

Drinking-Water System Number:	220000460
Drinking-Water System Name:	North Bay Water Drinking Water System
Drinking-Water System Owner:	The Corporation of the City of North Bay
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2025 to December 31, 2025

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [] No []

Is your annual report available to the public at no charge on a web site on the Internet?

Yes [] No []

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

The Corporation of the City of North Bay
P.O. Box 360
200 McIntyre Street East
North Bay, ON P1B 8H8

Complete for all other Categories.

Number of Designated Facilities served:

Did you provide a copy of your annual report to all Designated Facilities you serve?

Yes [] No []

Number of Interested Authorities you

report to:

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?

Yes [] No []

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
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 of its drinking water?

Yes [] No []

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

[X] Public access/notice via the web

[X] Public access/notice via a newspaper

Describe your Drinking-Water System

The City of North Bay water treatment plant (WTP), water distribution facilities and water distribution piping system are owned and operated by the Corporation of the City of North Bay. The City of North Bay Water Treatment System is classified as a "Large Municipal Residential" Drinking-Water System, Class 3 Water Treatment Plant and Class 4 Water Distribution System with the Drinking-Water System Number: 220000460. The WTP is located at 248 Lakeside Drive in North Bay and treats water from Trout Lake which is part of the Mattawa River watershed. The WTP services a population of approximately 54,000, the permit to take water permits water consumption up to 79,500 cubic meters per day.

The water distribution facilities consist of the following:

Ellendale Reservoir, High lift Pump Station & Re-chlorination Facility;
CFB Standpipe;
Canadore Pumping Station;
Cedar Heights Booster pumping station;
Judge Avenue Valve Chamber;
Birches Road Standpipe and Re-chlorination Station; and
Airport Road Standpipe, Booster Pumping Station and Re-chlorination Facility.
Larocque Rd. Standpipe

The membrane filtration water treatment plant has the design capacity of 79,500 cubic meters per day. The plant is a SCADA controlled membrane filtration system with ultraviolet and chlorine disinfection. The plant also doses fluoride, caustic for pH adjustment and Control Max for corrosion control prior to delivery to the distribution system.

The membrane filtration plant meets the Ontario Drinking Water Standards requirements for the removal/disinfection of 3-log *Giardia Lambia*, 2-log *Cryptosporidium* and 4-log Viruses. The membrane filtration Primary Barrier provides a 3- log *Giardia* removal, 2-log *Cryptosporidium* removal. The chlorine/UV disinfection Secondary Barrier provides for a 0.5 *Giardia* removal, 0.5-log *Cryptosporidium* removal and with chlorine addition gives a 4- log virus removal.

In general the North Bay WTP can be described as follows:

Intake

A 1200mm diameter 45 series polyethylene intake pipe, with a capacity of 80,000 cubic meters per day. The pipe, constructed in 1973, extends approximately 300 meters into Delaney Bay of Trout Lake and includes an intake structure consisting of a steel inlet bell mouth with fiber reinforced plastic (FRP) cage and is in approximately 21.5 meters of water at low water level.

Membrane Feed Pump Well/Prescreening

Two (2) parallel sub-surface well chambers with level monitoring containing, two (2) 6mm mesh manual prescreen in series, five (5) vertical turbine pumps (4 duty and one standby) each rated at 20 ML/d feeding the primary membrane system.

Membrane Feed Strainers

Five (5) 300 micron automatic membranes feed strainers (four duties and one standby).

Treatment Plant Process Areas

A building housing the following process components:

- Primary and secondary membrane filtration system;
- Primary and secondary UV disinfection system;
- Two (2) chlorine contact tanks;
- split high lift pump well
- three (3) chemical storage and delivery rooms housing membrane cleaning and neutralization chemical systems, pre-chlorination system, primary disinfection chemical system, secondary chlorination chemical system, pH adjustment system, fluoride and corrosion control addition system.

Also includes;

- High lift pumping room;
- Generator room;
- Electrical room.
- Compressor/blower room

Administration Area

Two floor administrative area including laboratory/control room, server room, multipurpose training room, offices, washrooms, women's and men's locker rooms, janitor room, building mechanical room and storage room.

Membrane Filtration

Eleven (11) pressurized primary membrane racks treating water from the membrane feed strainers, two(2) pressurized secondary membrane racks treating non-chemical backwash water from the primary membrane racks. The primary racks have a maximum production flow rate of 78.7 MLD based on raw water flow rate of 79.5 MLD, Ancillary systems including backwash pumps, instrument air for operating valves and integrity testing membranes, process blowers, and chemical cleaning and neutralization systems.

