

Southview Estates Drinking Water System

2025 Annual Water Report

Drinking Water System Number: 220012260

Drinking Water System Operating Authorities: City of Kawartha Lakes and Ontario
Clean Water Agency

Drinking Water System Category: Large Municipal Residential

Reporting Period: January 1st – December 31st, 2025



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2025 Annual Drinking Water System Summary Report

General Information

The City of Kawartha Lakes prepares a report summarizing system operation and water quality for every municipal drinking water system annually. This report has been prepared to satisfy the annual reporting requirements in O. Reg. 170/03 Section 11 and Schedule 22. The annual reports will be available to residents at the City of Kawartha Lakes Public Works Administration Office by appointment and the [City's website](#). Notification that the reports are available free of charge will be made on the City of Kawartha Lakes website. The City of Kawartha Lakes Public Works Administration Office is located at 322 Kent Street West in Lindsay, Ontario.

This system does not serve more than 10,000 residences.

Drinking Water System Number: 220012260

Drinking Water System Name: Southview Estates Drinking Water System

Drinking Water System Owner: City of Kawartha Lakes

Drinking Water System Category: Large Municipal Residential

Reporting Period: January 1, 2025 – December 31, 2025

Compliance Summary

Table 1. Drinking Water Compliance Summary

	Number of Events	Date (yyyy/mm/dd)	Details
Ministry (MECP) Inspections	1	2025 11 17	Announced Focused Drinking Water Inspection – 100%
Adverse Water Quality Incidents (AWQIs)	1	2025 01 02	AWQI 167151 – The Q4 2024 Running Annual Average (RAA) for Trihalomethane was 100.88ug/L. The RAA limit is 100ug/L.
Non-Compliances	0		
Boil Water Advisories	0		
Health and Safety	0		

Drinking Water System Description

The Southview Estates drinking water system is a large municipal residential drinking water system serving the subdivision of Southview Estates located in Cameron, Ontario within the City of Kawartha Lakes. The drinking water system is classified as a Class II Water Treatment and Class I Water Distribution subsystems in accordance with O. Reg. 128/04.

Source Water

The water supply for the system is obtained from Sturgeon Lake, which is classified as a surface water source.

Water Treatment Facility

The Southview Estates water treatment facility consists of a dual-train conventional filtration package system. Each train includes a flocculator/clarifier unit with automatic sludge withdrawal and dual-media high-rate gravity filters with automatic backwash. Coagulant and polymer are added to the treatment process. Primary disinfection is accomplished using sodium hypochlorite.

Treated water is directed to a dual-celled baffled clearwell and subsequently pumped to the distribution system using three high lift pumps. Online analyzers continuously monitor treated free chlorine and filter effluent turbidity to ensure regulatory compliance.

A wastewater treatment system includes two backwash pumps and two settling tanks that receive filter backwash water and clarifier sludge prior to discharge.

A diesel generator is located onsite to provide standby power to the water treatment facility in the event of a power failure.

Distribution System

The distribution system consists of approximately 4.8 kilometres of PVC watermain and is not rated for fire protection. The system does not include treated water storage facilities, chlorine boosting stations, secondary disinfection processes, or pressure boosting capabilities within the control of the distribution system.

Table 2. Treatment Chemicals Used

Chemical Name	Use	Supplier
Sodium Hypochlorite	Disinfection	Jutzi Water Technologies
SternPAC	Coagulant	Kemira
Magnafloc	Coagulant Aid	Basf

Summary of Non-Compliance

Adverse Water Quality Incidents

Table 3. Adverse Water Quality Incidents

Date	AWQI #	Location	Problem	Details	Legislation	Corrective Action Taken
2025 01 02	167151	Distribution	The Q4 2024 Running Annual Average (RAA) for Trihalomethane (THM) was 100.88ug/L.	The RAA limit is 100ug/L.	O. Reg. 169 & 170/03 Schedule 13-6	<ul style="list-style-type: none"> -Completed THM & Haloacetic Acids (HAA) study in 2024, increased polymer dosage as a result. -Installed automatic flusher in distribution system in 2023. -Ongoing process optimization: decrease clearwell turnover time, lower Cl2 dosage, jar testing for chemical optimization and increased process monitoring

Non-Compliance

There were no non-compliances reported during the reporting period.

