

# 2023 Annual Drinking Water System Report

#### Simcoe Drinking Water System

# 1. Introduction

The Corporation of Norfolk County has prepared this report to satisfy the requirements of Section 11 of Ontario Regulation (O. Reg.) 170/03. This annual report must be prepared no later than February 28 of each year.

This report covers the period from January 1, 2023 to December 31, 2023, and the information provided complies with the reporting requirements of O. Reg. 170/03 Section 11.

A summary of Simcoe's Municipal Drinking Water System is outlined below:

Drinking Water System Number: 220000371

Drinking Water System Name: Simcoe Drinking Water System

Drinking Water System Owner: Corporation of Norfolk County

Drinking Water System Category: Large Municipal Residential

# 2. Reporting Requirements under Section 11 – O. Reg. 170/03

Section 11 requires that the report include the following information relating to the period covered by the report. This includes:

- A statement of where a report prepared under Schedule 22 will be available for inspection by any member of the public during normal business hours without charge.
- A brief description of the drinking water system, including a list of water treatment chemicals used.
- Any major expenses incurred to install, repair or replace required equipment.



- A summary of any reports made to the Ministry of Environment, Conservation and Parks (MECP) for Adverse Water Quality Incidents (AWQI's).
- A summary of the results of tests performed under O. Reg. 170/03, an approval, the municipal drinking water licence or an order, including an Ontario Water Resources Act (OWRA) order.
- To describe any corrective actions taken

# 3. Evidence of Compliance

#### Availability of the Annual Report

In accordance with Section 11 O. Reg. 170/03, a copy of the annual report will be posted for each system by the end of February each year on the Norfolk County web site at <u>norfolkcounty.ca</u>. A Summary Report on regulatory compliance is required annually under Schedule 22 of Regulation 170/03 for each municipal drinking water system. This report summarizes any known failures to meet the requirements of the Safe Drinking Water Act, its duration and corrective measures. The reports are presented to Norfolk County Council for acceptance before March 31st each year. The reports are made available to the public in April on the Norfolk County web site noted above or by request from the Environmental Services Department. A copy of the annual report is available to the public, free of charge at the following locations as well:

185 Robinson St., Simcoe, ON

## **Description of the Municipal Drinking Water System**

The Simcoe water system supplies drinking water to the Community of Simcoe. The drinking water system currently serves a population of approximately 16,100.

The Cedar Street Well Field is located at 396 Cedar Street and consists of five wells, an infiltration gallery, a reservoir and a booster pumping station.

The Northwest drinking water system located on Fourteenth Street is a well-based supply consisting of two groundwater well sources, an iron and manganese removal plant and a reservoir.

The Chapel Street Well located at 260 Chapel Street also provides water to the Community of Simcoe.



The water distribution system includes a 3,400 m3 elevated storage tank, which acts as a reservoir when the system requires larger amounts of water than the wells can supply (such as firefighting and peak flows) and also helps to maintain a constant system pressure. There are approximately 568 fire hydrants and approximately 112,000 meters of water main and transmission main ranging in size from 150 mm to 400mm in diameter. The piping material consists of cast iron, Polyvinyl Chloride (PVC) and ductile iron pipe.

#### **Water Treatment Chemicals**

The following water treatment chemicals were used during the reporting period:

- Sodium Hypochlorite
- Sodium Silicate
- Hydrofluorosilicic Acid
- Poly Aluminum Chloride
- Sodium Permanganate

#### Significant Expenses Incurred

A brief summary of the major expenses incurred during the reporting period to install, repair or replace required equipment, and value of each, is included in Table 1.

Table 1 – Summary of Expenses Incurred

Activity	Cost Incurred (2023)
General Operations Maintenance and	\$209,031.00
Repair in Water Treatment Plants and	
Distribution System	
Well Rehabilitations	\$48,173.00
New Well Field - Environmental	\$40,778.00
Assessment	
Safety Equipment - Simcoe Water	\$378,645.00
Tower	
PLC Replacements - Simcoe NW Well	\$9,529.33
Replacement of Watermains	\$1,107,367.00



# 4. Microbiological Testing

## E. coli and Total Coliform

As per Schedule 10 of O. Reg. 170/03 – Microbiological Sampling and Testing, bacteriological tests for E. coli and total coliforms were performed weekly on the raw and treated water at the facilities and in the distribution system. The results from the 2023 sampling program for the Simcoe Drinking Water System are shown in the table below.

