11	1.02	50	0	0
Selenium: Se (ug/L) – TW 2	2024/01/10	0.64	50	0	0
Selenium: Se (ug/L) – TW 3	2024/01/10	0.5	50	0	0
Uranium: U (ug/L) – TW 1	2024/01/11	1.5	20	0	0
Uranium: U (ug/L) – TW 2	2024/01/10	2.11	20	0	0
Uranium: U (ug/L) – TW 3	2024/01/10	2.65	20	0	0
Additional Inorganics					
Fluoride (mg/L) – TW 1	2020/01/06	1.07	1.5	0	1
Fluoride (mg/L) – TW 2	2020/01/06	1.25	1.5	0	1
Fluoride (mg/L) – TW 3	2020/01/06	1.19	1.5	0	1
Nitrite (mg/L) – TW 1	2024/01/08	3.03	10	0	0
Nitrite (mg/L) – TW 1	2024/04/08	2.74	10	0	0
Nitrite (mg/L) – TW 1	2024/07/08	2.31	10	0	0
Nitrite (mg/L) – TW 1	2024/10/07	1.27	10	0	0
Nitrite (mg/L) – TW 2	2024/01/08	0.852	10	0	0
Nitrite (mg/L) – TW 2	2024/04/08	1.22	10	0	0
Nitrite (mg/L) – TW 2	2024/07/08	1.06	10	0	0
Nitrite (mg/L) – TW 2	2024/10/07	0.83	10	0	0
Nitrite (mg/L) – TW 3	2024/01/08	0.722	10	0	0

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
Nitrite (mg/L) – TW 3	2024/04/08	0.944	10	0	0
Nitrite (mg/L) – TW 3	2024/07/08	0.871	10	0	0
Nitrite (mg/L) – TW 3	2024/10/07	0.564	10	0	0
Nitrate (mg/L) – TW 1	2024/01/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 1	2024/04/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 1	2024/07/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 1	2024/10/07	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 2	2024/01/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 2	2024/04/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 2	2024/07/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 2	2024/10/07	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 3	2024/01/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 3	2024/04/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 3	2024/07/08	< MDL 0.003	1	0	0
Nitrate (mg/L) – TW 3	2024/10/07	< MDL 0.003	1	0	0
Sodium: Na (mg/L) – TW 1	2020/01/09	27.2	n/a	-	-
Sodium: Na (mg/L) – TW 2	2020/01/09	49.7	n/a	-	-
Sodium: Na (mg/L) – TW 3	2020/01/09	44.1	n/a	-	-

MAC = Maximum Allowable Concentration as per O.Reg 169/03

*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health is notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

Schedule 15.1 Sampling:

In 2007, the MECP amended the O.Reg. 170/03, to introduce the Community Lead Testing Program (Schedule 15.1 of the Regulation). Under this program, all municipal drinking water systems were required to collect samples from private residences, non-residential buildings as well as the distribution system. The Town of St. Marys met the sampling requirements with results showing no more than 10% of plumbing samples exceeding the MECP standard of 10 µg/L. As such, the Town of St. Marys has been exempt from plumbing sample requirements and is only required to monitor the distribution system twice per year. Refer to Table 8 below for Schedule 15.1 monitoring results in 2024. Monitoring the pH and alkalinity in the distribution system is essential to ensure adequate buffering for corrosion control and to minimize exposure to metals such as lead.

Table 8: Schedule 15.1 Monitoring Results

Distribution System	Number of Sampling Points	Number of Samples	Range of Results		MAC (ug/L)	Number of Exceedances
			Minimum	Maximum		
Alkalinity (mg/L)	3	6	274	312	-	-
pH	3	6	7.11	7.4	-	-
Lead (ug/l)	3	6	0.16	0.19	10	0

Organic Parameters

Organic parameters are tested annually as a requirement under O.Reg 170/03. In the event any of the parameters exceed half of the maximum allowable concentration, the parameter is required to be

sampled quarterly. Refer to Table 9 for the monitoring results for organic parameters.

Table 9: Organic Parameter Monitoring Results

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
1,1-Dichloroethylene (ug/L)-TW3	2024/01/10	< MDL 0.33	14	0	0
1,2-Dichlorobenzene (ug/L)-TW3	2024/01/10	< MDL 0.41	200	0	0
1,2-Dichloroethane (ug/L)-TW3	2024/01/10	< MDL 0.35	5	0	0
1,4-Dichlorobenzene (ug/L)-TW3	2024/01/10	< MDL 0.36	5	0	0
2,3,4,6-Tetrachlorophenol (ug/L)-TW3	2024/01/10	< MDL 0.2	100	0	0
2,4,6-Trichlorophenol (ug/L)-TW3	2024/01/10	< MDL 0.25	5	0	0
2,4-Dichlorophenol (ug/L)-TW3	2024/01/10	< MDL 0.15	900	0	0
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW3	2024/01/10	< MDL 0.19	100	0	0
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW3	2024/01/10	< MDL 0.12	100	0	0
Alachlor (ug/L) -TW3	2024/01/10	< MDL 0.02	5	0	0
Atrazine + N-dealkylated metabolites (ug/L)-TW3	2024/01/10	< MDL 0.01	5	0	0
Azinphos-methyl (ug/L)-TW3	2024/01/10	< MDL 0.05	20	0	0
Benzene (ug/L)-TW3	2024/01/10	< MDL 0.32	1	0	0
Benzo(a)pyrene (ug/L)-TW3	2024/01/10	< MDL 0.004	0.01	0	0
Bromoxynil (ug/L)-TW3	2024/01/10	< MDL 0.33	5	0	0
Carbaryl (ug/L)-TW3	2024/01/10	< MDL 0.05	90	0	0
Carbofuran (ug/L) -TW3	2024/01/10	< MDL 0.01	90	0	0
Carbon Tetrachloride (ug/L) -TW3	2024/01/10	< MDL 0.17	2	0	0
Chlorpyrifos (ug/L) -TW3	2024/01/10	< MDL 0.02	90	0	0
Diazinon (ug/L)-TW3	2024/01/10	< MDL 0.02	20	0	0
Dicamba (ug/L)-TW3	2024/01/10	< MDL 0.2	120	0	0
Dichloromethane (Methylene Chloride) (ug/L)-TW3	2024/01/10	< MDL 0.35	50	0	0
Diclofop-methyl (ug/L)-TW3	2024/01/10	< MDL 0.4	9	0	0
Dimethoate (ug/L)-TW3	2024/01/10	< MDL 0.06	20	0	0
Diquat (ug/L)-TW3	2024/01/10	< MDL 1	70	0	0
Diuron (ug/L)-TW3	2024/01/10	< MDL 0.03	150	0	0
Glyphosate (ug/L)-TW3	2024/01/10	< MDL 1	280	0	0
Malathion (ug/L)-TW3	2024/01/10	< MDL 0.02	190	0	0
Metolachlor (ug/L)-TW3	2024/01/10	< MDL 0.01	50	0	0
Metribuzin (ug/L)-TW3	2024/01/10	< MDL 0.02	80	0	0
Monochlorobenzene (Chlorobenzene) (ug/L)-TW3	2024/01/10	< MDL 0.3	80	0	0
Paraquat (ug/L)-TW3	2024/01/10	< MDL 1	10	0	0
PCB (ug/L)-TW3	2024/01/10	< MDL 0.04	3	0	0
Pentachlorophenol (ug/L)-TW3	2024/01/10	< MDL 0.15	60	0	0
Phorate (ug/L)-TW3	2024/01/10	< MDL 0.01	2	0	0
Picloram (ug/L)-TW3	2024/01/10	< MDL 1	190	0	0
Prometryne (ug/L)-TW3	2024/01/10	< MDL 0.03	1	0	0
Simazine (ug/L)-TW3	2024/01/10	< MDL 0.01	10	0	0
Terbufos (ug/L)-TW3	2024/01/10	< MDL 0.01	1	0	0

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Tetrachloroethylene (ug/L)-TW3	2024/01/10	< MDL 0.35	10	0	0
Triallate (ug/L) -TW3	2024/01/10	< MDL 0.01	230	0	0
Trichloroethylene (ug/L)-TW3	2024/01/10	< MDL 0.44	5	0	0
Trifluralin (ug/L)-TW3	2024/01/10	< MDL 0.02	45	0	0
Vinyl Chloride (ug/L)-TW3	2024/01/10	< MDL 0.17	1	0	0
1,1-Dichloroethylene (ug/L)-TW2	2024/01/10	< MDL 0.33	14	0	0
1,2-Dichlorobenzene (ug/L)-TW2	2024/01/10	< MDL 0.41	200	0	0
1,2-Dichloroethane (ug/L)-TW2	2024/01/10	< MDL 0.35	5	0	0
1,4-Dichlorobenzene (ug/L)-TW2	2024/01/10	< MDL 0.36	5	0	0
2,3,4,6-Tetrachlorophenol (ug/L)-TW2	2024/01/10	< MDL 0.2	100	0	0
2,4,6-Trichlorophenol (ug/L)-TW2	2024/01/10	< MDL 0.25	5	0	0
2,4-Dichlorophenol (ug/L)-TW2	2024/01/10	< MDL 0.15	900	0	0
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW2	2024/01/10	< MDL 0.19	100	0	0
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW2	2024/01/10	< MDL 0.12	100	0	0
Alachlor (ug/L) -TW2	2024/01/10	< MDL 0.02	5	0	0
Atrazine + N-dealkylated metabolites (ug/L)-TW2	2024/01/10	< MDL 0.01	5	0	0
Azinphos-methyl (ug/L)-TW2	2024/01/10	< MDL 0.05	20	0	0
Benzene (ug/L)-TW2	2024/01/10	< MDL 0.32	1	0	0
Benzo(a)pyrene (ug/L)-TW2	2024/01/10	< MDL 0.004	0.01	0	0
Bromoxynil (ug/L)-TW2	2024/01/10	< MDL 0.33	5	0	0
Carbaryl (ug/L)-TW2	2024/01/10	< MDL 0.05	90	0	0
Carbofuran (ug/L) -TW2	2024/01/10	< MDL 0.01	90	0	0
Carbon Tetrachloride (ug/L) -TW2	2024/01/10	< MDL 0.17	2	0	0
Chlorpyrifos (ug/L) -TW2	2024/01/10	< MDL 0.02	90	0	0
Diazinon (ug/L)-TW2	2024/01/10	< MDL 0.02	20	0	0
Dicamba (ug/L)-TW2	2024/01/10	< MDL 0.2	120	0	0
Dichloromethane (Methylene Chloride) (ug/L)-TW2	2024/01/10	< MDL 0.35	50	0	0
Diclofop-methyl (ug/L)-TW2	2024/01/10	< MDL 0.4	9	0	0
Dimethoate (ug/L)-TW2	2024/01/10	< MDL 0.06	20	0	0
Diquat (ug/L)-TW2	2024/01/10	< MDL 1	70	0	0
Diuron (ug/L)-TW2	2024/01/10	< MDL 0.03	150	0	0
Glyphosate (ug/L)-TW2	2024/01/10	< MDL 1	280	0	0
Malathion (ug/L)-TW2	2024/01/10	< MDL 0.02	190	0	0
Metolachlor (ug/L)-TW2	2024/01/10	< MDL 0.01	50	0	0
Metribuzin (ug/L)-TW2	2024/01/10	< MDL 0.02	80	0	0
Monochlorobenzene (Chlorobenzene) (ug/L)-TW2	2024/01/10	< MDL 0.3	80	0	0
Paraquat (ug/L)-TW2	2024/01/10	< MDL 1	10	0	0
PCB (ug/L)-TW2	2024/01/10	< MDL 0.04	3	0	0
Pentachlorophenol (ug/L)-TW2	2024/01/10	< MDL 0.15	60	0	0
Phorate (ug/L)-TW2	2024/01/10	< MDL 0.01	2	0	0
Picloram (ug/L)-TW2	2024/01/10	< MDL 1	190	0	0