UV Disinfection Systems

Three (3) 600mm primary UV reactors (two duty and one standby) treating water from the eleven (11) pressurized primary membrane racks and two (2) secondary membrane racks. Two dedicated UV reactors for secondary membrane racks up stream of primary UV reactors. Each reactor contains medium pressure high intensity lamps housed in quartz sleeves; units equipped with self-cleaning mechanism and intensity sensors.

Chemical systems for:

Primary disinfection

Secondary (residual) disinfection

Fluoride Dosing

pH Adjustment

Corrosion Control

Membrane cleaning

Membrane cleaning solutions neutralization

Chlorine Contact Tank #1 and #2

Two (2) baffled chlorine contact tanks in series with capacities of 688 cubic meters in (tank #1) and 502 cubic meters (tank #2).

High Lift Pump Well #1 and #2

High lift pump well #1 has a capacity of approximately 240 cubic meters and is equipped with one (1) variable speed and two (2) constant speed vertical turbine high lift pumps each rated at 20 MLD. High lift pump well #2 has a capacity of approximately 240 cubic meters and is equipped with one (1) variable speed and one (1) constant speed vertical turbine high lift pump each rated at 20 MLD.

Generator Room

One (1) dual fuel generator set (NG/Diesel) with a rating of 2050KW, to provide power during peak hours and emergency situations.

Wastewater Disposal System**Primary Membrane Backwash Tank**

Tank with a volume of approximately 310 cubic meters,

Two (2) membranes feed pumps supplying water to the Secondary Membrane System.

Secondary Waste Tank

Tank with a volume of approximately 130 cubic meters,

Two (2) pumps, one duty and one standby, to deliver water to the sanitary sewer.

Neutralization Tank #1 and #2

Two (2) tanks each with a volume of 150 cubic meters, pH and Chlorine Residual analyzers. Designed to dechlorinate and adjust pH to suitable levels for wastewater plant.

Sanitary Sewage Disposal

One sump with two (2) submersible pumps in the Administration Area and two (2) sumps and two (2) submersible pumps in the Process Area discharging to the sanitary sewer along Lakeside Drive

The treated water is pumped to the distribution system.

The water distribution facilities can be described as follows:

Ellendale Reservoir High lift Pumping Station and Re-chlorination Facility

The facility is a reinforced concrete at-grade, double cell, un-baffled, treated water reservoir, located at

the east end of Ellendale Drive. The reservoir has an approximate capacity of 18,200 cubic meters, with dimensions of 71 meters by 38 meters by 7 meters. The facility is equipped with a sodium hypochlorite re-chlorination system, on-line continuous water quality analyzer for free chlorine residual monitoring. A 500KW, 346/600V standby diesel generator is available to operate the facility during power outages.

Birch's Road Standpipe and Re-chlorination Station

The facility consists of one (1) 39 meter high, 19 meter diameter, 11,775 cubic meter capacity with a hydrostatic mixing system, the steel standpipe is located near the southwest corner of Birch's Road and Booth Road. The facility is equipped with a sodium hypochlorite re-chlorination system and on-line continuous water quality analyzer for free chlorine. A fixed 7.5kW, 120/240 Volt single phase diesel powered generator to power the re-chlorination and SCADA communications during prolonged power outages.

Larocque Rd. Standpipe

The facility consists of one (1) 22 meter high, 15meter diameter, and 4,000 cubic meter capacity glass fused to steel standpipe with a hydrostatic mixing system. The standpipe is located at the North end of the city on Larocque Rd. to provide water pressure to future development, along with the Canadore College and Nippissing University. There is a 10KW, 120/240V backup generator to maintain communication and SCADA controls during power outages.

Judge Avenue Valve Chamber

The facility consists of two (2) valves and chlorine analyzer designated as the distribution residual compliance point. The station is located near the northeast corner of Judge Avenue and Lakeshore Drive. The facility is equipped with a fixed 7.5kW 120/240 Volt single phase, diesel powered generator to power the valve and SCADA communications during prolonged power outages. Valve control for pressure or tower level integrated with Birches Standpipe. The equipment for a re-chlorination station is located at the facility however not currently in use.

CFB Standpipe

The standpipe is a glass fused to steel un-baffled tank with an electric mixer inside, it is located on the Airport Standpipe property and shares all the buildings resources such as the PLC and standby generator. This Standpipe has a volume of 2,280m³ and supplies water to zone 3 and the Airport Standpipe. The piping at this facility allows this standpipe to also supply water for zone 5 during emergencies and maintenance activities.