Location	Number of Samples	Range of E.coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)
Raw Cedar St 1	0		
Raw Cedar St 2	52	0 - 0	0 - 0
Raw Cedar St 3	52	0 - 0	0 – 3
Raw Cedar St 4	52	0 - 0	0 – 1
Raw Cedar St 5	50	0 - 0	0 - 2
Infiltration Gallery	521	0 – 11	0 - 42
Raw Chapel St	52	0 - 0	0 - 0
Raw NW 2	50	0 - 0	0 - 0
Raw NW 3	50	0 - 0	0 - 1
Cedar Street Reservoir POE	52	0 - 0	0 – 0
Chapel Street Well POE	52	0 - 0	0 – 0
North West Reservoir POE	52	0 - 0	0 – 0
Distribution	380	0 - 0	0 – 18

## **Heterotrophic Plate Count (HPC)**

As per Schedule 10 of O. Reg. 170/03 - Microbiological Sampling and Testing, HPC analyses are required from the treated and distribution water. HPC tests are required weekly for treated water and for twenty five percent of the required distribution system bacteriological samples. Results over 500 colonies per 1 mL may indicate a change in water quality but is not considered an indicator of unsafe drinking water. The results



from the 2023 sampling program for the Simcoe Drinking Water System are shown in the table below.

Location	Number of Samples	Range of HPC Results (min #)-(max #)	Unit of Measure
Cedar Street Reservoir POE	52	0 – 20	cfu/mL
Chapel Street Well POE	52	0 - 40	cfu/mL
North West Reservoir POE	52	0 - 40	cfu/mL
Distribution	175	0 – 170	cfu/mL

# 5. Chemical Testing

The Safe Drinking Water Act requires periodic testing of the water for sixty different chemical parameters. The latest results for these parameters are provided in Appendix A. The sampling frequency varies for the different types of water systems. If the concentration of the parameter is found to be above half of the Maximum Allowable Concentration (MAC) under the Ontario Drinking Water Quality Standards, an increased testing frequency of once every three months is required by Regulation. Additional testing is required for the Simcoe Drinking Water System as required by the Municipal Drinking Water Licence for Sodium and Volatile Organic Compounds (VOC). The nitrates levels are about 50% of the MAC of 10 mg/L and are also monitored on a quarterly basis. The Chapel Street Well also has nitrate levels that are about 50% of the MAC of 10 mg/L and are monitored on a quarterly basis.

# 6. Operational Monitoring

Operational checks including raw and treated water turbidity and treated and distribution free chlorine was conducted in accordance with Schedule 7 of Reg. O. 170/03.

## Turbidity

The turbidity of the treated water is monitored continuously at each treatment plant; the turbidity of the raw water is checked on a weekly basis. Turbidity is measured in Nephelometric Turbidity Units (NTU). Under O. Reg. 170/03 turbidity in groundwater is not reportable, however it is desirable to have it <1NTU at the treatment plant and



<5NTU in the distribution system. The results from the 2023 turbidity monitoring program for the Simcoe Drinking Water System are shown in the table below.

Location	Number of Grab Samples	Range of Results	Unit of Measure
Turbidity Cedar St Well#1 Raw		Well - Out of Service	
Turbidity Cedar St Well#2 Raw	168	0.06 – 0.50	NTU
Turbidity Cedar St Well#3 Raw	179	0.06 – 0.80	NTU
Turbidity Cedar St Well#4 Raw	181	0.07 – 1.85	NTU
Turbidity Cedar St Well#5 Raw	181	0.06 – 0.41	NTU
Turbidity NW Well #2 Raw	51	0.20 – 2.20	NTU
Turbidity NW Well #3 Raw	46	0.29 – 1.85	NTU
Turbidity Chapel St Raw	52	0.06– 1.38	NTU
Turbidity NW Filter 1	8760	0.04 – 5.00	NTU
Turbidity NW Filter 2	8760	0.01 – 3.48	NTU
Turbidity NW Filter 3	8760	0.01 – 4.99	NTU

## **Chlorine Residual**

In accordance with Schedule 7 of O. Reg. 170/03, free chlorine residuals in the treated water are monitored continuously at the point of entry to the distribution system at all water treatment plants and wells. The free chlorine in the water distribution system must be above 0.05 mg/L, if it is below this, it must be reported and corrective actions taken. The results from the 2023 chlorine residual monitoring program for Simcoe Drinking Water System are shown in the table below.

Location	Number of Grab Samples	Range of Results	Unit of Measure
Chlorine Cedar St	8760	0.01 – 3.52	mg/L



Location	Number of Grab Samples	Range of Results	Unit of Measure
Chlorine Chapel St	8760	0.01 – 1.99	mg/L
Chlorine NW Res.	8760	0.73 – 1.99	mg/L
Chlorine Residual	745	0.13-1.62	mg/L
<b>Distribution System</b>			

## Fluoride

Hydrofluosilicic acid is added for fluoridation at the Chapel St. Well and the water treatment plants. The fluoride residuals are taken daily at the well and the water treatment plants. The results from the 2023 fluoride residual monitoring program for Simcoe Drinking Water System are shown in the table below.