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Prometryne (ug/L)-TW2	2024/01/10	< MDL 0.03	1	0	0
Simazine (ug/L)-TW2	2024/01/10	< MDL 0.01	10	0	0
Terbufos (ug/L)-TW2	2024/01/10	< MDL 0.01	1	0	0
Tetrachloroethylene (ug/L)-TW2	2024/01/10	< MDL 0.35	10	0	0
Triallate (ug/L) -TW2	2024/01/10	< MDL 0.01	230	0	0
Trichloroethylene (ug/L)-TW2	2024/01/10	< MDL 0.44	5	0	0
Trifluralin (ug/L)-TW2	2024/01/10	< MDL 0.02	45	0	0
Vinyl Chloride (ug/L)-TW2	2024/01/10	< MDL 0.17	1	0	0
1,1-Dichloroethylene (ug/L)-TW1	2024/01/11	< MDL 0.33	14	0	0
1,2-Dichlorobenzene (ug/L)-TW1	2024/01/11	< MDL 0.41	200	0	0
1,2-Dichloroethane (ug/L)-TW1	2024/01/11	< MDL 0.35	5	0	0
1,4-Dichlorobenzene (ug/L)-TW1	2024/01/11	< MDL 0.36	5	0	0
2,3,4,6-Tetrachlorophenol (ug/L)-TW1	2024/01/11	< MDL 0.2	100	0	0
2,4,6-Trichlorophenol (ug/L)-TW1	2024/01/11	< MDL 0.25	5	0	0
2,4-Dichlorophenol (ug/L)-TW1	2024/01/11	< MDL 0.15	900	0	0
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW1	2024/01/11	< MDL 0.19	100	0	0
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW1	2024/01/11	< MDL 0.12	100	0	0
Alachlor (ug/L) -TW1	2024/01/11	< MDL 0.02	5	0	0
Atrazine + N-dealkylated metabolites (ug/L)-TW1	2024/01/11	0.01	5	0	0
Azinphos-methyl (ug/L)-TW1	2024/01/11	< MDL 0.05	20	0	0
Benzene (ug/L)-TW1	2024/01/11	< MDL 0.32	1	0	0
Benzo(a)pyrene (ug/L)-TW1	2024/01/11	< MDL 0.004	0.01	0	0
Bromoxynil (ug/L)-TW1	2024/01/11	< MDL 0.33	5	0	0
Carbaryl (ug/L)-TW1	2024/01/11	< MDL 0.05	90	0	0
Carbofuran (ug/L) -TW1	2024/01/11	< MDL 0.01	90	0	0
Carbon Tetrachloride (ug/L) -TW1	2024/01/11	< MDL 0.17	2	0	0
Chlorpyrifos (ug/L) -TW1	2024/01/11	< MDL 0.02	90	0	0
Diazinon (ug/L)-TW1	2024/01/11	< MDL 0.02	20	0	0
Dicamba (ug/L)-TW1	2024/01/11	< MDL 0.2	120	0	0
Dichloromethane (Methylene Chloride) (ug/L)-TW1	2024/01/11	< MDL 0.35	50	0	0
Diclofop-methyl (ug/L)-TW1	2024/01/11	< MDL 0.4	9	0	0
Dimethoate (ug/L)-TW1	2024/01/11	< MDL 0.06	20	0	0
Diquat (ug/L)-TW1	2024/01/11	< MDL 1	70	0	0
Diuron (ug/L)-TW1	2024/01/11	< MDL 0.03	150	0	0
Glyphosate (ug/L)-TW1	2024/01/11	< MDL 1	280	0	0
Malathion (ug/L)-TW1	2024/01/11	< MDL 0.02	190	0	0
Metolachlor (ug/L)-TW1	2024/01/11	< MDL 0.01	50	0	0
Metribuzin (ug/L)-TW1	2024/01/11	< MDL 0.02	80	0	0
Monochlorobenzene (Chlorobenzene) (ug/L)-TW1	2024/01/11	< MDL 0.3	80	0	0
Paraquat (ug/L)-TW1	2024/01/11	< MDL 1	10	0	0
PCB (ug/L)-TW1	2024/01/11	< MDL 0.04	3	0	0

Treated Water	Sample Date (yyyy/mm/dd)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
Pentachlorophenol (ug/L)-TW1	2024/01/11	< MDL 0.15	60	0	0
Phorate (ug/L)-TW1	2024/01/11	< MDL 0.01	2	0	0
Picloram (ug/L)-TW1	2024/01/11	< MDL 1	190	0	0
Prometryne (ug/L)-TW1	2024/01/11	< MDL 0.03	1	0	0
Simazine (ug/L)-TW1	2024/01/11	< MDL 0.01	10	0	0
Terbufos (ug/L)-TW1	2024/01/11	< MDL 0.01	1	0	0
Tetrachloroethylene (ug/L)-TW1	2024/01/11	< MDL 0.35	10	0	0
Triallate (ug/L) -TW1	2024/01/11	< MDL 0.01	230	0	0
Trichloroethylene (ug/L)-TW1	2024/01/11	< MDL 0.44	5	0	0
Trifluralin (ug/L)-TW1	2024/01/11	< MDL 0.02	45	0	0
Vinyl Chloride (ug/L)-TW1	2024/01/11	< MDL 0.17	1	0	0
Distribution Water					
Trihalomethane: Total (ug/L) – DW	2024/01/08	12.0	100	0	0
	2024/04/08	14.0			
	2024/07/08	8.1			
	2024/10/07	28.0			
	Annual Avg.	15.5			
HAA: Total (ug/L) – DW	2024/01/08	5.3	80	0	0
	2024/04/08	5.3			
	2024/07/08	5.3			
	2024/10/07	5.3			
	Annual Avg.	5.3			

MAC = Maximum Allowable Concentration as per O.Reg 169/03

MDL = Below the laboratory method detection level

Additional Legislated Samples

The Ultraviolet Light (UV) units provide the necessary treatment to provide primary disinfection. When the dosage is below 40mJ/cm², the well will shut down so no untreated water is directed to users. Refer to Table 10 for the additional monitoring results for UV dose.

Table 10: UV Dosage Monitoring

Legal Document	Date of Issuance	Parameter	Date Sampled	Result	Unit of measure
MDWL	Issue 6; dated 2019-10-10 Issue 7; dated 2024-09-24	Continuous Pass-Through UV Dose	Continuously monitored	No results below 40mJ/cm ² for Well 1, 2A and 3.	mJ/cm ²

Major Maintenance and Capital Summary

The St. Marys Drinking Water System completed a number of repairs, installations, replacements as listed in Table 11. These represent the major expenses incurred in 2024.

Table 11: Major Maintenance and Capital

Location	Description
Well 1	Commercial dehumidifier installation
Well 1	Replace seals in gate valve
Well 1, 2A, 3	Bi-annual UV maintenance
Well 2A, 3	End of life PRV valve replacement
Well 2A	Replaced failed pump VFD (warranty)
Well 3	Replaced chlorine gas injection booster pump
Well 3	Replaced electrical meter – completed by Festival Hydro
Well 3	Chlorine analyzer maintenance
Distribution	Watermain and valve repairs and replacements
Reservoir	Replaced gas chlorination equipment
Tower	Replace faulty heater unit
Tower	ROV and structural inspection – completed by Landmark

Revision History

Date	Revision #	Revision Notes
2025-02-28	0	2024 Annual Report issued.

Appendix A

Section 11 Annual Report

ANNUAL REPORT 2024

Drinking Water System Number:	220000521
Drinking Water System Name:	St. Marys Drinking Water System
Drinking Water System Owner:	The Corporation of the Town of St. Marys
Drinking Water System Category:	Large, Municipal, Residential
Period being reported:	January 1, 2024 to December 31, 2024

<u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u>	<u>Complete for all other Categories</u>
Does your Drinking Water System serve more than 10,000 people? Yes [] No [X] Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [] Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection. Municipal Operations Center, 408 James St South St. Marys, ON www.townofstmarys.com	Number of Designated Facilities served: n/a Did you provide a copy of your annual report to all Designated Facilities you serve? n/a Number of Interested Authorities you report to: n/a Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? n/a

List all Drinking Water Systems (if any), which receive all their drinking water from your system: n/a

Did you provide a copy of your annual report to all Drinking Water System owners that are connected to you and to whom you provide all drinking water? n/a

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

- [X] Public access/notice via the web
- [] Public access/notice via Government Office
- [] Public access/notice via a newspaper
- [X] Public access/notice via Public Request
- [] Public access/notice via a Public Library
- [X] Public access/notice via other method: Municipal Office

Describe your Drinking Water System

Each of the wells, Well #1, 2A and 3, have a vertical turbine pump rated at 60 L/s capacity. These pumps draw ground water from each of the three wells. Water passes air release valves, a backflow check valve, pressure gauges, primary UV light disinfection, flow meter, the chlorine gas injection point, actuator control valve and then into the contact chamber piping located underground.

Booster Station

This provides additional system pressure for industrial properties within the southeast area of the town during fire emergencies.

Reservoir

An in-ground reservoir and booster pumping station provides the sytem with 1,600 m³ of water storage.

Water Tower

The water tower is for system pressure regulation and has a storage capacity of 1,820 m³.

List all water treatment chemicals used over this reporting period

Chlorine gas for disinfection

Were any significant expenses incurred to?

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

Please describe any major expenses incurred to install, repair or replace required equipment

Well 1 – Replaced gate valve seals and install commercial dehumidifier
Well 1, 2A, 3 – Bi-annual UV maintenance
Well 2A – Replaced failed pump VFD (warranty)
Well 2A, 3 – End of life PRV replacements
Well 3 – Replaced chlorine gas injection booster pump and electrical meter
Well 3 – Completed chlorine analyzer maintenance
Distribution – Watermain and valve repairs and replacements
Reservoir – Replaced gas chlorination equipment
Tower – ROV and structural inspection
Tower – Replaced faulty heater unit

Provide details on the notices submitted in accordance with subsection 18 (1) of the Safe Drinking Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
No reportable issues for this reporting period.					

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period

	Number of Samples	Range of E. Coli Results (min)-(max)	Range of Total Coliform Results (min)-(max)	Number of HPC Samples	Range of HPC Results (min)-(max)
Well #1 Raw	53	0-1	0-23	n/a	n/a
Well #2A Raw	53	0-0	0-0	n/a	n/a
Well #3 Raw	53	0-0	0-1	n/a	n/a
Well #1Treated	53	0-0	0-0	53	0-<10
Well #2A Treated	53	0-0	0-0	53	0-<10
Well #3 Treated	53	0-0	0-0	53	0-<10
Distribution	218	0-0	0-0	53	0-<10

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min)-(max)	Unit of Measure
Turbidity-Raw Water	159	Well #1: 0.05-0.36 Well#2A: 0.07-0.38 Well#3: 0.06-0.37	NTU
Chlorine-Treated	Continuously monitored	Well #1: 0.74-1.77 Well#2A: 0.61-1.90 Well#3: 0.14-2.04	mg/L
Chlorine- Distribution	368	0.34-1.44	mg/L

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

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result
MDWL Issue 6; dated 2019-10-10 MDWL Issue 7; dated 2024-09-24	Continuous Pass-Through UV Dose	Continuously monitored	No results below 40mJ/cm ² for Well 1, 2A and 3.