Non-Compliance Identified in a Ministry Inspection

There were no non-compliances identified in a Ministry Inspection during this period.

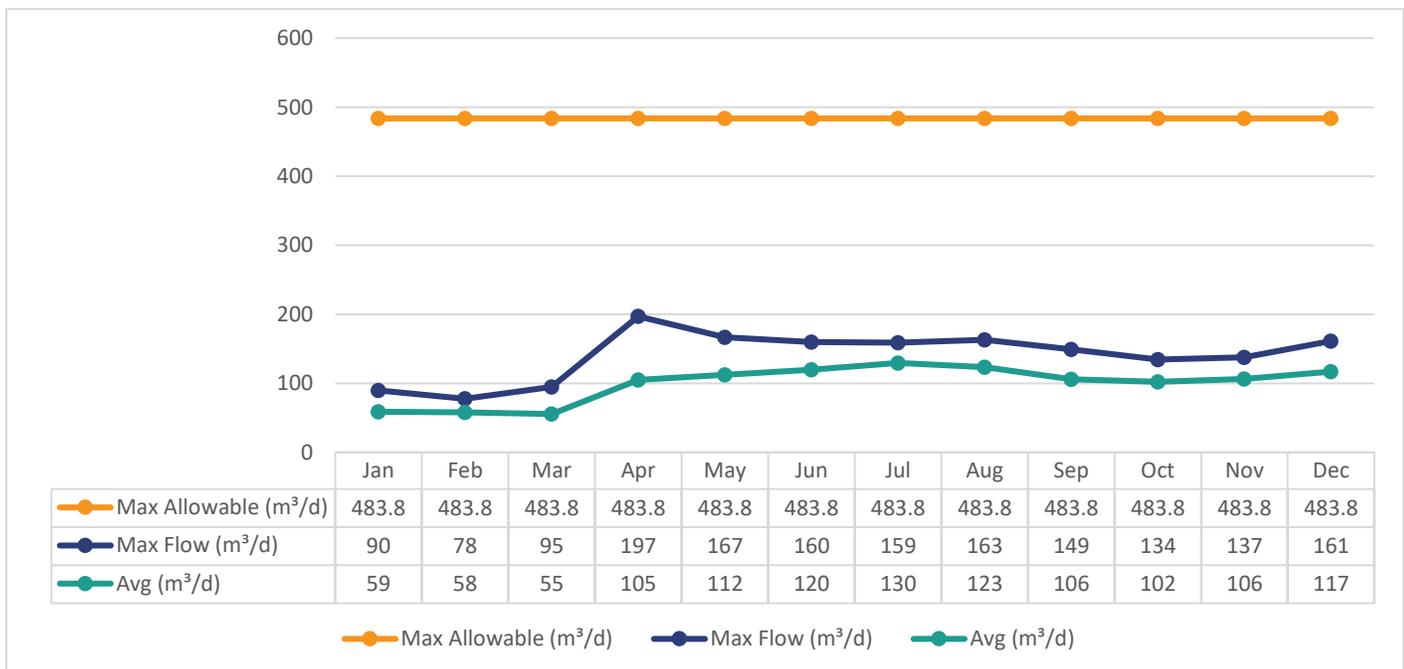
Flows

The Southview Estates Drinking Water System is operating on average under half the rated capacity. The rated capacity of the system (treated water flows) is 484 m³/day.