Location	Number of Grab Samples	Range of Results	Unit of Measure
Fluoride Cedar St	365	0.39 – 0.89	mg/L
Fluoride Chapel St	365	0.12 – 0.89	mg/L
Fluoride NW Res.	365	0.44 – 0.85	mg/L

# 7. Adverse Results

In accordance with Schedule 16 – Reporting of Adverse Test Results and Other Problems of O. Reg. 170/03, there were three Adverse Water Quality Incident (AWQI) issued for the Simcoe Drinking Water System. The following table describes the date the adverse occurred, the parameter, the result, the corrective action taken and the corrective action date.

Incident Date	Parameter	Result	Corrective Action	Corrective Action Date
03/12/2023	Operational Observation	Filter #1 had a lamp failure but did not alarm and continued to run.	The Filter was taken out of service and the bulb was replaced. The filter was put back into service to check operation and a grab sample was taken. An Instrumentation tech was also on site to fix the issue of not alarming out.	03/12/2023



Incident Date	Parameter	Result	Corrective Action	Corrective Action Date
			There was not an adverse condition as all parameters were within compliance limits.	
03/15/2023	Total Coliform	1 Total Coliform	System was flushed, and chlorine residual were checked in the distribution system. Samples were taken and all results were within the Ministry of the Environment Guidelines. No further action was required.	03/20/2023
07/05/2023	Total Coliform	15 Total Coliform	System was flushed, and chlorine residual were checked in the distribution system. Samples were taken and all results were within the Ministry of the Environment Guidelines. No further action was required.	07/11/2023

# APPENDIX A: SUMMARY OF CHEMICAL RESULTS

#### UNDERSTANDING CHEMICAL TEST RESULTS

The following tables summarize the laboratory results of the chemical testing Norfolk County is required to complete. Different parameters are required to be tested for at different frequencies as noted below. Results are shown as concentrations with units of either milligrams per litre (mg/L) or micrograms per litre (ug/L). 1 mg/L is equal to 1000 ug/L. The Maximum Acceptable Concentration (MAC) is the highest amount of a parameter that is acceptable in Municipal drinking water and can be found in the MECP Drinking Water Standards. The Method Detection Limit (MDL) is the lowest amount to which the laboratory can confidently measure. Additional testing is required for the



Simcoe Drinking Water System as required by the Municipal Drinking Water Licence for Sodium and Volatile Organic Compounds (VOC). The following tables summarize the Inorganic parameters tested for during the reporting period or the most resent sample results for Simcoe Drinking Water.

Parameter	Sample Date	Result Value	Unit of	Exceedance
			Measure	
Antimony	08/05/2023	0.6 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Arsenic	08/05/2023	0.2 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Barium	08/05/2023	70.8	ug/L	No
Boron	08/05/2023	34	ug/L	No
Cadmium	08/05/2023	0.003	ug/L	No
Chromium	08/05/2023	0.18	ug/L	No
Lead	Exempt			
Mercury	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Selenium	08/05/2023	0.32	ug/L	No
Sodium	13/02/2023 08/05/2023 14/08/2023 06/11/2023	45.1 47.9 52.9 44.7	mg/L mg/L mg/L mg/L	Yes
Volatile Organic Compounds	14/02/2023 08/05/2023 15/08/2023 07/11/2023	<mdl< td=""><td>ug/L</td><td>No</td></mdl<>	ug/L	No
Uranium	08/05/2023	0.732	ug/L	No
Fluoride	Daily			
Nitrite	13/02/2023 08/05/2023 14/08/2023 06/11/2023	0.003 <mdl 0.003<mdl 0.003<mdl 0.003<mdl< td=""><td>mg/L mg/L mg/L mg/L</td><td>No</td></mdl<></mdl </mdl </mdl 	mg/L mg/L mg/L mg/L	No
Nitrate	13/02/2023 08/05/2023 14/08/2023 06/11/2023	5.54 5.05 5.82 6.27	mg/L mg/L mg/L mg/L	No