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony: Sb (ug/L) – TW 1	2024/01/11	<0.6	ug/L	No
Antimony: Sb (ug/L) – TW 2	2024/01/10	<0.6	ug/L	No
Antimony: Sb (ug/L) – TW 3	2024/01/10	<0.6	ug/L	No
Arsenic: As (ug/L) – TW 1	2024/01/11	0.3	ug/L	No
Arsenic: As (ug/L) – TW 2	2024/01/10	0.3	ug/L	No
Arsenic: As (ug/L) – TW 3	2024/01/10	<0.2	ug/L	No
Barium: Ba (ug/L) – TW 1	2024/01/11	164	ug/L	No
Barium: Ba (ug/L) – TW 2	2024/01/10	100	ug/L	No
Barium: Ba (ug/L) – TW 3	2024/01/10	110	ug/L	No
Boron: B (ug/L) – TW 1	2024/01/11	49	ug/L	No
Boron: B (ug/L) – TW 2	2024/01/10	55	ug/L	No
Boron: B (ug/L) – TW 3	2024/01/10	58	ug/L	No
Cadmium: Cd (ug/L) – TW 1	2024/01/11	0.108	ug/L	No
Cadmium: Cd (ug/L) – TW 2	2024/01/10	0.026	ug/L	No
Cadmium: Cd (ug/L) – TW 3	2024/01/10	0.039	ug/L	No
Chromium: Cr (ug/L) – TW 1	2024/01/11	0.16	ug/L	No
Chromium: Cr (ug/L) – TW 2	2024/01/10	0.14	ug/L	No
Chromium: Cr (ug/L) – TW 3	2024/01/10	<0.08	ug/L	No
Mercury: Hg (ug/L) – TW 1	2024/01/11	<0.01	ug/L	No
Mercury: Hg (ug/L) – TW 2	2024/01/10	<0.01	ug/L	No
Mercury: Hg (ug/L) – TW 3	2024/01/10	<0.01	ug/L	No
Selenium: Se (ug/L) – TW 1	2024/01/11	1.02	ug/L	No
Selenium: Se (ug/L) – TW 2	2024/01/10	0.64	ug/L	No
Selenium: Se (ug/L) – TW 3	2024/01/10	0.5	ug/L	No
Uranium: U (ug/L) – TW 1	2024/01/11	1.5	ug/L	No
Uranium: U (ug/L) – TW 2	2024/01/10	2.11	ug/L	No
Uranium: U (ug/L) – TW 3	2024/01/10	2.65	ug/L	No
Fluoride (mg/L) – TW 1	2020/01/06	1.07	mg/L	No
Fluoride (mg/L) – TW 2	2020/01/06	1.25	mg/L	No
Fluoride (mg/L) – TW 3	2020/01/06	1.19	mg/L	No
Nitrite (mg/L) – TW 1	2024/01/08	3.03	mg/L	No
Nitrite (mg/L) – TW 1	2024/04/08	2.74	mg/L	No
Nitrite (mg/L) – TW 1	2024/07/08	2.31	mg/L	No
Nitrite (mg/L) – TW 1	2024/10/07	1.27	mg/L	No
Nitrite (mg/L) – TW 2	2024/01/08	0.852	mg/L	No
Nitrite (mg/L) – TW 2	2024/04/08	1.22	mg/L	No
Nitrite (mg/L) – TW 2	2024/07/08	1.06	mg/L	No
Nitrite (mg/L) – TW 2	2024/10/07	0.83	mg/L	No
Nitrite (mg/L) – TW 3	2024/01/08	0.722	mg/L	No
Nitrite (mg/L) – TW 3	2024/04/08	0.944	mg/L	No
Nitrite (mg/L) – TW 3	2024/07/08	0.871	mg/L	No
Nitrite (mg/L) – TW 3	2024/10/07	0.564	mg/L	No
Nitrate (mg/L) – TW 1	2024/01/08	<0.003	mg/L	No
Nitrate (mg/L) – TW 1	2024/04/08	<0.003	mg/L	No

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Nitrate (mg/L) – TW 1	2024/07/08	<0.003	mg/L	No
Nitrate (mg/L) – TW 1	2024/10/07	<0.003	mg/L	No
Nitrate (mg/L) – TW 2	2024/01/08	<0.003	mg/L	No
Nitrate (mg/L) – TW 2	2024/04/08	<0.003	mg/L	No
Nitrate (mg/L) – TW 2	2024/07/08	<0.003	mg/L	No
Nitrate (mg/L) – TW 2	2024/10/07	<0.003	mg/L	No
Nitrate (mg/L) – TW 3	2024/01/08	<0.003	mg/L	No
Nitrate (mg/L) – TW 3	2024/04/08	<0.003	mg/L	No
Nitrate (mg/L) – TW 3	2024/07/08	<0.003	mg/L	No
Nitrate (mg/L) – TW 3	2024/10/07	<0.003	mg/L	No
Sodium: Na (mg/L) – TW 1	2020/01/09	27.2	mg/L	N/A
Sodium: Na (mg/L) – TW 2	2020/01/09	49.7	mg/L	N/A
Sodium: Na (mg/L) – TW 3	2020/01/09	44.1	mg/L	N/A

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min) – (max)	Unit of Measure	Number of Exceedances
Distribution	6	0.16 - 0.19	ug/L	0

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
1,1-Dichloroethylene (ug/L)-TW3	2024/01/10	<0.33	ug/L	No
1,2-Dichlorobenzene (ug/L)-TW3	2024/01/10	<0.41	ug/L	No
1,2-Dichloroethane (ug/L)-TW3	2024/01/10	<0.35	ug/L	No
1,4-Dichlorobenzene (ug/L)-TW3	2024/01/10	<0.36	ug/L	No
2,3,4,6-Tetrachlorophenol (ug/L)-TW3	2024/01/10	<0.2	ug/L	No
2,4,6-Trichlorophenol (ug/L)-TW3	2024/01/10	<0.25	ug/L	No
2,4-Dichlorophenol (ug/L)-TW3	2024/01/10	<0.15	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW3	2024/01/10	<0.19	ug/L	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW3	2024/01/10	<0.12	ug/L	No
Alachlor (ug/L) -TW3	2024/01/10	<0.02	ug/L	No
Atrazine + N-dealkylated metabolites (ug/L)-TW3	2024/01/10	<0.01	ug/L	No
Azinphos-methyl (ug/L)-TW3	2024/01/10	<0.05	ug/L	No
Benzene (ug/L)-TW3	2024/01/10	<0.32	ug/L	No
Benzo(a)pyrene (ug/L)-TW3	2024/01/10	<0.004	ug/L	No
Bromoxynil (ug/L)-TW3	2024/01/10	<0.33	ug/L	No
Carbaryl (ug/L)-TW3	2024/01/10	<0.05	ug/L	No

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Carbofuran (ug/L) -TW3	2024/01/10	<0.01	ug/L	No
Carbon Tetrachloride (ug/L) -TW3	2024/01/10	<0.17	ug/L	No
Chlorpyrifos (ug/L) -TW3	2024/01/10	<0.02	ug/L	No
Diazinon (ug/L)-TW3	2024/01/10	<0.02	ug/L	No
Dicamba (ug/L)-TW3	2024/01/10	<0.2	ug/L	No
Dichloromethane (Methylene Chloride) (ug/L)-TW3	2024/01/10	<0.35	ug/L	No
Diclofop-methyl (ug/L)-TW3	2024/01/10	<0.4	ug/L	No
Dimethoate (ug/L)-TW3	2024/01/10	<0.06	ug/L	No
Diquat (ug/L)-TW3	2024/01/10	<1	ug/L	No
Diuron (ug/L)-TW3	2024/01/10	<0.03	ug/L	No
Glyphosate (ug/L)-TW3	2024/01/10	<1	ug/L	No
Malathion (ug/L)-TW3	2024/01/10	<0.02	ug/L	No
Metolachlor (ug/L)-TW3	2024/01/10	<0.01	ug/L	No
Metribuzin (ug/L)-TW3	2024/01/10	<0.02	ug/L	No
Monochlorobenzene (Chlorobenzene) (ug/L)-TW3	2024/01/10	<0.3	ug/L	No
Paraquat (ug/L)-TW3	2024/01/10	<1	ug/L	No
PCB (ug/L)-TW3	2024/01/10	<0.04	ug/L	No
Pentachlorophenol (ug/L)-TW3	2024/01/10	<0.15	ug/L	No
Phorate (ug/L)-TW3	2024/01/10	<0.01	ug/L	No
Picloram (ug/L)-TW3	2024/01/10	<1	ug/L	No
Prometryne (ug/L)-TW3	2024/01/10	<0.03	ug/L	No
Simazine (ug/L)-TW3	2024/01/10	<0.01	ug/L	No
Terbufos (ug/L)-TW3	2024/01/10	<0.01	ug/L	No
Tetrachloroethylene (ug/L)-TW3	2024/01/10	<0.35	ug/L	No
Triallate (ug/L) -TW3	2024/01/10	<0.01	ug/L	No
Trichloroethylene (ug/L)-TW3	2024/01/10	<0.44	ug/L	No
Trifluralin (ug/L)-TW3	2024/01/10	<0.02	ug/L	No
Vinyl Chloride (ug/L)-TW3	2024/01/10	<0.17	ug/L	No
1,1-Dichloroethylene (ug/L)-TW2	2024/01/10	<0.33	ug/L	No
1,2-Dichlorobenzene (ug/L)-TW2	2024/01/10	<0.41	ug/L	No
1,2-Dichloroethane (ug/L)-TW2	2024/01/10	<0.35	ug/L	No
1,4-Dichlorobenzene (ug/L)-TW2	2024/01/10	<0.36	ug/L	No
2,3,4,6-Tetrachlorophenol (ug/L)-TW2	2024/01/10	<0.2	ug/L	No
2,4,6-Trichlorophenol (ug/L)-TW2	2024/01/10	<0.25	ug/L	No
2,4-Dichlorophenol (ug/L)-TW2	2024/01/10	<0.15	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW2	2024/01/10	<0.19	ug/L	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW2	2024/01/10	<0.12	ug/L	No
Alachlor (ug/L) -TW2	2024/01/10	<0.02	ug/L	No
Atrazine + N-dealkylated metabolites (ug/L)-TW2	2024/01/10	<0.01	ug/L	No
Azinphos-methyl (ug/L)-TW2	2024/01/10	<0.05	ug/L	No
Benzene (ug/L)-TW2	2024/01/10	<0.32	ug/L	No