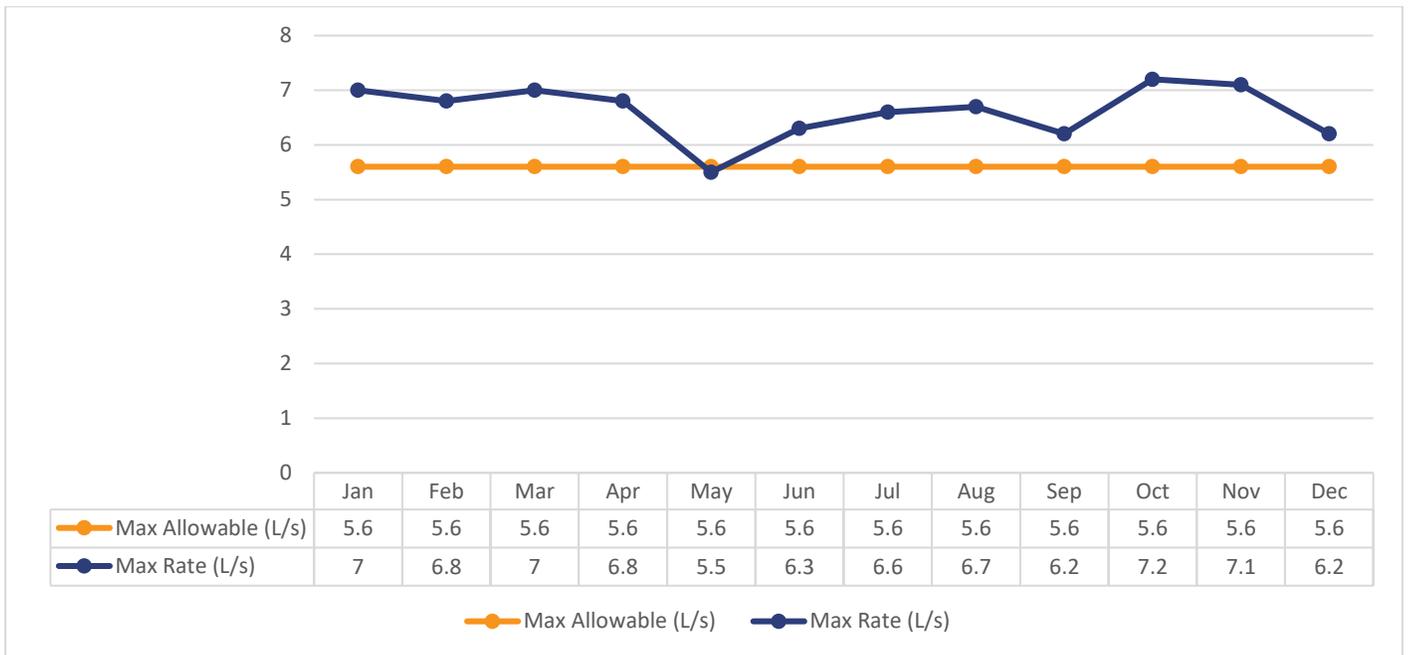
Raw Water Flows

The raw water flows are regulated under the Permit to Take Water. Raw flow data for 2025 was submitted to the Ministry of Environment, Conservation and Parks (MECP) electronically under permit #8118-AW2NZT. The confirmation of the data that was submitted is attached in Appendix A.

Graph 1. Total Monthly Flows (m³/d) – Sturgeon Lake (Max Allowable PTTW)



Graph 2. Monthly Rated Flows (L/s) – Sturgeon Lake (Max Allowable Rate PTTW)