#### Simcoe Cedar Street Reservoir

#### Simcoe Chapel Street Well

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	08/05/2023	0.6 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Arsenic	08/05/2023	0.2 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Barium	08/05/2023	76	ug/L	No
Boron	08/05/2023	25	ug/L	No
Cadmium	08/05/2023	0.003 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Chromium	08/05/2023	0.53	ug/L	No
Lead	Exempt	Exempt		
Mercury	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Selenium	08/05/2023	0.43	ug/L	No
Sodium	11/05/2020	20.3	mg/L	No
Uranium	08/05/2023	0.521	ug/L	No
Fluoride	Daily			
Nitrite	13/02/2023 08/05/2023 14/08/2023 06/11/2023	0.003 <mdl 0.003 0.003 0.003<mdl< th=""><th>mg/L mg/L mg/L mg/L</th><th>No</th></mdl<></mdl 	mg/L mg/L mg/L mg/L	No
Nitrate	13/02/2023 08/05/2023 14/08/2023 06/11/2023	4.96 4.84 4.69 4.76	mg/L mg/L mg/L mg/L	No

## Simcoe Northwest Reservoir

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	08/05/2023	0.6 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Arsenic	08/05/2023	0.2 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Barium	08/05/2023	71.1	ug/L	No
Boron	08/05/2023	17	ug/L	No
Cadmium	08/05/2023	0.003 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Chromium	08/05/2023	0.09	ug/L	No
Lead	Exempt			
Mercury	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Selenium	08/05/2023	0.16	ug/L	No
Sodium	11/05/2020	9.58	mg/L	No
Uranium	08/05/2023	0.555	ug/L	No
Fluoride	Daily			
Nitrite	13/02/2023 08/05/2023 14/08/2023	0.003 <mdl 0.003<mdl 0.003<mdl< th=""><th>mg/L mg/L mg/L</th><th>No</th></mdl<></mdl </mdl 	mg/L mg/L mg/L	No



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
	06/11/2023	0.003 <mdl< th=""><th>mg/L</th><th></th></mdl<>	mg/L	
Nitrate	13/02/2023	2.05	mg/L	
	08/05/2023	2.19	mg/L	No
	14/08/2023	0.38	mg/L	INU
	06/11/2023	2.43	mg/L	

The following tables summarize the Organic parameters tested for during the reporting period or the most resent sample results for the Simcoe Drinking Water System.

#### Simcoe Cedar Street Reservoir

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Atrazine + N-	08/05/2023			
dealkylated		0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
metobolites				
Azinphos-methyl	08/05/2023	0.05 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Benzene	08/05/2023	0.32 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Benzo(a)pyrene	08/05/2023	0.004 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Bromoxynil	08/05/2023	0.33 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbaryl	08/05/2023	0.05 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbofuran	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbon Tetrachloride	08/05/2023	0.17 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Chlorpyrifos	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diazinon	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dicamba	08/05/2023	0.20 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,2- Dichlorobenzene	08/05/2023	0.41 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,4- Dichlorobenzene	08/05/2023	0.36 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,2-Dichloroethane	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,1-	08/05/2023	0.33 <mdl< th=""><th></th><th></th></mdl<>		
Dichloroethylene				
(vinylidene chloride)				
Dichloromethane	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2-4 Dichlorophenol	08/05/2023	0.15 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
2,4- Dichlorophenoxy	08/05/2023	0.19 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
acetic acid (2,4-D)			_	
Diclofop-methyl	08/05/2023	0.40 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dimethoate	08/05/2023	0.06 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diquat	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diuron	08/05/2023	0.03 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Glyphosate	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Malathion	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
MCPA	08/05/2023	0.00012 <mdl< th=""><th>mg/L</th><th>No</th></mdl<>	mg/L	No
Metolachlor	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Metribuzin	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Monochlorobenzene	08/05/2023	0.3 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Paraquat	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Pentachlorophenol	08/05/2023	0.15 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Phorate	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Picloram	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Polychlorinated Biphenyls(PCB)	08/05/2023	0.04 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Prometryne	08/05/2023	0.03 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Simazine	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Terbufos	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Tetrachloroethylene	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2,3,4,6- Tetrachlorophenol	08/05/2023	0.20 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Triallate	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Trichloroethylene	08/05/2023	0.44 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2,4,6- Trichlorophenol	08/05/2023	0.25 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Trifluralin	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Vinyl Chloride	08/05/2023	0.17 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No