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Benzo(a)pyrene (ug/L)-TW2	2024/01/10	<0.004	ug/L	No
Bromoxynil (ug/L)-TW2	2024/01/10	<0.33	ug/L	No
Carbaryl (ug/L)-TW2	2024/01/10	<0.05	ug/L	No
Carbofuran (ug/L) -TW2	2024/01/10	<0.01	ug/L	No
Carbon Tetrachloride (ug/L) -TW2	2024/01/10	<0.17	ug/L	No
Chlorpyrifos (ug/L) -TW2	2024/01/10	<0.02	ug/L	No
Diazinon (ug/L)-TW2	2024/01/10	<0.02	ug/L	No
Dicamba (ug/L)-TW2	2024/01/10	<0.2	ug/L	No
Dichloromethane (Methylene Chloride) (ug/L)-TW2	2024/01/10	<0.35	ug/L	No
Diclofop-methyl (ug/L)-TW2	2024/01/10	<0.4	ug/L	No
Dimethoate (ug/L)-TW2	2024/01/10	<0.06	ug/L	No
Diquat (ug/L)-TW2	2024/01/10	<1	ug/L	No
Diuron (ug/L)-TW2	2024/01/10	<0.03	ug/L	No
Glyphosate (ug/L)-TW2	2024/01/10	<1	ug/L	No
Malathion (ug/L)-TW2	2024/01/10	<0.02	ug/L	No
Metolachlor (ug/L)-TW2	2024/01/10	<0.01	ug/L	No
Metribuzin (ug/L)-TW2	2024/01/10	<0.02	ug/L	No
Monochlorobenzene (Chlorobenzene) (ug/L)-TW2	2024/01/10	<0.3	ug/L	No
Paraquat (ug/L)-TW2	2024/01/10	<1	ug/L	No
PCB (ug/L)-TW2	2024/01/10	<0.04	ug/L	No
Pentachlorophenol (ug/L)-TW2	2024/01/10	<0.15	ug/L	No
Phorate (ug/L)-TW2	2024/01/10	<0.01	ug/L	No
Picloram (ug/L)-TW2	2024/01/10	<1	ug/L	No
Prometryne (ug/L)-TW2	2024/01/10	<0.03	ug/L	No
Simazine (ug/L)-TW2	2024/01/10	<0.01	ug/L	No
Terbufos (ug/L)-TW2	2024/01/10	<0.01	ug/L	No
Tetrachloroethylene (ug/L)-TW2	2024/01/10	<0.35	ug/L	No
Triallate (ug/L) -TW2	2024/01/10	<0.01	ug/L	No
Trichloroethylene (ug/L)-TW2	2024/01/10	<0.44	ug/L	No
Trifluralin (ug/L)-TW2	2024/01/10	<0.02	ug/L	No
Vinyl Chloride (ug/L)-TW2	2024/01/10	<0.17	ug/L	No
1,1-Dichloroethylene (ug/L)-TW1	2024/01/11	<0.33	ug/L	No
1,2-Dichlorobenzene (ug/L)-TW1	2024/01/11	<0.41	ug/L	No
1,2-Dichloroethane (ug/L)-TW1	2024/01/11	<0.35	ug/L	No
1,4-Dichlorobenzene (ug/L)-TW1	2024/01/11	<0.36	ug/L	No
2,3,4,6-Tetrachlorophenol (ug/L)-TW1	2024/01/11	<0.2	ug/L	No
2,4,6-Trichlorophenol (ug/L)-TW1	2024/01/11	<0.25	ug/L	No
2,4-Dichlorophenol (ug/L)-TW1	2024/01/11	<0.15	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW1	2024/01/11	<0.19	ug/L	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW1	2024/01/11	<0.12	ug/L	No
Alachlor (ug/L) -TW1	2024/01/11	<0.02	ug/L	No

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Atrazine + N-dealkylated metabolites (ug/L)-TW1	2024/01/11	0.01	ug/L	No
Azinphos-methyl (ug/L)-TW1	2024/01/11	<0.05	ug/L	No
Benzene (ug/L)-TW1	2024/01/11	<0.32	ug/L	No
Benzo(a)pyrene (ug/L)-TW1	2024/01/11	<0.004	ug/L	No
Bromoxynil (ug/L)-TW1	2024/01/11	<0.33	ug/L	No
Carbaryl (ug/L)-TW1	2024/01/11	<0.05	ug/L	No
Carbofuran (ug/L) -TW1	2024/01/11	<0.01	ug/L	No
Carbon Tetrachloride (ug/L) -TW1	2024/01/11	<0.17	ug/L	No
Chlorpyrifos (ug/L) -TW1	2024/01/11	<0.02	ug/L	No
Diazinon (ug/L)-TW1	2024/01/11	<0.02	ug/L	No
Dicamba (ug/L)-TW1	2024/01/11	<0.2	ug/L	No
Dichloromethane (Methylene Chloride) (ug/L)-TW1	2024/01/11	<0.35	ug/L	No
Diclofop-methyl (ug/L)-TW1	2024/01/11	<0.4	ug/L	No
Dimethoate (ug/L)-TW1	2024/01/11	<0.06	ug/L	No
Diquat (ug/L)-TW1	2024/01/11	<1	ug/L	No
Diuron (ug/L)-TW1	2024/01/11	<0.03	ug/L	No
Glyphosate (ug/L)-TW1	2024/01/11	<1	ug/L	No
Malathion (ug/L)-TW1	2024/01/11	<0.02	ug/L	No
Metolachlor (ug/L)-TW1	2024/01/11	<0.01	ug/L	No
Metribuzin (ug/L)-TW1	2024/01/11	<0.02	ug/L	No
Monochlorobenzene (Chlorobenzene) (ug/L)-TW1	2024/01/11	<0.3	ug/L	No
Paraquat (ug/L)-TW1	2024/01/11	<1	ug/L	No
PCB (ug/L)-TW1	2024/01/11	<0.04	ug/L	No
Pentachlorophenol (ug/L)-TW1	2024/01/11	<0.15	ug/L	No
Phorate (ug/L)-TW1	2024/01/11	<0.01	ug/L	No
Picloram (ug/L)-TW1	2024/01/11	<1	ug/L	No
Prometryne (ug/L)-TW1	2024/01/11	<0.03	ug/L	No
Simazine (ug/L)-TW1	2024/01/11	<0.01	ug/L	No
Terbufos (ug/L)-TW1	2024/01/11	<0.01	ug/L	No
Tetrachloroethylene (ug/L)-TW1	2024/01/11	<0.35	ug/L	No
Triallate (ug/L) -TW1	2024/01/11	<0.01	ug/L	No
Trichloroethylene (ug/L)-TW1	2024/01/11	<0.44	ug/L	No
Trifluralin (ug/L)-TW1	2024/01/11	<0.02	ug/L	No
Vinyl Chloride (ug/L)-TW1	2024/01/11	<0.17	ug/L	No
Trihalomethane: Total (ug/L) – DW	2024/01/08 2024/04/08 2024/07/08 2024/10/07 Annual Avg.	12.0 14.0 8.1 28.0 15.5	ug/L	No

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
HAA: Total (ug/L) – DW	2024/01/08	5.3		
	2024/04/08	5.3		
	2024/07/08	5.3		
	2024/10/07	5.3		
	Annual Avg.	5.3		

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

Parameter	Result Value	Unit of Measure	Date of Sample
Sodium – TW1	27.2	mg/L	2020/01/09
Sodium – TW2	49.7	mg/L	2020/01/09
Sodium – TW3	44.1	mg/L	2020/01/09