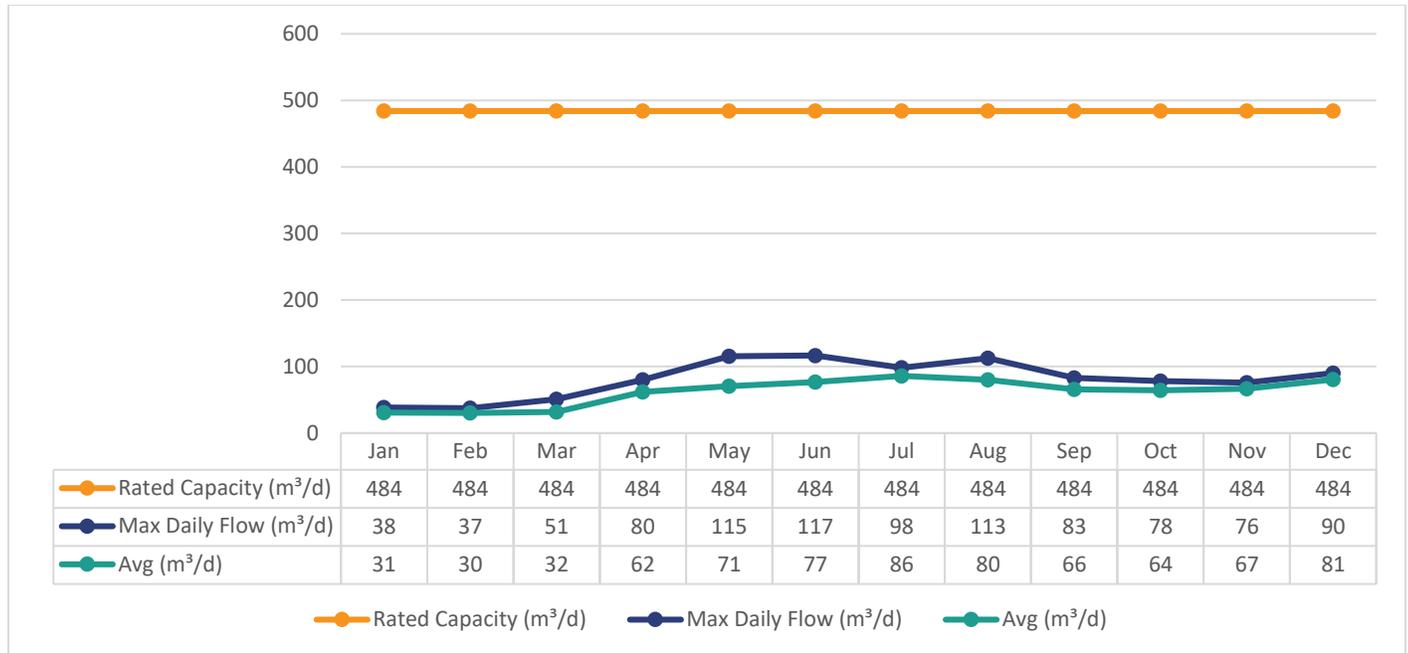


Note: Certain operational circumstances could cause results to be temporarily outside of the allowable rates. In August 2025, the allowable rate was momentarily surpassed due to annual calibration of the flow meter and did not indicate a true exceedance. In the other months where the allowable rate was momentarily surpassed, it was due to generator transfers and did not indicate true exceedances. All spikes are reviewed for compliance with O. Reg. 170/03.