Canadore Pumping Station

The facility is equipped with two (2) PRV's, one (1) six inch and one (1) two inch which are responsible for providing water from zone 2 into zone 1. This helps with water age in Laroque standpipe and provides extra fire flow water available to the lower zone.

Cedar Heights Booster Station

This Facility is equipped with two (2) 100 hp high lift pumps responsible for filling the Larocque Rd. Standpipe with a pressurized cushion tank to protect pressure surges in the grid. There is an on-line continuous water quality analyzer to monitor free chlorine residual and a 357kW, 347/600 Volt, 3 phase diesel generator to provide equipment power and SCADA communications during prolonged power outages.

Airport Standpipe, Booster Pumping Station

This 4,000 cubic meter water storage standpipe, booster pumping station and re-chlorination facility was constructed in 2009. With the standpipe, high lift pumps, pressurized cushion tanks and a 500kW back-up diesel generator. This system consists of a standpipe and a series of pumps to facilitate filling of the standpipe and providing pressure to the Airport Rd. and Carmichael Dr. area (Zone 5). Filling the standpipe utilizes three booster pumps (2 duty and 1 standby). The standpipe provides suction pressure for four booster pumps (3 duties and 1 standby) and two fire pumps to provide pressure for Zone 5. Zone 5 is equipped with four (4) pneumatic tanks to mitigate minor pressure fluctuations within the distribution system, and to provide some volume of available storage during power interruptions while the standby power system engages.

List all water treatment chemicals used over this reporting period

Sodium Hydroxide
Sodium Hypochlorite
HydroFluorosilicic Acid
Control Max

Were any significant expenses incurred to?

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

Please provide a brief description and a breakdown of monetary expenses incurred treatment and distribution of water to Major repair and replacement to ensure reliable the water system.

The major capital repairs and replacements include:

- Replaced multiple chemical dosing pumps on chlorination system at the water treatment plant and distribution.
- Upgraded chlorine dosing system at Birch's Standpipe.
- Upgraded chlorine dosing system at Ellendale Reservoir.
- Completed a trial period with a new Turbidity analyzer to begin replacing obsolete models.
- Replaced water level sensors on UV#3, UV #4 & UV#5, long term issue causing units to shut down frequently.
- Replaced multiple electronic ballasts in UV units as they failed.
- Replaced multiple defective valves and actuators on filter racks.
- Upgraded HVAC system for the blower room in the water treatment plant.
- Judge Valve Chamber PLC upgrade completed.

- Engineer Consultant was hired to design a plan to phase in our new filter rack modules as ours are theoretically near the end of life.
- Replace bearing in motor for one High lift pump and one low lift pump after vibration analysis.
- Repaired multiple leaks on Airport Standpipe. Drained entire tank and resealed bottom panels through contractor.
- Replaced Raw chlorine analyzer at the Water Treatment plant to updated model.
- Installed new electric mixer in Larocque Standpipe.
- Replaced bladders in the Sodium Hypochlorite tanks at the Water Treatment Plant.
- Replaced one of the Sodium Hydroxide bladders in tank at the Water Treatment Plant.
- Replaced piping for suction line and bulk sodium hypochlorite system at the Water Treatment plant due to many leaks.
- Replaced Solar tanks at the Water treatment plant for solar water heating system.
- Cleaned and inspected Contact Tank #1 at the Water Treatment Plant.
- Upgraded the air-drying unit on the air compressor system at the Water Treatment Plant.
- Upgraded the Air compressor at the Water Treatment Plant.
- Replaced 170 m of 100mm watermain on Princess St. from Cassels St. to Fraser St. with 200m of 200mm watermain and new valves.
- Replaced 515m of 300mm watermain on McKeown Ave. along with new isolation valves. Old main was abandoned and filled with grout.
- Installed 345m of 400mm water main on Cholette St. from Hwy.11 to Seymour St. with new isolation valves.
- Relined 45m of 600mm water main under Hwy 11 from Cholette St. to Drury St. as an emergency repair.