Appendix B

Permit to Take Water (PTTW) Data

Well 1

Date Measured	Value (m ³ /d)	Value (Litres)
01/01/2023	1368.6600	1368660.0000
02/01/2023	798.7400	798740.0000
03/01/2023	162.9300	162930.0000
04/01/2023	0.0000	0.0000
05/01/2023	74.1300	74130.0000
06/01/2023	0.0000	0.0000
07/01/2023	0.0000	0.0000
08/01/2023	0.0000	0.0000
09/01/2023	0.0000	0.0000
10/01/2023	41.2200	41220.0000
11/01/2023	571.1300	571130.0000
12/01/2023	1591.7600	1591760.0000
13/01/2023	476.8900	476890.0000
14/01/2023	0.0000	0.0000
15/01/2023	1516.2500	1516250.0000
16/01/2023	1037.8100	1037810.0000
17/01/2023	1059.6000	1059600.0000
18/01/2023	1096.5400	1096540.0000
19/01/2023	508.2800	508280.0000
20/01/2023	0.0000	0.0000
21/01/2023	836.6500	836650.0000
22/01/2023	0.0000	0.0000
23/01/2023	98.5500	98550.0000
24/01/2023	0.0000	0.0000
25/01/2023	1013.2500	1013250.0000
26/01/2023	1083.1800	1083180.0000
27/01/2023	0.0000	0.0000
28/01/2023	0.0000	0.0000
29/01/2023	1366.3800	1366380.0000
30/01/2023	2596.4000	2596400.0000
31/01/2023	780.7400	780740.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/02/2024	0.0000	0.0000
02/02/2024	130.9200	130920.0000
03/02/2024	0.0000	0.0000
04/02/2024	0.0000	0.0000
05/02/2024	599.9300	599930.0000
06/02/2024	161.2100	161210.0000
07/02/2024	163.9400	163940.0000
08/02/2024	0.0000	0.0000
09/02/2024	0.0000	0.0000
10/02/2024	901.0200	901020.0000
11/02/2024	0.0000	0.0000
12/02/2024	0.0000	0.0000
13/02/2024	1072.2100	1072210.0000
14/02/2024	529.6800	529680.0000
15/02/2024	843.2600	843260.0000
16/02/2024	0.0000	0.0000
17/02/2024	0.0000	0.0000
18/02/2024	0.0000	0.0000
19/02/2024	0.0000	0.0000
20/02/2024	1495.5300	1495530.0000
21/02/2024	1192.3800	1192380.0000
22/02/2024	0.0000	0.0000
23/02/2024	705.0200	705020.0000
24/02/2024	2530.4500	2530450.0000
25/02/2024	2483.9600	2483960.0000
26/02/2024	1093.4300	1093430.0000
27/02/2024	1129.2800	1129280.0000
28/02/2024	1061.4600	1061460.0000
29/02/2024	0.0000	0.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/03/2024	1573.0700	1573070.0000
02/03/2024	161.7700	161770.0000
03/03/2024	0.0000	0.0000
04/03/2024	961.7800	961780.0000
05/03/2024	1601.9500	1601950.0000
06/03/2024	1008.7100	1008710.0000
07/03/2024	2139.4600	2139460.0000
08/03/2024	854.8100	854810.0000
09/03/2024	0.0000	0.0000
10/03/2024	0.0000	0.0000
11/03/2024	0.0000	0.0000
12/03/2024	1839.9400	1839940.0000
13/03/2024	902.6700	902670.0000
14/03/2024	1512.0700	1512070.0000
15/03/2024	915.8400	915840.0000
16/03/2024	0.0000	0.0000
17/03/2024	0.0000	0.0000
18/03/2024	1120.3000	1120300.0000
19/03/2024	1934.0000	1934000.0000
20/03/2024	962.9000	962900.0000
21/03/2024	0.0000	0.0000
22/03/2024	1559.9500	1559950.0000
23/03/2024	2476.1900	2476190.0000
24/03/2024	2415.7000	2415700.0000
25/03/2024	530.5800	530580.0000
26/03/2024	1180.8100	1180810.0000
27/03/2024	695.1700	695170.0000
28/03/2024	1532.1400	1532140.0000
29/03/2024	274.3900	274390.0000
30/03/2024	0.0000	0.0000
31/03/2024	0.0000	0.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/04/2024	0.0000	0.0000
02/04/2024	1328.7500	1328750.0000
03/04/2024	824.1100	824110.0000
04/04/2024	0.0000	0.0000
05/04/2024	0.0000	0.0000
06/04/2024	0.0000	0.0000
07/04/2024	0.0000	0.0000
08/04/2024	147.9600	147960.0000
09/04/2024	1646.7400	1646740.0000
10/04/2024	1086.3400	1086340.0000
11/04/2024	1543.4600	1543460.0000
12/04/2024	1214.1300	1214130.0000
13/04/2024	0.0000	0.0000
14/04/2024	0.0000	0.0000
15/04/2024	0.0000	0.0000
16/04/2024	237.5900	237590.0000
17/04/2024	0.0000	0.0000
18/04/2024	0.0000	0.0000
19/04/2024	333.5700	333570.0000
20/04/2024	0.0000	0.0000
21/04/2024	271.1600	271160.0000
22/04/2024	1190.0500	1190050.0000
23/04/2024	121.0200	121020.0000
24/04/2024	278.7800	278780.0000
25/04/2024	597.4000	597400.0000
26/04/2024	1580.2000	1580200.0000
27/04/2024	2631.3600	2631360.0000
28/04/2024	1344.3600	1344360.0000
29/04/2024	797.5100	797510.0000
30/04/2024	141.5100	141510.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/05/2024	1492.7100	1492710.0000
02/05/2024	2289.1200	2289120.0000
03/05/2024	855.2600	855260.0000
04/05/2024	0.0000	0.0000
05/05/2024	0.0000	0.0000
06/05/2024	0.0000	0.0000
07/05/2024	282.4800	282480.0000
08/05/2024	1618.6400	1618640.0000
09/05/2024	542.9600	542960.0000
10/05/2024	1255.0700	1255070.0000
11/05/2024	2401.9400	2401940.0000
12/05/2024	2314.8800	2314880.0000
13/05/2024	677.9900	677990.0000
14/05/2024	323.7000	323700.0000
15/05/2024	1161.1200	1161120.0000
16/05/2024	2161.2600	2161260.0000
17/05/2024	1579.1800	1579180.0000
18/05/2024	0.0000	0.0000
19/05/2024	0.0000	0.0000
20/05/2024	0.0000	0.0000
21/05/2024	432.7700	432770.0000
22/05/2024	2115.4900	2115490.0000
23/05/2024	1522.0700	1522070.0000
24/05/2024	2705.5400	2705540.0000
25/05/2024	2366.0100	2366010.0000
26/05/2024	1848.4300	1848430.0000
27/05/2024	771.6700	771670.0000
28/05/2024	1299.1800	1299180.0000
29/05/2024	1177.1900	1177190.0000
30/05/2024	0.0000	0.0000
31/05/2024	1248.9800	1248980.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/06/2024	2810.4800	2810480.0000
02/06/2024	2173.1000	2173100.0000
03/06/2024	863.8800	863880.0000
04/06/2024	1627.7300	1627730.0000
05/06/2024	2081.3900	2081390.0000
06/06/2024	2025.6400	2025640.0000
07/06/2024	910.6800	910680.0000
08/06/2024	0.0000	0.0000
09/06/2024	0.0000	0.0000
10/06/2024	63.8600	63860.0000
11/06/2024	88.8300	88830.0000
12/06/2024	0.0000	0.0000
13/06/2024	1745.3900	1745390.0000
14/06/2024	1405.2600	1405260.0000
15/06/2024	0.0000	0.0000
16/06/2024	0.0000	0.0000
17/06/2024	1271.0400	1271040.0000
18/06/2024	1116.0000	1116000.0000
19/06/2024	0.0000	0.0000
20/06/2024	988.9700	988970.0000
21/06/2024	0.0000	0.0000
22/06/2024	2785.6400	2785640.0000
23/06/2024	791.0700	791070.0000
24/06/2024	439.3500	439350.0000
25/06/2024	939.5300	939530.0000
26/06/2024	118.4100	118410.0000
27/06/2024	1518.1100	1518110.0000
28/06/2024	1203.0900	1203090.0000
29/06/2024	2082.0400	2082040.0000
30/06/2024	946.8100	946810.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/07/2024	0.0000	0.0000
02/07/2024	461.6100	461610.0000
03/07/2024	213.6400	213640.0000
04/07/2024	300.1600	300160.0000
05/07/2024	1142.8900	1142890.0000
06/07/2024	3035.0000	3035000.0000
07/07/2024	2777.3400	2777340.0000
08/07/2024	1081.3600	1081360.0000
09/07/2024	708.5300	708530.0000
10/07/2024	46.4500	46450.0000
11/07/2024	0.0000	0.0000
12/07/2024	385.4900	385490.0000
13/07/2024	2855.0400	2855040.0000
14/07/2024	2248.1600	2248160.0000
15/07/2024	782.0100	782010.0000
16/07/2024	1474.8100	1474810.0000
17/07/2024	783.8200	783820.0000
18/07/2024	1169.1700	1169170.0000
19/07/2024	1241.7100	1241710.0000
20/07/2024	0.0000	0.0000
21/07/2024	0.0000	0.0000
22/07/2024	1696.0100	1696010.0000
23/07/2024	1562.9100	1562910.0000
24/07/2024	939.2000	939200.0000
25/07/2024	174.5100	174510.0000
26/07/2024	1492.3200	1492320.0000
27/07/2024	3160.2900	3160290.0000
28/07/2024	2908.0000	2908000.0000
29/07/2024	607.7700	607770.0000
30/07/2024	229.9700	229970.0000
31/07/2024	1028.5900	1028590.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/08/2024	877.0000	877000.0000
02/08/2024	770.7600	770760.0000
03/08/2024	0.0000	0.0000
04/08/2024	1526.3400	1526340.0000
05/08/2024	2645.9500	2645950.0000
06/08/2024	819.3900	819390.0000
07/08/2024	749.5900	749590.0000
08/08/2024	2583.6200	2583620.0000
09/08/2024	1037.1200	1037120.0000
10/08/2024	1934.3900	1934390.0000
11/08/2024	2447.0500	2447050.0000
12/08/2024	789.4000	789400.0000
13/08/2024	1726.0800	1726080.0000
14/08/2024	1207.4000	1207400.0000
15/08/2024	1978.1900	1978190.0000
16/08/2024	1047.6300	1047630.0000
17/08/2024	0.0000	0.0000
18/08/2024	0.0000	0.0000
19/08/2024	1532.3100	1532310.0000
20/08/2024	1766.1500	1766150.0000
21/08/2024	1325.1400	1325140.0000
22/08/2024	1837.4000	1837400.0000
23/08/2024	1523.3100	1523310.0000
24/08/2024	2656.8700	2656870.0000
25/08/2024	2700.7000	2700700.0000
26/08/2024	1089.4900	1089490.0000
27/08/2024	387.9600	387960.0000
28/08/2024	1547.7400	1547740.0000
29/08/2024	1042.9300	1042930.0000
30/08/2024	797.4300	797430.0000
31/08/2024	3012.5800	3012580.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/09/2024	2185.1800	2185180.0000
02/09/2024	2907.2000	2907200.0000
03/09/2024	986.9800	986980.0000
04/09/2024	349.2100	349210.0000
05/09/2024	651.0100	651010.0000
06/09/2024	1166.9400	1166940.0000
07/09/2024	2950.1000	2950100.0000
08/09/2024	3059.8700	3059870.0000
09/09/2024	1010.7800	1010780.0000
10/09/2024	146.7400	146740.0000
11/09/2024	1401.3400	1401340.0000
12/09/2024	1432.3500	1432350.0000
13/09/2024	1219.6300	1219630.0000
14/09/2024	643.1200	643120.0000
15/09/2024	295.6300	295630.0000
16/09/2024	659.7200	659720.0000
17/09/2024	1551.2100	1551210.0000
18/09/2024	1257.6700	1257670.0000
19/09/2024	0.0000	0.0000
20/09/2024	979.9300	979930.0000
21/09/2024	1773.7900	1773790.0000
22/09/2024	0.0000	0.0000
23/09/2024	1444.8500	1444850.0000
24/09/2024	1495.7600	1495760.0000
25/09/2024	0.0000	0.0000
26/09/2024	1559.4100	1559410.0000
27/09/2024	1771.5500	1771550.0000
28/09/2024	2616.2300	2616230.0000
29/09/2024	983.7100	983710.0000
30/09/2024	0.0000	0.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/10/2024	1467.9400	1467940.0000
02/10/2024	797.6400	797640.0000
03/10/2024	335.5100	335510.0000
04/10/2024	747.7400	747740.0000
05/10/2024	0.0000	0.0000
06/10/2024	0.0000	0.0000
07/10/2024	1645.4500	1645450.0000
08/10/2024	1355.2000	1355200.0000
09/10/2024	0.0000	0.0000
10/10/2024	1526.2700	1526270.0000
11/10/2024	878.3100	878310.0000
12/10/2024	2217.5700	2217570.0000
13/10/2024	2458.3000	2458300.0000
14/10/2024	2628.1000	2628100.0000
15/10/2024	1021.9200	1021920.0000
16/10/2024	988.5500	988550.0000
17/10/2024	0.0000	0.0000
18/10/2024	1154.5700	1154570.0000
19/10/2024	0.0000	0.0000
20/10/2024	544.4800	544480.0000
21/10/2024	294.2900	294290.0000
22/10/2024	268.6800	268680.0000
23/10/2024	0.0000	0.0000
24/10/2024	1183.7400	1183740.0000
25/10/2024	879.6900	879690.0000
26/10/2024	0.0000	0.0000
27/10/2024	319.6900	319690.0000
28/10/2024	283.1400	283140.0000
29/10/2024	115.2000	115200.0000
30/10/2024	1120.4600	1120460.0000
31/10/2024	1592.3400	1592340.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/11/2024	1109.3600	1109360.0000
02/11/2024	2350.9600	2350960.0000
03/11/2024	2595.5500	2595550.0000
04/11/2024	594.5000	594500.0000
05/11/2024	183.3700	183370.0000
06/11/2024	93.6200	93620.0000
07/11/2024	0.0000	0.0000
08/11/2024	918.7700	918770.0000
09/11/2024	2248.8800	2248880.0000
10/11/2024	820.9700	820970.0000
11/11/2024	0.0000	0.0000
12/11/2024	51.1100	51110.0000
13/11/2024	1390.5200	1390520.0000
14/11/2024	1371.3800	1371380.0000
15/11/2024	242.1000	242100.0000
16/11/2024	2592.4600	2592460.0000
17/11/2024	466.6400	466640.0000
18/11/2024	0.0000	0.0000
19/11/2024	248.9200	248920.0000
20/11/2024	1396.2400	1396240.0000
21/11/2024	900.6100	900610.0000
22/11/2024	888.3000	888300.0000
23/11/2024	2426.2300	2426230.0000
24/11/2024	1990.1100	1990110.0000
25/11/2024	502.4900	502490.0000
26/11/2024	118.2400	118240.0000
27/11/2024	106.0100	106010.0000
28/11/2024	241.9100	241910.0000
29/11/2024	1491.4100	1491410.0000
30/11/2024	2554.9900	2554990.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/12/2024	2154.4200	2154420.0000
02/12/2024	1193.9000	1193900.0000
03/12/2024	573.3000	573300.0000
04/12/2024	293.6100	293610.0000
05/12/2024	1241.4800	1241480.0000
06/12/2024	844.6900	844690.0000
07/12/2024	100.4600	100460.0000
08/12/2024	2388.6500	2388650.0000
09/12/2024	745.5000	745500.0000
10/12/2024	1351.2000	1351200.0000
11/12/2024	1321.0900	1321090.0000
12/12/2024	665.3700	665370.0000
13/12/2024	0.0000	0.0000
14/12/2024	0.0000	0.0000
15/12/2024	0.0000	0.0000
16/12/2024	198.3900	198390.0000
17/12/2024	90.4900	90490.0000
18/12/2024	1382.8400	1382840.0000
19/12/2024	1139.7500	1139750.0000
20/12/2024	1295.0400	1295040.0000
21/12/2024	2845.8300	2845830.0000
22/12/2024	2403.5700	2403570.0000
23/12/2024	291.9900	291990.0000
24/12/2024	870.1100	870110.0000
25/12/2024	1873.7200	1873720.0000
26/12/2024	612.9900	612990.0000
27/12/2024	117.4900	117490.0000
28/12/2024	0.0000	0.0000
29/12/2024	0.0000	0.0000
30/12/2024	1028.6400	1028640.0000
31/12/2024	675.9600	675960.0000