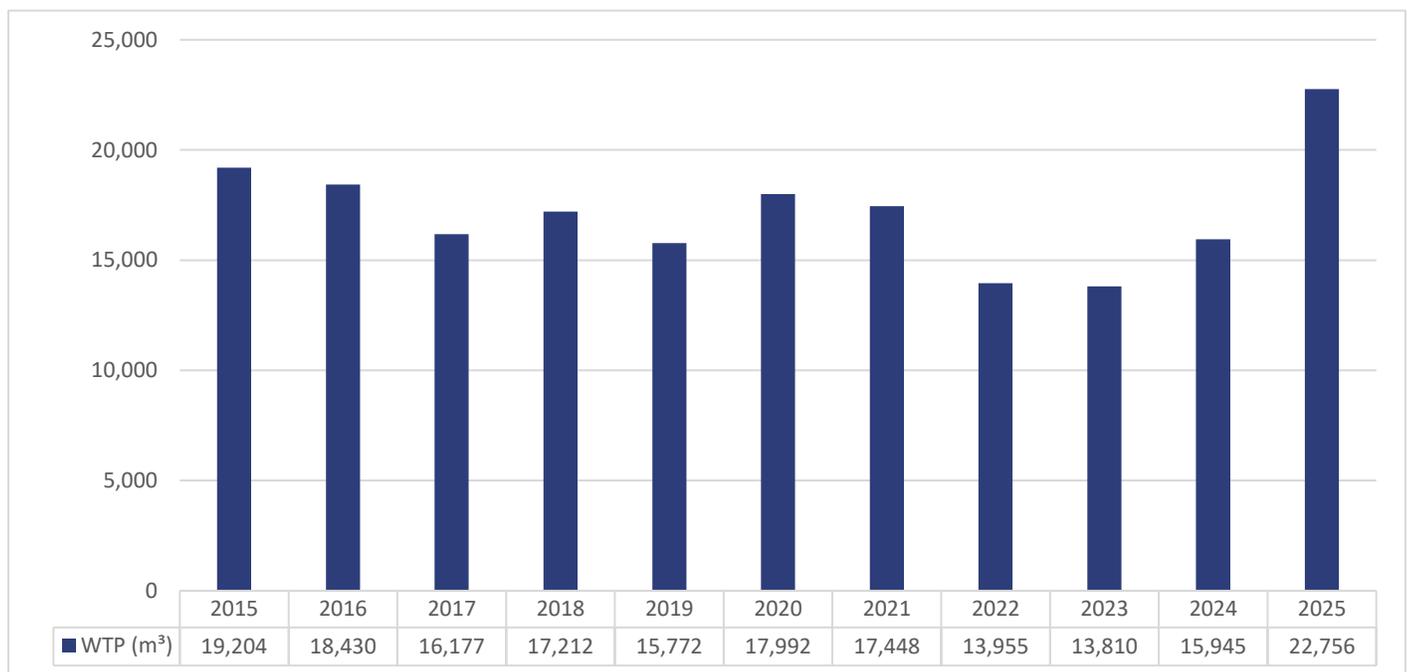
Treated Water Flows

The Treated Water flows are regulated under the Municipal Drinking Water Licence 141-101.

Graph 3. Monthly Rated Flows (m³/d) – Rated Capacity - MDWL



Graph 4. Annual Total Flow Comparison (m³)



Regulatory Sample Results Summary

Microbiological Testing

Table 4. Microbiological Test Results

	Number of Samples Collected	Range of E. Coli Results	Range of E. Coli Results	Range of Total Coliform Results	Range of Total Coliform Results	Range of HPC Results	Range of HPC Results
		Min	Max	Min	Max	Min	Max
Raw	52	0	40	0	130	N/A	N/A
Treated	52	0	0	0	0	0	2
Distribution	156	0	0	0	0	0	3

OG = Overgrowth

HPC = Heterotrophic Plate Count

Note: There were 3 NDOGT raw sample results that did occur. NDOGT – No Data, Overgrown with Target bacteria

Operational Testing

Table 5. Operational Test Results

Parameter	Number of Samples Collected	Range of Results Minimum	Range of Results Maximum
Turbidity Raw (NTU)	12	0.46	1.11
Turbidity Filter 1 (NTU)	8760	0.00	2.01
Turbidity Filter 2 (NTU)	8760	0.00	2.01
Chlorine	8760	0.34	5.01
Fluoride (If the DWS provides fluoridation)	N/A	N/A	N/A

Note: Record the unit of measurement if it is **not** milligrams per litre.

Note: For continuous monitors 8760 is used as the number of samples. Spikes recorded by online instrumentation were a result of air bubbles and various maintenance/calibration activities. All spikes are reviewed for compliance with O. Reg. 170/03.