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
January 30, 2025	Online Analyzer Checks Interval	48 days	N/A	Online analyzers in the Water System need to be checked within a time frame between 20 & 40 days apart for this month. On January 30, 2025, the monthly UV Sensor Reference checks were completed. The previous month they were done on December 13, 2024, which put the interval at 48 days causing a non-compliance.	N/A
October 15, 2025	Lead Exceedance	0.0194	mg/L	Sample from plumbing at 1011 McLeod St. resulted in a lead exceedance of 0.0194 mg/L. Reported to MOH and MECP as per regulations on October 20, 2025. Results sent to homeowners through registered mail. AWQI # 170463	October 20, 2025
November 17, 2025	Maximum of 5 minutes apart	56	Minutes	The UVT Analyzer at the Water Treatment Plant had failed, this resulted in no reading for a period until problem resolved. This resulted in a non-compliance due to missing the maximum 5-minute interval for readings to be recorded. Reported to MECP inspector as required on November 17, 2025.	November 17, 2025
December 2, 2025	Maximum of 5 minutes apart	23	Minutes	Water Treatment plant Computer Servers had gone down and stopped trending and data recording from 17:39 to 18:02. We were unable to collect UV values for this time causing a non-compliance. Reported to MECP as required on December 10, 2025.	December 10, 2025
December 29, 2025	Maximum of 5 minutes apart	25	Minutes	Water Treatment plant Computer Servers had gone down and stopped trending and data recording from 19:17 to 19:42. We were unable to collect UV values for this time causing a non-compliance. Reported to MECP as required on January 2, 2026.	January 2, 2026

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 (#)-(#)	Range of Total Coliform Results (#)-(#)	Number of samples Background Colony Counts	Range of Back-ground Colony Counts	Number of HPC Samples	Range of HPC Results (#)-(#)
Raw	52	0 - 14	3 - 57	52	46- >200	N/A	N/A
Treated	52	0 - 0	0 - 0	52	0 - 0	52	0 - 50
Distribution Fixed Sites	364	0 - 0	0 - 0	364	0 - 2	104	0 - 12
Distribution Random Sites	520	0 - 0	0 - 0	520	0 - 128	156	0 - 74

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

POE Grab Samples	Number of Grab Samples	Range of Results (min #)-(max #)	ODWQS/Operational Requirement
Turbidity	220	0.035 – 0.210 NTU	1.0 NTU max
Chlorine	222	0.96 – 2.17 mg/L	0.05 mg/L min.
Fluoride (If the DWS provides fluoridation)	204	0.56 – 0.80 mg/L	1.5 mg/L max

Distribution Free Chlorine Grab Samples	Number of Grab Samples	Range of Results (min #)-(max #)	ODWQS Requirement
Chlorine Fixed Sites	3060	0.29 – 3.60 mg/L	0.05mg/L min.
Chlorine Random Sites	520	0.20 - 1.75 mg/L	0.05 mg/L min.

POE on-line Continuous Analyzers	Number of Grab Samples	Range of Results (min #)-(max #)	ODWQS/Operational Requirement
Turbidity	8760	0.006 – 0.997 NTU	5.0 NTU max
Chlorine	8760	0.28 – 2.95 mg/L	0.05 mg/L min.
Fluoride (If the DWS provides fluoridation)	8760	0.055 – 1.23 mg/L	1.5 mg/L max

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	15 Jul 25	<0.0001	mg/L	no
Arsenic	15 Jul 25	0.0002	mg/L	no
Barium	15 Jul 25	0.010	mg/L	no
Boron	15 Jul 25	<0.005	mg/L	no
Cadmium	15 Jul 25	<0.000015	mg/L	no
Chromium	15 Jul 25	<0.0010	mg/L	no
Mercury	15 Jul 25	<0.00002	mg/L	no
Selenium	15 Jul 25	<0.001	mg/L	no
Uranium	15 Jul 25	<0.00005	mg/L	no
Sodium	15 Jul 25	10.7	mg/L	no
Fluoride	15 Jul 25	0.62	mg/L	no
Nitrite	7 Jan 25	<RDL	mg/L	no
	9 Apr 25	<RDL	mg/L	
	7 Jul 25	<RDL	mg/L	
	6 Oct 25	<RDL	mg/L	
Nitrate	7 Jan 25	0.153	mg/L	no
	9 Apr 25	<RDL	mg/L	
	7 Jul 25	<RDL	mg/L	
	6 Oct 25	<RDL	mg/L	