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Date Measured	Value (m ³ /d)	Value (Litres)
01/01/2024	0.0000	0.0000
02/01/2024	937.4800	937480.0000
03/01/2024	1074.5100	1074510.0000
04/01/2024	2202.4900	2202490.0000
05/01/2024	1750.3300	1750330.0000
06/01/2024	0.0000	0.0000
07/01/2024	1842.2000	1842200.0000
08/01/2024	1504.7000	1504700.0000
09/01/2024	1497.1100	1497110.0000
10/01/2024	1704.0200	1704020.0000
11/01/2024	1832.2800	1832280.0000
12/01/2024	894.4800	894480.0000
13/01/2024	0.0000	0.0000
14/01/2024	0.0000	0.0000
15/01/2024	622.0900	622090.0000
16/01/2024	800.1400	800140.0000
17/01/2024	778.6200	778620.0000
18/01/2024	364.3600	364360.0000
19/01/2024	839.1800	839180.0000
20/01/2024	0.0000	0.0000
21/01/2024	0.0000	0.0000
22/01/2024	1659.7600	1659760.0000
23/01/2024	1000.6100	1000610.0000
24/01/2024	1823.8300	1823830.0000
25/01/2024	1856.6600	1856660.0000
26/01/2024	1525.1900	1525190.0000
27/01/2024	2339.7800	2339780.0000
28/01/2024	618.4900	618490.0000
29/01/2024	0.0000	0.0000
30/01/2024	1433.9900	1433990.0000
31/01/2024	0.0000	0.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/02/2024	1910.3100	1910310.0000
02/02/2024	729.4900	729490.0000
03/02/2024	0.0000	0.0000
04/02/2024	0.0000	0.0000
05/02/2024	397.1200	397120.0000
06/02/2024	625.5800	625580.0000
07/02/2024	722.5800	722580.0000
08/02/2024	2007.2500	2007250.0000
09/02/2024	2945.2900	2945290.0000
10/02/2024	1516.3500	1516350.0000
11/02/2024	2247.7200	2247720.0000
12/02/2024	853.8800	853880.0000
13/02/2024	819.9800	819980.0000
14/02/2024	0.0000	0.0000
15/02/2024	984.5700	984570.0000
16/02/2024	0.0000	0.0000
17/02/2024	0.0000	0.0000
18/02/2024	0.0000	0.0000
19/02/2024	0.0000	0.0000
20/02/2024	0.0000	0.0000
21/02/2024	621.8100	621810.0000
22/02/2024	1698.8900	1698890.0000
23/02/2024	1151.2900	1151290.0000
24/02/2024	0.0000	0.0000
25/02/2024	0.0000	0.0000
26/02/2024	0.0000	0.0000
27/02/2024	784.0300	784030.0000
28/02/2024	382.7500	382750.0000
29/02/2024	1,712.98	1712980.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/03/2024	1074.0400	1074040.0000
02/03/2024	0.0000	0.0000
03/03/2024	0.0000	0.0000
04/03/2024	605.2000	605200.0000
05/03/2024	161.9700	161970.0000
06/03/2024	229.3800	229380.0000
07/03/2024	45.1800	45180.0000
08/03/2024	1378.8400	1378840.0000
09/03/2024	0.0000	0.0000
10/03/2024	0.0000	0.0000
11/03/2024	67.7000	67700.0000
12/03/2024	167.7100	167710.0000
13/03/2024	1767.9600	1767960.0000
14/03/2024	510.1000	510100.0000
15/03/2024	685.5000	685500.0000
16/03/2024	0.0000	0.0000
17/03/2024	0.0000	0.0000
18/03/2024	925.5000	925500.0000
19/03/2024	793.3200	793320.0000
20/03/2024	0.0000	0.0000
21/03/2024	662.3800	662380.0000
22/03/2024	521.1700	521170.0000
23/03/2024	0.0000	0.0000
24/03/2024	0.0000	0.0000
25/03/2024	1453.6200	1453620.0000
26/03/2024	1663.8100	1663810.0000
27/03/2024	0.0000	0.0000
28/03/2024	86.3800	86380.0000
29/03/2024	2326.2600	2326260.0000
30/03/2024	2488.2300	2488230.0000
31/03/2024	632.5000	632500.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/04/2024	0.0000	0.0000
02/04/2024	370.1000	370100.0000
03/04/2024	1206.3400	1206340.0000
04/04/2024	1113.0900	1113090.0000
05/04/2024	1804.3800	1804380.0000
06/04/2024	2809.2000	2809200.0000
07/04/2024	374.7300	374730.0000
08/04/2024	1860.7300	1860730.0000
09/04/2024	933.2000	933200.0000
10/04/2024	0.0000	0.0000
11/04/2024	147.2900	147290.0000
12/04/2024	520.8100	520810.0000
13/04/2024	0.0000	0.0000
14/04/2024	1519.3300	1519330.0000
15/04/2024	2912.4900	2912490.0000
16/04/2024	2635.3700	2635370.0000
17/04/2024	2960.0400	2960040.0000
18/04/2024	442.8200	442820.0000
19/04/2024	1245.3100	1245310.0000
20/04/2024	2675.1600	2675160.0000
21/04/2024	2023.9000	2023900.0000
22/04/2024	199.3800	199380.0000
23/04/2024	1788.6800	1788680.0000
24/04/2024	1151.6900	1151690.0000
25/04/2024	433.6700	433670.0000
26/04/2024	411.2700	411270.0000
27/04/2024	0.0000	0.0000
28/04/2024	278.3300	278330.0000
29/04/2024	150.1100	150110.0000
30/04/2024	1123.9400	1123940.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/05/2024	408.9800	408980.0000
02/05/2024	105.3000	105300.0000
03/05/2024	1677.1300	1677130.0000
04/05/2024	2566.3800	2566380.0000
05/05/2024	2148.2800	2148280.0000
06/05/2024	1648.9200	1648920.0000
07/05/2024	1283.4600	1283460.0000
08/05/2024	249.3000	249300.0000
09/05/2024	1962.9400	1962940.0000
10/05/2024	1114.0200	1114020.0000
11/05/2024	0.0000	0.0000
12/05/2024	0.0000	0.0000
13/05/2024	1748.3700	1748370.0000
14/05/2024	1507.5100	1507510.0000
15/05/2024	0.0000	0.0000
16/05/2024	0.0000	0.0000
17/05/2024	890.0600	890060.0000
18/05/2024	1213.0700	1213070.0000
19/05/2024	2528.4600	2528460.0000
20/05/2024	2939.8400	2939840.0000
21/05/2024	1870.4700	1870470.0000
22/05/2024	1839.5600	1839560.0000
23/05/2024	1075.9900	1075990.0000
24/05/2024	251.2300	251230.0000
25/05/2024	0.0000	0.0000
26/05/2024	0.0000	0.0000
27/05/2024	1931.5800	1931580.0000
28/05/2024	605.9800	605980.0000
29/05/2024	525.7400	525740.0000
30/05/2024	1608.1400	1608140.0000
31/05/2024	1669.6500	1669650.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/06/2024	0.0000	0.0000
02/06/2024	0.0000	0.0000
03/06/2024	835.8100	835810.0000
04/06/2024	633.4200	633420.0000
05/06/2024	162.3100	162310.0000
06/06/2024	657.9800	657980.0000
07/06/2024	0.0000	0.0000
08/06/2024	2315.0200	2315020.0000
09/06/2024	671.2100	671210.0000
10/06/2024	2345.5500	2345550.0000
11/06/2024	903.4800	903480.0000
12/06/2024	1948.5600	1948560.0000
13/06/2024	806.1700	806170.0000
14/06/2024	1383.6500	1383650.0000
15/06/2024	2933.5200	2933520.0000
16/06/2024	2954.7400	2954740.0000
17/06/2024	2005.2700	2005270.0000
18/06/2024	1284.7900	1284790.0000
19/06/2024	2211.9900	2211990.0000
20/06/2024	2138.3500	2138350.0000
21/06/2024	2205.9600	2205960.0000
22/06/2024	0.0000	0.0000
23/06/2024	0.0000	0.0000
24/06/2024	1796.6700	1796670.0000
25/06/2024	1635.4600	1635460.0000
26/06/2024	1041.0900	1041090.0000
27/06/2024	223.6500	223650.0000
28/06/2024	0.0000	0.0000
29/06/2024	0.0000	0.0000
30/06/2024	929.4400	929440.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/07/2024	2402.4600	2402460.0000
02/07/2024	1026.9900	1026990.0000
03/07/2024	668.3900	668390.0000
04/07/2024	1260.7800	1260780.0000
05/07/2024	1775.6900	1775690.0000
06/07/2024	0.0000	0.0000
07/07/2024	0.0000	0.0000
08/07/2024	1438.6700	1438670.0000
09/07/2024	1925.7800	1925780.0000
10/07/2024	2428.1200	2428120.0000
11/07/2024	2654.7800	2654780.0000
12/07/2024	1004.2400	1004240.0000
13/07/2024	0.0000	0.0000
14/07/2024	0.0000	0.0000
15/07/2024	1332.2200	1332220.0000
16/07/2024	1042.5100	1042510.0000
17/07/2024	1795.4000	1795400.0000
18/07/2024	2195.1400	2195140.0000
19/07/2024	1601.7000	1601700.0000
20/07/2024	2672.0300	2672030.0000
21/07/2024	2748.5400	2748540.0000
22/07/2024	932.8700	932870.0000
23/07/2024	330.5300	330530.0000
24/07/2024	1970.8300	1970830.0000
25/07/2024	1059.9300	1059930.0000
26/07/2024	108.1100	108110.0000
27/07/2024	0.0000	0.0000
28/07/2024	0.0000	0.0000
29/07/2024	940.4500	940450.0000
30/07/2024	1776.0800	1776080.0000
31/07/2024	720.3300	720330.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/08/2024	976.1800	976180.0000
02/08/2024	375.8100	375810.0000
03/08/2024	0.0000	0.0000
04/08/2024	0.0000	0.0000
05/08/2024	0.0000	0.0000
06/08/2024	1756.0700	1756070.0000
07/08/2024	658.4400	658440.0000
08/08/2024	1234.0500	1234050.0000
09/08/2024	0.0000	0.0000
10/08/2024	0.0000	0.0000
11/08/2024	0.0000	0.0000
12/08/2024	1067.7600	1067760.0000
13/08/2024	62.9500	62950.0000
14/08/2024	402.4600	402460.0000
15/08/2024	0.0000	0.0000
16/08/2024	1481.7700	1481770.0000
17/08/2024	3630.4700	3630470.0000
18/08/2024	2435.9300	2435930.0000
19/08/2024	622.9400	622940.0000
20/08/2024	1205.4200	1205420.0000
21/08/2024	1457.9400	1457940.0000
22/08/2024	1248.2500	1248250.0000
23/08/2024	658.5200	658520.0000
24/08/2024	0.0000	0.0000
25/08/2024	0.0000	0.0000
26/08/2024	1146.7100	1146710.0000
27/08/2024	1559.2600	1559260.0000
28/08/2024	1093.2700	1093270.0000
29/08/2024	896.9600	896960.0000
30/08/2024	1130.7000	1130700.0000
31/08/2024	0.0000	0.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/09/2024	191.2500	191250.0000
02/09/2024	0.0000	0.0000
03/09/2024	1439.5000	1439500.0000
04/09/2024	1511.2100	1511210.0000
05/09/2024	1457.5600	1457560.0000
06/09/2024	2379.9700	2379970.0000
07/09/2024	0.0000	0.0000
08/09/2024	0.0000	0.0000
09/09/2024	1081.1700	1081170.0000
10/09/2024	2504.0700	2504070.0000
11/09/2024	2426.1600	2426160.0000
12/09/2024	1280.0800	1280080.0000
13/09/2024	1601.1900	1601190.0000
14/09/2024	2657.7200	2657720.0000
15/09/2024	3268.4900	3268490.0000
16/09/2024	1708.2500	1708250.0000
17/09/2024	1044.8100	1044810.0000
18/09/2024	2337.0300	2337030.0000
19/09/2024	1310.8900	1310890.0000
20/09/2024	583.7000	583700.0000
21/09/2024	0.0000	0.0000
22/09/2024	316.5000	316500.0000
23/09/2024	197.3700	197370.0000
24/09/2024	856.8200	856820.0000
25/09/2024	2530.8700	2530870.0000
26/09/2024	902.0800	902080.0000
27/09/2024	677.2500	677250.0000
28/09/2024	0.0000	0.0000
29/09/2024	1205.3500	1205350.0000
30/09/2024	2947.4200	2947420.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/10/2024	1206.3900	1206390.0000
02/10/2024	1294.4200	1294420.0000
03/10/2024	1121.1400	1121140.0000
04/10/2024	258.1300	258130.0000
05/10/2024	2129.6600	2129660.0000
06/10/2024	2853.8400	2853840.0000
07/10/2024	1006.3400	1006340.0000
08/10/2024	77.0700	77070.0000
09/10/2024	616.6500	616650.0000
10/10/2024	0.0000	0.0000
11/10/2024	1883.2300	1883230.0000
12/10/2024	754.1300	754130.0000
13/10/2024	0.0000	0.0000
14/10/2024	0.0000	0.0000
15/10/2024	257.7500	257750.0000
16/10/2024	870.3400	870340.0000
17/10/2024	1568.8000	1568800.0000
18/10/2024	1827.3500	1827350.0000
19/10/2024	0.0000	0.0000
20/10/2024	14.3900	14390.0000
21/10/2024	2139.8400	2139840.0000
22/10/2024	2474.2300	2474230.0000
23/10/2024	1516.6900	1516690.0000
24/10/2024	1677.9000	1677900.0000
25/10/2024	682.8700	682870.0000
26/10/2024	0.0000	0.0000
27/10/2024	0.0000	0.0000
28/10/2024	0.0000	0.0000
29/10/2024	2013.0000	2013000.0000
30/10/2024	1197.5000	1197500.0000
31/10/2024	67.2800	67280.0000