Inorganic Parameters

These parameters are tested as a requirement under O. Reg. 170/03. Sodium and Fluoride are required to be tested every five years. Nitrate and Nitrite are tested quarterly and the metals are tested annually as required under O. Reg. 170/03. In the event any of the parameters listed in Schedule 23 or 24 of O. Reg. 170/03 exceed half of the maximum allowable concentration the

parameter is required to be samples quarterly. Based on the latest test results no additional testing is required.

Table 6. Inorganic Parameters Test Results

	Sample Date (yyyy/mm/dd)	Sample Result	Unit of Measure	MAC	Exceedance
Treated Water					
Antimony	2025 01 07	<MDL 0.6	µg/L	6.0	No
Arsenic	2025 01 07	<MDL 0.2	µg/L	10.0	No
Barium	2025 01 07	20.9	µg/L	1000.0	No
Boron	2025 01 07	7.0	µg/L	5000.0	No
Cadmium	2025 01 07	<MDL 0.003	µg/L	5.0	No
Chromium	2025 01 07	0.10	µg/L	50.0	No
Mercury	2025 01 07	<MDL 0.01	µg/L	1.0	No
Selenium	2025 01 07	<MDL 0.04	µg/L	50.0	No
Uranium	2025 01 07	0.004	µg/L	20.0	No
Additional Inorganics					
Fluoride	2023 01 03	<MDL 0.06	mg/L	1.5	No
Nitrate	2025 01 06	0.10	mg/L	10.0	No
Nitrate	2025 04 07	0.408	mg/L	10.0	No
Nitrate	2025 07 07	0.133	mg/L	10.0	No
Nitrate	2025 10 06	0.072	mg/L	10.0	No
Nitrite	2025 01 06	<MDL 0.003	mg/L	1.0	No
Nitrite	2025 04 07	<MDL 0.003	mg/L	1.0	No
Nitrite	2025 07 07	<MDL 0.003	mg/L	1.0	No
Nitrite	2025 10 06	<MDL 0.003	mg/L	1.0	No
Sodium	2023 01 03	13.8	mg/L	20*	No

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

MDL = Method Detection Limit

*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. Sodium results exceeding 20 mg/L are to be reported to the Medical Officer of Health as per Schedule 16-3 (8) of O. Reg. 170/03.

Schedule 15 Sampling (Lead)

The Schedule 15 sampling is required under O. Reg. 170/03. This system is under reduced sampling. Only distribution samples were collected, and no plumbing samples were collected.

Table 7. Schedule 15 Test Results (Lead)

	Number of Sampling Points	Number of Samples	Range of Results Minimum	Range of Results Maximum	MAC (µg/L)	Number of Exceedances
Alkalinity (mg/L)	1	2	63	72	N/A	N/A
pH	1	2	7.62	8.05	N/A	N/A
Lead (µg/L)	N/A	N/A	N/A	N/A	10.0	N/A

Organic Parameters

These parameters are tested as a requirement under O. Reg. 170/03. In the event any of the parameters listed in Schedule 23 or 24 of O. Reg. 170/03 exceed half of the maximum allowable concentration the parameter is required to be samples quarterly. Based on the latest test results no additional testing is required.