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

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
Round 1 Dec 15 2024 to Apr 15 2025	Plumbing	44	<0.00002 – 0.00483	mg/L	0
	Distribution	8	0.00010-0.00146	mg/L	0
Round 2 June 15 2025 to Oct 15 2025	Plumbing	44	0.00003 – 0.01940	mg/L	1
	Distribution	8	0.00008-0.00045	mg/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
Alachlor	15 Jul 25	<0.0003	mg/L	no
Atrazine + N-dealkylated metabolites	15 Jul 25	<0.0005	mg/L	no
Azinphos-methyl	15 Jul 25	<0.001	mg/L	no
Benzene	15 Jul 25	<0.0005	mg/L	no
Benzo(a)pyrene	15 Jul 25	<0.000006	mg/L	no
Bromoxynil	15 Jul 25	<0.0005	mg/L	no
Carbaryl	15 Jul 25	<0.003	mg/L	no
Carbofuran	15 Jul 25	<0.001	mg/L	no
Carbon Tetrachloride	15 Jul 25	<0.0002	mg/L	no
Chlorpyrifos	15 Jul 25	<0.0005	mg/L	no
Diazinon	15 Jul 25	<0.001	mg/L	no
Dicamba	15 Jul 25	<0.001	mg/L	no
1,2-Dichlorobenzene	15 Jul 25	<0.0005	mg/L	no
1,4-Dichlorobenzene	15 Jul 25	<0.0005	mg/L	no
1,2-Dichloroethane	15 Jul 25	<0.0005	mg/L	no
1,1-Dichloroethylene (vinylidene chloride)	15 Jul 25	<0.0005	mg/L	no
Dichloromethane	15 Jul 25	<0.005	mg/L	no
2-4 Dichlorophenol	15 Jul 25	<0.0002	mg/L	no
2,4-Dichlorophenoxy acetic acid	15 Jul 25	<0.001	mg/L	no
Diclofop-methyl	15 Jul 25	<0.0009	mg/L	no
Dimethoate	15 Jul 25	<0.001	mg/L	no
Diquat	15 Jul 25	<0.005	mg/L	no
Diuron	15 Jul 25	<0.005	mg/L	no
Glyphosate	15 Jul 25	<0.025	mg/L	no
HAA (NOTE: show latest annual average)		41.18	ug/L	no
Malathion	15 Jul 25	<0.005	mg/L	no
Metolachlor	15 Jul 25	<0.003	mg/L	no
Metribuzin	15 Jul 25	<0.003	mg/L	no
Monochlorobenzene	15 Jul 25	<0.0005	mg/L	no
Paraquat	15 Jul 25	<0.001	mg/L	no
Pentachlorophenol	15 Jul 25	<0.0002	mg/L	no
Phorate	15 Jul 25	<0.0003	mg/L	no
Picloram	15 Jul 25	<0.005	mg/L	no
Polychlorinated Biphenyls(PCB)	15 Jul 25	<0.00005	mg/L	no
Prometryne	15 Jul 25	<0.0001	mg/L	no
Simazine	15 Jul 25	<0.0005	mg/L	no
THM		60.10	ug/L	no

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
(NOTE: show latest annual average)				
Terbufos	15 Jul 25	<0.0005	mg/L	no
Tetrachloroethylene	15 Jul 25	<0.0005	mg/L	no
2,3,4,6-Tetrachlorophenol	15 Jul 25	<0.0002	mg/L	no
Triallate	15 Jul 25	<0.01	mg/L	no
Trichloroethylene	15 Jul 25	<0.0005	mg/L	no
2,4,6-Trichlorophenol	15 Jul 25	<0.0002	mg/L	no
Trifluralin	15 Jul 25	<0.0005	mg/L	no
Vinyl Chloride	15 Jul 25	<0.0002	mg/L	no
2 Methyl-4-Chlorophenoxyacetic acid (MCPA)	15 Jul 25	<0.01	mg/L	no

THM Dist. Sample Location Mid-Canada Line & Pinewood Park Sample Stations	1 st Quarter Result Value	2 nd Quarter Result Value	3 rd Quarter Result Value	4 th Quarter Result Value	Unit of Measure	Exceed- dance
Sample Period	Jan. 1 – Mar. 31, 2025	Apr.1– June 30, 2025	July 1 – Sept. 30, 2025	Oct. 1 – Dec. 31, 2025	mg/L	
Bromodichloromethane (Average)	0.0040 0.0035	0.0045 0.0037	0.0043 0.0043	0.0047 0.0047	mg/L	
Bromoform(Average)	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	mg/L	
Chloroform(Average)	0.0725 0.0695	0.0890 0.0780	0.09133 0.00887	0.08633 0.09167	mg/L	
Dibromochloromethane (Average)	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	mg/L	
Total Trihalomethanes	0.0750	0.0862	0.0945	0.0935	mg/L	
THM All Distribution sites (Averages)	1 st Quarter Result Value	2 nd Quarter Result Value	3 rd Quarter Result Value	4 th Quarter Result Value	Unit of Measure	Exceed- dance
Sample Period	Jan. 1 – Mar. 31, 2025	Apr.1 – June 30, 2025	July 1, - Sep. 30, 2025	Oct. 1 – Dec. 31, 2025	mg/L	
Bromodichloromethane	0.0029	0.0028	0.0030	0.0030	mg/L	
Bromoform	<0.005	<0.005	<0.005	<0.005	mg/L	
Chloroform	0.05175	0.06242	0.05836	0.05786	mg/L	