Date Measured	Value (m³/d)	Value (Litres)
01/11/2024	1630.1500	1630150.0000
02/11/2024	0.0000	0.0000
03/11/2024	0.0000	0.0000
04/11/2024	1460.1200	1460120.0000
05/11/2024	839.0400	839040.0000
06/11/2024	1344.7000	1344700.0000
07/11/2024	891.9700	891970.0000
08/11/2024	650.7200	650720.0000
09/11/2024	0.0000	0.0000
10/11/2024	1154.0000	1154000.0000
11/11/2024	0.0000	0.0000
12/11/2024	509.5400	509540.0000
13/11/2024	600.9400	600940.0000
14/11/2024	1135.8400	1135840.0000
15/11/2024	2064.8400	2064840.0000
16/11/2024	0.0000	0.0000
17/11/2024	163.5000	163500.0000
18/11/2024	1770.7300	1770730.0000
19/11/2024	1141.8600	1141860.0000
20/11/2024	0.0000	0.0000
21/11/2024	1861.3300	1861330.0000
22/11/2024	1573.7600	1573760.0000
23/11/2024	0.0000	0.0000
24/11/2024	205.6800	205680.0000
25/11/2024	0.0000	0.0000
26/11/2024	350.0400	350040.0000
27/11/2024	84.1400	84140.0000
28/11/2024	0.0000	0.0000
29/11/2024	554.9500	554950.0000
30/11/2024	0.0000	0.0000

Date Measured	Value (m³/d)	Value (Litres)
01/12/2024	0.0000	0.0000
02/12/2024	1380.3500	1380350.0000
03/12/2024	315.1400	315140.0000
04/12/2024	952.6000	952600.0000
05/12/2024	699.2800	699280.0000
06/12/2024	632.7300	632730.0000
07/12/2024	0.0000	0.0000
08/12/2024	0.0000	0.0000
09/12/2024	474.5600	474560.0000
10/12/2024	522.0000	522000.0000
11/12/2024	778.6000	778600.0000
12/12/2024	0.0000	0.0000
13/12/2024	755.0700	755070.0000
14/12/2024	0.0000	0.0000
15/12/2024	1925.0600	1925060.0000
16/12/2024	361.9600	361960.0000
17/12/2024	1532.0600	1532060.0000
18/12/2024	837.3100	837310.0000
19/12/2024	1602.9200	1602920.0000
20/12/2024	787.8900	787890.0000
21/12/2024	0.0000	0.0000
22/12/2024	0.0000	0.0000
23/12/2024	231.0700	231070.0000
24/12/2024	683.0700	683070.0000
25/12/2024	0.0000	0.0000
26/12/2024	0.0000	0.0000
27/12/2024	1822.9000	1822900.0000
28/12/2024	2297.2400	2297240.0000
29/12/2024	2468.8400	2468840.0000
30/12/2024	545.1600	545160.0000
31/12/2024	0.0000	0.0000