Table 8. Organic Parameters Test Results

	Sample Date (yyyy/mm/dd)	Sample Result	Unit of Measure	MAC	Exceedance
Treated Water					
Alachlor	2025 01 07	<MDL 0.02	µg/L	5.0	No
Atrazine + N-dealkylated metabolites	2025 01 07	<MDL 0.01	µg/L	5.0	No
Azinphos-methyl	2025 01 07	<MDL 0.05	µg/L	20.0	No
Benzene	2025 01 07	<MDL 0.32	µg/L	1.0	No
Benzo(a)pyrene	2025 01 07	<MDL 0.004	µg/L	0.01	No
Bromoxynil	2025 01 07	<MDL 0.33	µg/L	5.0	No
Carbaryl	2025 01 07	<MDL 0.05	µg/L	90.0	No
Carbofuran	2025 01 07	<MDL 0.01	µg/L	90.0	No
Carbon Tetrachloride	2025 01 07	<MDL 0.17	µg/L	2.0	No
Chlorpyrifos	2025 01 07	<MDL 0.02	µg/L	90.0	No
Diazinon	2025 01 07	<MDL 0.02	µg/L	20.0	No
Dicamba	2025 01 07	<MDL 0.2	µg/L	120.0	No
1,2-Dichlorobenzene	2025 01 07	<MDL 0.41	µg/L	200.0	No
1,4-Dichlorobenzene	2025 01 07	<MDL 0.36	µg/L	5.0	No
1,2-Dichloroethane	2025 01 07	<MDL 0.35	µg/L	5.0	No
1,1-Dichloroethylene	2025 01 07	<MDL 0.33	µg/L	14.0	No

	Sample Date (yyyy/mm/dd)	Sample Result	Unit of Measure	MAC	Exceedance
Dichloromethane (Methylene Chloride)	2025 01 07	<MDL 0.35	µg/L	50.0	No
2,4-Dichlorophenol	2025 01 07	<MDL 0.15	µg/L	900.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2025 01 07	<MDL 0.19	µg/L	100.0	No
Diclofop-methyl	2025 01 07	<MDL 0.4	µg/L	9.0	No
Dimethoate	2025 01 07	<MDL 0.06	µg/L	20.0	No
Diquat	2025 01 07	<MDL 1.0	µg/L	70.0	No
Diuron	2025 01 07	<MDL 0.03	µg/L	150.0	No
Glyphosate	2025 01 07	<MDL 1.0	µg/L	280.0	No
Malathion	2025 01 07	<MDL 0.02	µg/L	190.0	No
2-Methyl- 4chlorophenoxyacetic Acid (MCPA)	2025 01 07	<MDL 0.12	µg/L	100.0	No
Metolachlor	2025 01 07	<MDL 0.01	µg/L	50.0	No
Metribuzin	2025 01 07	<MDL 0.02	µg/L	80.0	No
Monochlorobenzene (Chlorobenzene)	2025 01 07	<MDL 0.3	µg/L	80.0	No
Paraquat	2025 01 07	<MDL 1.0	µg/L	10.0	No
PCB	2025 01 07	<MDL 0.04	µg/L	3.0	No
Pentachlorophenol	2025 01 07	<MDL 0.15	µg/L	60.0	No
Phorate	2025 01 07	<MDL 0.01	µg/L	2.0	No
Picloram	2025 01 07	<MDL 1.0	µg/L	190.0	No
Prometryne	2025 01 07	<MDL 0.03	µg/L	1.0	No
Simazine	2025 01 07	<MDL 0.01	µg/L	10.0	No
Terbufos	2025 01 07	<MDL 0.01	µg/L	1.0	No
Tetrachloroethylene	2025 01 07	<MDL 0.35	µg/L	10.0	No
2,3,4,6- Tetrachlorophenol	2025 01 07	<MDL 0.2	µg/L	100.0	No
Triallate	2025 01 07	<MDL 0.01	µg/L	230.0	No
Trichloroethylene	2025 01 07	<MDL 0.44	µg/L	5.0	No
2,4,6-Trichlorophenol	2025 01 07	<MDL 0.25	µg/L	5.0	No
Trifluralin	2025 01 07	<MDL 0.02	µg/L	45.0	No
Vinyl Chloride	2025 01 07	<MDL 0.17	µg/L	1.0	No
Distribution Water					
Haloacetic Acids Running Annual Average Q1	2025 01 06	54.38	µg/L	80.0	No
Haloacetic Acids Running Annual Average Q2	2025 04 07	45.98	µg/L	80.0	No
Haloacetic Acids Running Annual Average Q3	2025 07 07	49.93	µg/L	80.0	No