THM Dist. Sample Location Mid-Canada Line & Pinewood Park Sample Stations	1st Quarter Result Value	2nd Quarter Result Value	3rd Quarter Result Value	4th Quarter Result Value	Unit of Measure	Exceed- dance
Dibromochloromethane	<0.002	<0.002	<0.002	<0.002	mg/L	
Total Trihalomethanes	0.05436	0.06531	0.06131	0.06061	mg/L	
Total Trihalomethanes 4 Quarter Running Average (Random & Fixed Sites Included)				0.06010	mg/L	No

HAA Distribution Sample Locations Judge Valve & HLPS (Averages)	1st Quarter Result Value	2nd Quarter Result Value	3rd Quarter Result Value	4th Quarter Result Value	Unit of Measure	Exceed- dance
Sample Period	Jan 1 – Mar. 31, 2025	Apr.1 – June. 30, 2025	July 1, - Sep. 30, 2025	Oct. 1 – Dec. 31, 2025		
(Mono)Bromoacetic Acid	<0.0029 < 0.0029	< 0.002 < 0.002	< 0.002 < 0.002	< 0.002 < 0.002	mg/L	
(Mono) Chloroacetic Acid	< 0.0047 < 0.0047	< 0.002 < 0.002	< 0.002 < 0.002	< 0.002 < 0.002	mg/L	
Dibromoacetic Acid	< 0.002 < 0.002	< 0.002 < 0.002	< 0.002 < 0.002	< 0.002 < 0.002	mg/L	
Dichloroacetic Acid	0.0139 0.0148	0.0196 0.0235	0.0157 0.0131	0.0182 0.0160	mg/L	
Trichloroacetic Acid	0.0173 0.0174	0.0269 0.0376	0.0185 0.0142	0.0275 0.0235	mg/L	
Avg.Total Haloacetic Acids	0.03175	0.05500	0.03370	0.04425	mg/L	
Total Haloacetic Acid Running Quarterly Average				0.04118	mg/L	No

Quarterly PFAS Sample (Range)	1st Quarter Result Value	2nd Quarter Result Value	3rd Quarter Result Value	4th Quarter Result Value	Unit of Measure	Exceed-dance
	Jan. 20, 2025	April 14, 2025	July 7, 2025	December 1, 2025	ng/L	
Perfluorodecanoic Acid (PFDA)	<2.0	<2.0	<2.0	<2.0	ng/L	
Perfluorododecanoic Acid (PFDOA)	<2.0	<2.0	<2.0	<2.0	ng/L	
Perfluorodecane Sulfonic Acid (PFDS)	<2.0	<2.0	<2.0	<2.0	ng/L	
Perfluoroheptanoic Acid 3 (PFHPA)	4.1	3.4	2.4	3.2	ng/L	
Perfluorohexanoic Acid (PFHXA)	6.8	6.0	4.9	5.9	ng/L	
Perfluorohexane Sulfonic Acid (PFHXS)	13.1	12.0	11.2	10.6	ng/L	
Perfluorononanoic Acid (PFNA)	<2.0	<2.0	<2.0	<2.0	ng/L	
Perfluorooctanoic Acid (PFOA)	4.6	6.5	5.0	5.4	ng/L	
Perfluorooctane Sulfonic Acid (PFOS)	35.6	38.1	23.5	24.7	ng/L	
Perfluorooctane Sulfonamide (PFOSA)	<2.0	<2.0	<2.0	<2.0	ng/L	
Perfluoroundecanoic Acid (PFUNA)	<1.0	<1.0	<1.0	<1.0	ng/L	
Total Sum for Quarter	64.2	66.0	47.0	49.8	ng/L	No