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Date Measured	Value (m ³ /d)	Value (Litres)
01/01/2024	689.0200	689020.0000
02/01/2024	1077.6700	1077670.0000
03/01/2024	1643.1000	1643100.0000
04/01/2024	577.5700	577570.0000
05/01/2024	963.6100	963610.0000
06/01/2024	2524.5700	2524570.0000
07/01/2024	387.4500	387450.0000
08/01/2024	678.9000	678900.0000
09/01/2024	1379.7200	1379720.0000
10/01/2024	1184.7600	1184760.0000
11/01/2024	236.5100	236510.0000
12/01/2024	347.3400	347340.0000
13/01/2024	2150.3800	2150380.0000
14/01/2024	2273.2300	2273230.0000
15/01/2024	508.5700	508570.0000
16/01/2024	1100.2000	1100200.0000
17/01/2024	988.3800	988380.0000
18/01/2024	1471.2000	1471200.0000
19/01/2024	1251.1200	1251120.0000
20/01/2024	2610.2600	2610260.0000
21/01/2024	1730.7500	1730750.0000
22/01/2024	1247.1700	1247170.0000
23/01/2024	1683.6300	1683630.0000
24/01/2024	824.6400	824640.0000
25/01/2024	0.0000	0.0000
26/01/2024	80.5600	80560.0000
27/01/2024	0.0000	0.0000
28/01/2024	1946.6200	1946620.0000
29/01/2024	1488.9000	1488900.0000
30/01/2024	449.1800	449180.0000
31/01/2024	1837.7700	1837770.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/02/2024	850.0700	850070.0000
02/02/2024	2025.4200	2025420.0000
03/02/2024	2559.0300	2559030.0000
04/02/2024	2409.0200	2409020.0000
05/02/2024	1755.8900	1755890.0000
06/02/2024	1978.6700	1978670.0000
07/02/2024	1872.9800	1872980.0000
08/02/2024	624.0400	624040.0000
09/02/2024	0.0000	0.0000
10/02/2024	0.0000	0.0000
11/02/2024	206.9100	206910.0000
12/02/2024	1837.6300	1837630.0000
13/02/2024	845.7800	845780.0000
14/02/2024	2173.2200	2173220.0000
15/02/2024	1111.5400	1111540.0000
16/02/2024	2574.0200	2574020.0000
17/02/2024	2563.9500	2563950.0000
18/02/2024	1943.1100	1943110.0000
19/02/2024	2645.2400	2645240.0000
20/02/2024	1390.5000	1390500.0000
21/02/2024	1152.8900	1152890.0000
22/02/2024	830.0900	830090.0000
23/02/2024	1026.0500	1026050.0000
24/02/2024	0.0000	0.0000
25/02/2024	0.0000	0.0000
26/02/2024	1713.3300	1713330.0000
27/02/2024	663.7800	663780.0000
28/02/2024	1509.4700	1509470.0000
29/02/2024	976.9000	976900.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/03/2024	110.6600	110660.0000
02/03/2024	2385.9200	2385920.0000
03/03/2024	2414.1500	2414150.0000
04/03/2024	1258.0700	1258070.0000
05/03/2024	752.2400	752240.0000
06/03/2024	1670.8000	1670800.0000
07/03/2024	755.6000	755600.0000
08/03/2024	484.3100	484310.0000
09/03/2024	2381.7400	2381740.0000
10/03/2024	2051.8500	2051850.0000
11/03/2024	2566.7400	2566740.0000
12/03/2024	1049.1600	1049160.0000
13/03/2024	305.7500	305750.0000
14/03/2024	819.3300	819330.0000
15/03/2024	1328.6500	1328650.0000
16/03/2024	2343.6600	2343660.0000
17/03/2024	2590.0900	2590090.0000
18/03/2024	645.3800	645380.0000
19/03/2024	129.0300	129030.0000
20/03/2024	1781.0300	1781030.0000
21/03/2024	2356.5100	2356510.0000
22/03/2024	716.5900	716590.0000
23/03/2024	0.0000	0.0000
24/03/2024	0.0000	0.0000
25/03/2024	554.4900	554490.0000
26/03/2024	445.3200	445320.0000
27/03/2024	1851.5300	1851530.0000
28/03/2024	1360.2100	1360210.0000
29/03/2024	0.0000	0.0000
30/03/2024	0.0000	0.0000
31/03/2024	1393.7600	1393760.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/04/2024	2919.3400	2919340.0000
02/04/2024	1307.6300	1307630.0000
03/04/2024	245.6000	245600.0000
04/04/2024	2176.8200	2176820.0000
05/04/2024	832.6700	832670.0000
06/04/2024	0.0000	0.0000
07/04/2024	1801.1600	1801160.0000
08/04/2024	887.8300	887830.0000
09/04/2024	262.4900	262490.0000
10/04/2024	1719.1100	1719110.0000
11/04/2024	1184.5900	1184590.0000
12/04/2024	1005.2300	1005230.0000
13/04/2024	2551.6300	2551630.0000
14/04/2024	579.0400	579040.0000
15/04/2024	0.0000	0.0000
16/04/2024	188.8300	188830.0000
17/04/2024	0.0000	0.0000
18/04/2024	2612.0400	2612040.0000
19/04/2024	944.8700	944870.0000
20/04/2024	0.0000	0.0000
21/04/2024	0.0000	0.0000
22/04/2024	1574.8300	1574830.0000
23/04/2024	729.8400	729840.0000
24/04/2024	1682.7400	1682740.0000
25/04/2024	1715.7800	1715780.0000
26/04/2024	680.4500	680450.0000
27/04/2024	0.0000	0.0000
28/04/2024	703.0100	703010.0000
29/04/2024	1803.6500	1803650.0000
30/04/2024	1690.5600	1690560.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/05/2024	910.5500	910550.0000
02/05/2024	682.0300	682030.0000
03/05/2024	0.0000	0.0000
04/05/2024	0.0000	0.0000
05/05/2024	257.4700	257470.0000
06/05/2024	1466.7500	1466750.0000
07/05/2024	1709.0700	1709070.0000
08/05/2024	903.9400	903940.0000
09/05/2024	527.9100	527910.0000
10/05/2024	708.6500	708650.0000
11/05/2024	0.0000	0.0000
12/05/2024	271.1200	271120.0000
13/05/2024	0.0000	0.0000
14/05/2024	1863.8500	1863850.0000
15/05/2024	1817.3300	1817330.0000
16/05/2024	403.2500	403250.0000
17/05/2024	1032.8200	1032820.0000
18/05/2024	1289.7000	1289700.0000
19/05/2024	0.0000	0.0000
20/05/2024	0.0000	0.0000
21/05/2024	381.8800	381880.0000
22/05/2024	147.5900	147590.0000
23/05/2024	0.0000	0.0000
24/05/2024	744.4100	744410.0000
25/05/2024	0.0000	0.0000
26/05/2024	473.1700	473170.0000
27/05/2024	57.0100	57010.0000
28/05/2024	1083.3400	1083340.0000
29/05/2024	1365.6400	1365640.0000
30/05/2024	757.0000	757000.0000
31/05/2024	426.3800	426380.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/06/2024	0.0000	0.0000
02/06/2024	0.0000	0.0000
03/06/2024	1330.3400	1330340.0000
04/06/2024	1004.1900	1004190.0000
05/06/2024	655.8700	655870.0000
06/06/2024	47.8300	47830.0000
07/06/2024	2034.4600	2034460.0000
08/06/2024	520.7100	520710.0000
09/06/2024	1770.9200	1770920.0000
10/06/2024	429.8200	429820.0000
11/06/2024	1618.4700	1618470.0000
12/06/2024	1904.3900	1904390.0000
13/06/2024	53.8200	53820.0000
14/06/2024	657.9800	657980.0000
15/06/2024	0.0000	0.0000
16/06/2024	0.0000	0.0000
17/06/2024	472.6800	472680.0000
18/06/2024	1358.0300	1358030.0000
19/06/2024	1391.8800	1391880.0000
20/06/2024	0.0000	0.0000
21/06/2024	1004.8300	1004830.0000
22/06/2024	0.0000	0.0000
23/06/2024	1932.3400	1932340.0000
24/06/2024	1173.7600	1173760.0000
25/06/2024	485.2000	485200.0000
26/06/2024	1594.8600	1594860.0000
27/06/2024	1578.8400	1578840.0000
28/06/2024	1877.0300	1877030.0000
29/06/2024	740.0000	740000.0000
30/06/2024	408.6200	408620.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/07/2024	0.0000	0.0000
02/07/2024	1969.3200	1969320.0000
03/07/2024	2251.1700	2251170.0000
04/07/2024	998.1000	998100.0000
05/07/2024	1242.9500	1242950.0000
06/07/2024	0.0000	0.0000
07/07/2024	0.0000	0.0000
08/07/2024	1265.7100	1265710.0000
09/07/2024	384.5200	384520.0000
10/07/2024	539.9900	539990.0000
11/07/2024	711.8200	711820.0000
12/07/2024	1531.7500	1531750.0000
13/07/2024	0.0000	0.0000
14/07/2024	0.0000	0.0000
15/07/2024	539.3700	539370.0000
16/07/2024	793.0400	793040.0000
17/07/2024	0.0000	0.0000
18/07/2024	127.7500	127750.0000
19/07/2024	389.2300	389230.0000
20/07/2024	0.0000	0.0000
21/07/2024	0.0000	0.0000
22/07/2024	211.5900	211590.0000
23/07/2024	1661.9600	1661960.0000
24/07/2024	0.0000	0.0000
25/07/2024	1925.5100	1925510.0000
26/07/2024	1474.8300	1474830.0000
27/07/2024	0.0000	0.0000
28/07/2024	0.0000	0.0000
29/07/2024	1783.8900	1783890.0000
30/07/2024	927.6000	927600.0000
31/07/2024	1389.2200	1389220.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/08/2024	1367.0700	1367070.0000
02/08/2024	1769.8700	1769870.0000
03/08/2024	2683.7000	2683700.0000
04/08/2024	751.1400	751140.0000
05/08/2024	0.0000	0.0000
06/08/2024	121.4000	121400.0000
07/08/2024	1044.2600	1044260.0000
08/08/2024	0.0000	0.0000
09/08/2024	1798.7900	1798790.0000
10/08/2024	877.6200	877620.0000
11/08/2024	0.0000	0.0000
12/08/2024	1313.7900	1313790.0000
13/08/2024	1437.0200	1437020.0000
14/08/2024	1720.6000	1720600.0000
15/08/2024	1458.0800	1458080.0000
16/08/2024	194.9800	194980.0000
17/08/2024	0.0000	0.0000
18/08/2024	0.0000	0.0000
19/08/2024	817.3700	817370.0000
20/08/2024	187.8100	187810.0000
21/08/2024	0.0000	0.0000
22/08/2024	0.0000	0.0000
23/08/2024	1477.6300	1477630.0000
24/08/2024	247.2800	247280.0000
25/08/2024	0.0000	0.0000
26/08/2024	1075.0400	1075040.0000
27/08/2024	1621.3900	1621390.0000
28/08/2024	561.2000	561200.0000
29/08/2024	1377.5200	1377520.0000
30/08/2024	1390.0700	1390070.0000
31/08/2024	0.0000	0.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/09/2024	29.8300	29830.0000
02/09/2024	0.0000	0.0000
03/09/2024	171.6400	171640.0000
04/09/2024	2233.3400	2233340.0000
05/09/2024	792.0600	792060.0000
06/09/2024	459.3000	459300.0000
07/09/2024	0.0000	0.0000
08/09/2024	0.0000	0.0000
09/09/2024	1474.3800	1474380.0000
10/09/2024	954.8800	954880.0000
11/09/2024	0.0000	0.0000
12/09/2024	1289.1100	1289110.0000
13/09/2024	901.2700	901270.0000
14/09/2024	0.0000	0.0000
15/09/2024	0.0000	0.0000
16/09/2024	1213.7300	1213730.0000
17/09/2024	1418.2400	1418240.0000
18/09/2024	169.4100	169410.0000
19/09/2024	2430.7300	2430730.0000
20/09/2024	2121.8200	2121820.0000
21/09/2024	1719.9400	1719940.0000
22/09/2024	3091.0900	3091090.0000
23/09/2024	1266.3700	1266370.0000
24/09/2024	1164.8500	1164850.0000
25/09/2024	647.3900	647390.0000
26/09/2024	255.6900	255690.0000
27/09/2024	872.4100	872410.0000
28/09/2024	0.0000	0.0000
29/09/2024	519.9400	519940.0000
30/09/2024	0.0000	0.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/10/2024	209.3100	209310.0000
02/10/2024	1035.8000	1035800.0000
03/10/2024	1772.1200	1772120.0000
04/10/2024	1728.9200	1728920.0000
05/10/2024	819.9500	819950.0000
06/10/2024	0.0000	0.0000
07/10/2024	99.2500	99250.0000
08/10/2024	2088.6100	2088610.0000
09/10/2024	1931.9500	1931950.0000
10/10/2024	2202.4900	2202490.0000
11/10/2024	0.0000	0.0000
12/10/2024	0.0000	0.0000
13/10/2024	42.5700	42570.0000
14/10/2024	0.0000	0.0000
15/10/2024	1885.3500	1885350.0000
16/10/2024	1042.7700	1042770.0000
17/10/2024	1498.5300	1498530.0000
18/10/2024	343.1800	343180.0000
19/10/2024	2594.4200	2594420.0000
20/10/2024	1878.4200	1878420.0000
21/10/2024	0.0000	0.0000
22/10/2024	973.1200	973120.0000
23/10/2024	1060.7900	1060790.0000
24/10/2024	449.9600	449960.0000
25/10/2024	1295.0200	1295020.0000
26/10/2024	2457.5200	2457520.0000
27/10/2024	2117.2200	2117220.0000
28/10/2024	2759.1700	2759170.0000
29/10/2024	936.6700	936670.0000
30/10/2024	0.0000	0.0000
31/10/2024	1889.8200	1889820.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/11/2024	79.1600	79160.0000
02/11/2024	0.0000	0.0000
03/11/2024	0.0000	0.0000
04/11/2024	669.7700	669770.0000
05/11/2024	1836.8300	1836830.0000
06/11/2024	1385.1900	1385190.0000
07/11/2024	1638.2900	1638290.0000
08/11/2024	1522.9300	1522930.0000
09/11/2024	0.0000	0.0000
10/11/2024	439.2600	439260.0000
11/11/2024	2978.7000	2978700.0000
12/11/2024	2080.3000	2080300.0000
13/11/2024	550.7200	550720.0000
14/11/2024	415.0800	415080.0000
15/11/2024	889.9300	889930.0000
16/11/2024	0.0000	0.0000
17/11/2024	1747.0500	1747050.0000
18/11/2024	744.0800	744080.0000
19/11/2024	1762.0300	1762030.0000
20/11/2024	1269.8200	1269820.0000
21/11/2024	0.0000	0.0000
22/11/2024	576.4600	576460.0000
23/11/2024	0.0000	0.0000
24/11/2024	212.5200	212520.0000
25/11/2024	1899.4000	1899400.0000
26/11/2024	2335.5000	2335500.0000
27/11/2024	2631.1700	2631170.0000
28/11/2024	2645.8800	2645880.0000
29/11/2024	458.6500	458650.0000
30/11/2024	0.0000	0.0000

Date Measured	Value (m ³ /d)	Value (Litres)
01/12/2024	187.1100	187110.0000
02/12/2024	0.0000	0.0000
03/12/2024	1600.5000	1600500.0000
04/12/2024	1636.4800	1636480.0000
05/12/2024	489.5200	489520.0000
06/12/2024	1244.9300	1244930.0000
07/12/2024	2494.9200	2494920.0000
08/12/2024	0.0000	0.0000
09/12/2024	1447.3900	1447390.0000
10/12/2024	866.6400	866640.0000
11/12/2024	694.6900	694690.0000
12/12/2024	1760.7300	1760730.0000
13/12/2024	2050.7900	2050790.0000
14/12/2024	2556.2300	2556230.0000
15/12/2024	665.5800	665580.0000
16/12/2024	2342.7400	2342740.0000
17/12/2024	1208.1200	1208120.0000
18/12/2024	380.1600	380160.0000
19/12/2024	0.0000	0.0000
20/12/2024	683.9900	683990.0000
21/12/2024	0.0000	0.0000
22/12/2024	0.0000	0.0000
23/12/2024	2180.7300	2180730.0000
24/12/2024	1013.4600	1013460.0000
25/12/2024	0.0000	0.0000
26/12/2024	1703.8400	1703840.0000
27/12/2024	512.8900	512890.0000
28/12/2024	185.0500	185050.0000
29/12/2024	0.0000	0.0000
30/12/2024	705.9000	705900.0000
31/12/2024	1752.2000	1752200.0000