	Sample Date (yyyy/mm/dd)	Sample Result	Unit of Measure	MAC	Exceedance
Haloacetic Acids Running Annual Average Q4	2025 10 06	48.53	µg/L	80.0	No
Trihalomethane Running Annual Average Q1	2025 01 06	99.00	µg/L	100.0	No
	2025 02 03				
	2025 02 24				
Trihalomethane Running Annual Average Q2	2025 04 07	98.75	µg/L	100.0	No
	2025 04 28				
Trihalomethane Running Annual Average Q3	2025 07 07	98.00	µg/L	100.0	No
Trihalomethane Running Annual Average Q4	2025 10 06	83.75	µg/L	100.0	No
	2025 12 01				

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

MDL = Method Detection Limit

Additional Legislated Samples

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

Harmful Algal Blooms monitoring is required as a condition within the Municipal Drinking Water Licence between June and October of each reporting year at a minimum. Treated and Raw samples are collected weekly during this time period and tested for Microcystin, which is an indicator for harmful algal blooms.

Table 9. Microcystin Sample Results

Municipal Drinking Water Licence	Collected Weekly June – Oct	Total Microcystin Raw Results Range (µg/L)	Total Microcystin Treated Water Results Range (µg/L)	Treated Water Total Microcystin Limit 1.5 µg/L Exceeded
Harmful Algal Blooms Monitoring	June	<0.1 - <0.1	<0.1 - <0.1	N
	July	<0.1 - <0.1	<0.1 - <0.1	N
	August	<0.1 - <0.1	<0.1 - <0.1	N
	September	<0.1 - <0.1	<0.1 - <0.1	N
	October	<0.1 - <0.1	<0.1 - <0.1	N

Method Detection Limit is 0.1 µg/L

Table 10. Various Additional Testing Required by MDWL

Municipal Drinking Water Licence	Location	No. of Samples Collected	Range of Results Minimum	Range of Results of Maximum
Alkalinity (mg/L as CaCO ₃)	Point of Entrance to Distribution System	4	57.0	80.0
Aluminum (µg/L)	Point of Entrance to Distribution System	4	20.0	96.0
Dissolved Organic Carbon (mg/L)	Point of Entrance to Distribution System	53	2.0	4.0
Total Suspended Solids (mg/L)	Settling Tank Discharge Point	12	2.0	3.0

Minor Maintenance

- Leaking water heater, repair
- Raw water line, pipe plug, replace
- Post treatment hut emergency light failure, investigate/repair
- SCADA programming issue, repair
- PAC Pump 1 inhibited, repair
- Discharge pond, beaver control

Major Maintenance Expense (above \$10,000)

Under Section 11 of O. Reg. 170/03, a description of any major expenses incurred during this reporting period to install, repair or replace required equipment must be included in the annual report. The details of the major expenses for this drinking water system are as follows:

Nothing to report for the reporting period.

APPENDIX A

WTR Submission Confirmation



Ministry of the Environment,
Conservation and Parks

| [WT DATA](#) | [USER PROFILE](#) | [CONTACT US](#) | [HELP](#) | [HOME](#) | [LOGOUT](#) |

Location: [WTRS](#) / [WT DATA](#) / [Input WT Record](#)

WTRS-WT-008

Water Taking Data submitted successfully.

Confirmation:

Thank you for submitting your water taking data online.

Permit Number: 8118-AW2NZT
Permit Holder: THE CORPORATION OF THE CITY OF KAWARTHA LAKES.
Received on: Jan 28, 2026 11:08 AM

This confirmation indicates that your data has been received by the Ministry, but should not be construed as acceptance of this data if it differs from that specified on the Permit Number, assigned to the Permit Holder stated above.