**** Sample Results and Sums are representing Treated Samples at POE. ******

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	½ MAC VALUE	MAC VALUE	Date of Sample
THM	0.0530	mg/L	0.050	0.100	Jan.6,2025
THM	0.0680	mg/L	0.050	0.100	Jan.6,2025
THM	0.0520	mg/L	0.050	0.100	Jan.6,2025
THM	0.0740	mg/L	0.050	0.100	Jan.6,2025
THM	0.0650	mg/L	0.050	0.100	Jan.6,2025
THM	0.0770	mg/L	0.050	0.100	Jan.6,2025
THM	0.0660	mg/L	0.050	0.100	Jan.7,2025
THM	0.0620	mg/L	0.050	0.100	Jan.7,2025
PFAS(Raw)	56.80	ng/L	35.00	70.00	Jan.20,2025
PFAS(Treated)	64.20	ng/L	35.00	70.00	Jan.20,2025
THM	0.0520	mg/L	0.050	0.100	Feb.10,2025
THM	0.0680	mg/L	0.050	0.100	Feb.10,2025
THM	0.0760	mg/L	0.050	0.100	Feb.10,2025
THM	0.0500	mg/L	0.050	0.100	Feb.10,2025
THM	0.0660	mg/L	0.050	0.100	Feb.10,2025
THM	0.0750	mg/L	0.050	0.100	Feb.10,2025
THM	0.0570	mg/L	0.050	0.100	Feb.10,2025
Total Lead	0.00754	mg/L	0.005	0.010	Feb.24,2025
THM	0.0590	mg/L	0.050	0.100	Mar.3,2025
THM	0.0720	mg/L	0.050	0.100	Mar.3,2025
THM	0.0720	mg/L	0.050	0.100	Mar.3,2025
THM	0.0530	mg/L	0.050	0.100	Mar.3,2025
THM	0.0530	mg/L	0.050	0.100	Mar.5,2025
THM	0.0800	mg/L	0.050	0.100	Apr.8,2025
THM	0.0600	mg/L	0.050	0.100	Apr.8,2025
THM	0.0630	mg/L	0.050	0.100	Apr.8,2025
THM	0.0710	mg/L	0.050	0.100	Apr.8,2025
THM	0.0580	mg/L	0.050	0.100	Apr.8,2025
THM	0.0530	mg/L	0.050	0.100	Apr.8,2025
THM	0.0580	mg/L	0.050	0.100	Apr.8,2025
THM	0.0500	mg/L	0.050	0.100	Apr.8,2025
THM	0.0640	mg/L	0.050	0.100	Apr.9,2025
THM	0.0640	mg/L	0.050	0.100	Apr.9,2025
PFAS(Raw)	73.80	ng/L	35.00	70.00	Apr.14,2025
PFAS(Treated)	66.00	ng/L	35.00	70.00	Apr.14,2025
THM	0.0530	mg/L	0.050	0.100	May 5,2025
THM	0.0790	mg/L	0.050	0.100	May 5,2025
THM	0.0740	mg/L	0.050	0.100	May 5,2025
THM	0.0740	mg/L	0.050	0.100	May 5,2025