# Chapel Street Well

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Atrazine + N- dealkylated metobolites	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Azinphos-methyl	08/05/2023	0.05 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Benzene	08/05/2023	0.32 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Benzo(a)pyrene	08/05/2023	0.004 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Bromoxynil	08/05/2023	0.33 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbaryl	08/05/2023	0.05 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbofuran	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbon Tetrachloride	08/05/2023	0.17 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Chlorpyrifos	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diazinon	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dicamba	08/05/2023	0.20 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,2- Dichlorobenzene	08/05/2023	0.41 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,4- Dichlorobenzene	08/05/2023	0.36 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,2-Dichloroethane	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,1- Dichloroethylene (vinylidene chloride)	08/05/2023	0.33 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dichloromethane	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2-4 Dichlorophenol	08/05/2023	0.15 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2,4- Dichlorophenoxy acetic acid (2,4-D)	08/05/2023	0.19 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diclofop-methyl	08/05/2023	0.40 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dimethoate	08/05/2023	0.06 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diquat	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diuron	08/05/2023	0.03 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Glyphosate	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Malathion	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
МСРА	08/05/2023	0.00012 <mdl< th=""><th>mg/L</th><th>No</th></mdl<>	mg/L	No
Metolachlor	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Metribuzin	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Monochlorobenzene	08/05/2023	0.3 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No



Parameter	Sample Date	Result Value	Unit of	Exceedance
	-		Measure	
Paraquat	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Pentachlorophenol	08/05/2023	0.15 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Phorate	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Picloram	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Polychlorinated	08/05/2023	0.04 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Biphenyls(PCB)				
Prometryne	08/05/2023	0.03 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Simazine	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Terbufos	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Tetrachloroethylene	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2,3,4,6-	08/05/2023	0.20 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Tetrachlorophenol				
Triallate	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Trichloroethylene	08/05/2023	0.44 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2,4,6-	08/05/2023	0.25 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Trichlorophenol				
Trifluralin	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Vinyl Chloride	08/05/2023	0.17 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No

#### Simcoe Northwest Reservoir

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Atrazine + N-	08/05/2023			
dealkylated		0.01	ug/L	No
metobolites				
Azinphos-methyl	08/05/2023	0.05 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Benzene	08/05/2023	0.32 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Benzo(a)pyrene	08/05/2023	0.004 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Bromoxynil	08/05/2023	0.33 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbaryl	08/05/2023	0.05 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbofuran	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Carbon	08/05/2023	0.17 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Tetrachloride				
Chlorpyrifos	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diazinon	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dicamba	08/05/2023	0.20 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No



Parameter	Sample Date	<b>Result Value</b>	Unit of	Exceedance
			Measure	
1,2-	08/05/2023	0.41 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dichlorobenzene				
1,4-	08/05/2023	0.36 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dichlorobenzene				
1,2-Dichloroethane	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
1,1-	08/05/2023			
Dichloroethylene		0.33 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
(vinylidene chloride)				
Dichloromethane	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2-4 Dichlorophenol	08/05/2023	0.15 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2,4-	08/05/2023	0.19 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dichlorophenoxy				
acetic acid (2,4-D)				
Diclofop-methyl	08/05/2023	0.40 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Dimethoate	08/05/2023	0.06 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diquat	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Diuron	08/05/2023	0.03 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Glyphosate	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Malathion	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
MCPA	08/05/2023	0.00012	mg/L	No
		<mdl< th=""><th></th><th></th></mdl<>		
Metolachlor	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Metribuzin	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Monochlorobenzene	08/05/2023	0.3 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Paraguat	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Pentachlorophenol	08/05/2023	0.15 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Phorate	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Picloram	08/05/2023	1 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Polychlorinated	08/05/2023	0.04 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Biphenyls(PCB)				
Prometryne	08/05/2023	0.03 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Simazine	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Terbufos	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Tetrachloroethylene	08/05/2023	0.35 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
2,3,4,6-	08/05/2023	0.20 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Tetrachlorophenol				
Triallate	08/05/2023	0.01 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Trichloroethylene	08/05/2023	0.44 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
	00,00,2020			1.1.5



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
2,4,6-	08/05/2023	0.25 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Trichlorophenol				
Trifluralin	08/05/2023	0.02 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Vinyl Chloride	08/05/2023	0.17 <mdl< th=""><th>ug/L</th><th>No</th></mdl<>	ug/L	No
Total Haloacetic	13/02/2023	13.5	ug/L	
Acid	08/05/2023	15.2	ug/L	No
Average 16.53 ug/L	14/08/2023	16.8	ug/L	
	06/11/2023	20.6	ug/L	
THM Annual	13/02/2023	30	ug/L	
Average 37 ug/L	08/05/2023	32	ug/L	No
	14/08/2023	39	ug/L	
	06/11/2023	47	ug/L	

The following table summarizes the lead testing as set out in Schedule 15.1 of O. Reg. 170/03 during the reporting period.

Location Type	Sample Date	Number of Samples	Range of Lead Results (min#) – (max #) ug/L	Number of Exceedances
Plumbing		Exempt		
Distribution		None. Next required sampling is Spring 2024.		