Parameter	Result Value	Unit of Measure	½ MAC VALUE	MAC VALUE	Date of Sample
THM	0.0520	mg/L	0.050	0.100	May 5,2025
THM	0.0560	mg/L	0.050	0.100	May 5,2025
THM	0.0570	mg/L	0.050	0.100	May 5,2025
THM	0.0610	mg/L	0.050	0.100	May 5,2025
THM	0.0610	mg/L	0.050	0.100	May 5,2025
THM	0.0510	mg/L	0.050	0.100	May 7,2025
THM	0.0670	mg/L	0.050	0.100	May 7,2025
THM	0.0750	mg/L	0.050	0.100	June 2,2025
THM	0.0650	mg/L	0.050	0.100	June 2,2025
THM	0.1070	mg/L	0.050	0.100	June 2,2025
THM	0.0960	mg/L	0.050	0.100	June 2,2025
THM	0.0790	mg/L	0.050	0.100	June 2,2025
THM	0.0600	mg/L	0.050	0.100	June 2,2025
THM	0.0550	mg/L	0.050	0.100	June 2,2025
THM	0.0640	mg/L	0.050	0.100	June 2,2025
THM	0.0590	mg/L	0.050	0.100	June 2,2025
THM	0.0900	mg/L	0.050	0.100	June 2,2025
THM	0.1040	mg/L	0.050	0.100	June 2,2025
HAA	0.0623	mg/L	0.040	0.080	June 4,2025
HAA	0.0477	mg/L	0.040	0.080	June 4,2025
PFAS(Raw)	46.80	ng/L	35.00	70.00	July 7,2025
PFAS(Treated)	47.00	ng/L	35.00	70.00	July 7,2025
THM	0.0700	mg/L	0.050	0.100	July 7,2025
THM	0.0590	mg/L	0.050	0.100	July 7,2025
THM	0.0730	mg/L	0.050	0.100	July 7,2025
THM	0.1110	mg/L	0.050	0.100	July 7,2025
THM	0.0560	mg/L	0.050	0.100	July 7,2025
THM	0.0590	mg/L	0.050	0.100	July 7,2025
THM	0.0550	mg/L	0.050	0.100	July 7,2025
THM	0.0500	mg/L	0.050	0.100	July 7,2025
THM	0.0600	mg/L	0.050	0.100	July 7,2025
THM	0.0820	mg/L	0.050	0.100	July 7,2025
THM	0.1010	mg/L	0.050	0.100	July 7,2025
Sodium	10.70	mg/L	10.00	20.00	July 15,2025
THM	0.0620	mg/L	0.050	0.100	Aug. 5,2025
THM	0.0610	mg/L	0.050	0.100	Aug. 5,2025
THM	0.0930	mg/L	0.050	0.100	Aug. 5,2025
THM	0.0680	mg/L	0.050	0.100	Aug. 5,2025
THM	0.0550	mg/L	0.050	0.100	Aug. 5,2025
THM	0.0710	mg/L	0.050	0.100	Aug. 5,2025
THM	0.0590	mg/L	0.050	0.100	Aug. 5,2025
THM	0.0860	mg/L	0.050	0.100	Aug. 5,2025

Parameter	Result Value	Unit of Measure	½ MAC VALUE	MAC VALUE	Date of Sample
THM	0.0510	mg/L	0.050	0.100	Sept.2,2025
THM	0.0830	mg/L	0.050	0.100	Sept.2,2025
THM	0.0560	mg/L	0.050	0.100	Sept.2,2025
THM	0.0790	mg/L	0.050	0.100	Sept.2,2025
THM	0.0930	mg/L	0.050	0.100	Sept.2,2025
THM	0.0550	mg/L	0.050	0.100	Oct.6,2025
THM	0.1080	mg/L	0.050	0.100	Oct.6,2025
THM	0.0740	mg/L	0.050	0.100	Oct.6,2025
THM	0.1070	mg/L	0.050	0.100	Oct.6,2025
THM	0.0800	mg/L	0.050	0.100	Oct.6,2025
THM	0.0500	mg/L	0.050	0.100	Oct.6,2025
THM	0.0620	mg/L	0.050	0.100	Oct.8,2025
THM	0.0690	mg/L	0.050	0.100	Oct.8,2025
Total Lead	0.0194	mg/L	0.005	0.010	Oct.20,2025
THM	0.0960	mg/L	0.050	0.100	Nov.3,2025
THM	0.0630	mg/L	0.050	0.100	Nov.3,2025
THM	0.0790	mg/L	0.050	0.100	Nov.3,2025
THM	0.0680	mg/L	0.050	0.100	Nov.3,2025
THM	0.1050	mg/L	0.050	0.100	Nov.3,2025
THM	0.0560	mg/L	0.050	0.100	Nov.5,2025
THM	0.0740	mg/L	0.050	0.100	Nov.5,2025
PFAS(Raw)	52.60	ng/L	35.00	70.00	Dec.1,2025
PFAS(Treated)	49.80	ng/L	35.00	70.00	Dec.1,2025
HAA	0.0408	mg/L	0.040	0.080	Dec.8,2025
HAA	0.0477	mg/L	0.040	0.080	Dec.8,2025
THM	0.0520	mg/L	0.050	0.100	Dec.8,2025
THM	0.0680	mg/L	0.050	0.100	Dec.8,2025
THM	0.0580	mg/L	0.050	0.100	Dec.8,2025
THM	0.0500	mg/L	0.050	0.100	Dec.8,2025
THM	0.0610	mg/L	0.050	0.100	Dec.8,2025
THM	0.0770	mg/L	0.050	0.100	Dec.8,2025

PFAS limits are not regulated at this point, the 70ng/L is a recommended limit by MECP

***THM and HAA (MAC Limits) our calculated by Running Quarterly Averages ***