



WIARTON WATER FILTRATION
PLANT

**2023
SECTION 22
SUMMARY REPORT**

**WIARTON
DRINKING WATER SYSTEM**

For the period of:
JANUARY 1, 2023 TO DECEMBER 31, 2023

Prepared for the Town of South Bruce Peninsula by the Ontario Clean Water Agency



This report was prepared in accordance with the requirements of [O.Reg 170/03, Schedule 22, Summary Reports for Municipalities](#) for the following system and reporting period:

Drinking-Water System Number:	220002681
Drinking-Water System Name:	Warton Drinking Water System
Drinking-Water System Owner:	The Town of South Bruce Peninsula
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2023 – December 31, 2023

1. Issue(s) of Non-Compliance

The 2023 Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on December 14, 2023 for the period covering January 11, 2023 to December 14, 2023. On January 31, 2023 the Inspection Report was issued and an inspection rating of 100% was received.

The following is a summary of non-compliances noted in the MECP Inspection Reports, as well as the duration and the measures that were taken to correct the non-compliance. If any self-reported non-compliances were included in the inspection report, they will be noted in Table 1.

Table 1. Non-Compliances and Corrective Actions noted in the 2023 MECP Inspection Report

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
N/A	N/A	N/A

The following table (Table 2) is a summary of any incidents that the Operating Authority interpreted as instances where any requirements of the Act, the regulations, the system's approval, drinking water works permit (DWWP), municipal drinking water licence (MDWL), and any orders applicable were not met. The Operating Authority reported the following incidents to the MECP and confirmation of whether the incidents are considered non-compliances are noted in the MECP Inspection Report and included in Table 1.

Table 2. Self-Reported Incidents and Corrective Actions for the Reporting Period

Incident	Duration	Corrective Actions
N/A	N/A	N/A

For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Wiarton Drinking Water System Annual Report (Section 11).

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows as well as a comparison to the rated capacity and flow rates approved in the system’s approval, DWWP or MDWL.

As required by the MDWL, regulatory flow measuring devices are checked/verified and where necessary, calibrated. These checks/verifications/calibrations are performed annually by a third party to ensure the flow measuring devices are within acceptable deviation limits.

2.1 Treated Water

Municipal Drinking Water License (MDWL):	094-102 (Issue Number: 4)
Allowable Rated Capacity:	5,400 m ³ /day
Allowable Flowrate into Treatment System:	N/A

As per the MDWL, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the listed rated capacity. However, the MDWL allows a system to be operated temporarily at a maximum daily volume and/or a maximum flowrate above the values set out in the MDWL for the purposes of fighting a large fire or for the maintenance of the drinking water system.

Table 3. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for 2023

Treated Water Flow					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	787	14.6%	1,162	21.5%	24,409
February	813	15.1%	1,155	21.4%	22,763
March	833	15.4%	1,147	21.3%	25,826
April	822	15.2%	1,076	19.9%	24,657
May	864	16.0%	1,136	21.1%	26,795
June	999	18.5%	1,391	25.8%	29,970
July	1,069	19.8%	1,520	28.2%	33,138
August	972	18.0%	1,397	25.9%	30,141
September	912	16.9%	1,326	24.6%	27,373
October	888	16.5%	1,246	23.1%	27,518
November	899	16.7%	1,191	22.1%	26,962
December	952	17.6%	1,502	27.8%	29,508
2023	901	16.7%	1,520	28.2%	329,060

A review of flow information for the reporting period indicates that the drinking water system operated within the rated capacity specified in the MDWL, for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system.

Table 4. Treated Water Annual and Monthly Average and Maximum Flowrates for 2023

Treated Water Flowrate		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	67.74	75.19
February	68.14	75.57
March	68.10	75.66
April	67.91	75.37
May	67.49	75.74
June	67.04	76.45
July	67.08	76.81
August	66.40	76.37
September	65.84	76.34
October	64.45	76.54
November	67.07	76.22
December	66.57	77.90
2023	66.98	77.90

The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into a treatment subsystem. A summary of flowrates of water that flows into the treatment system can be found in Table 6.

2.2 Raw Water

Permit to Take Water Number:	5181-9DFR4C
Allowable Maximum Raw Water Volume – Georgian Bay:	5,394.1 m ³ /day
Allowable Maximum Raw Water Flowrate – Georgian Bay:	3,746 L/min (62.43 L/sec)

As per the PTTW, water shall only be taken from the specified source(s) and at the rates and amounts taken as specified in the permit.

Table 5. Raw Water Monthly Average, Maximum Flow and Total Volume for 2023

Raw Water Flow – Georgian Bay					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	862	16.0%	1,265	23.4%	26,736
February	876	16.2%	1,218	22.6%	24,523
March	907	16.8%	1,154	21.4%	28,125
April	874	16.2%	1,225	22.7%	26,218
May	930	17.2%	1,287	23.9%	28,819
June	1,088	20.2%	1,444	26.8%	32,652
July	1,186	22.0%	1,789	33.2%	36,771
August	1,048	19.4%	1,543	28.6%	32,492
September	984	18.2%	1,330	24.6%	29,516
October	988	18.3%	1,358	25.2%	30,643
November	968	17.9%	1,230	22.8%	29,030
December	1,024	19.0%	1,656	30.7%	31,732
2023	978	18.1%	1,789	33.2%	357,256

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume.

Table 6. Raw Water Annual and Monthly Average and Maximum Flowrates for 2023

Raw Water Flowrate		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	37.06	52.39
February	39.09	51.90
March	37.61	51.67
April	36.63	52.46
May	35.14	52.91
June	47.89	53.11
July	47.88	53.06
August	47.08	54.24
September	46.58	52.75
October	46.49	68.10 ^{6a}
November	46.57	52.23
December	46.24	52.43
2023	42.87	68.10^{6a}

^{6a}The PTTW defines the maximum flowrate as 3,746 L/min which has been converted it to 62.43 L/s for the table above. While performing maintenance on the filter backwash cycle on October 8-10, 2023, the flow rate of 62.43 L/s was exceeded for a maximum of 6.5 minutes on October 8, 18 minutes on October 9 and 4 minutes on October 10, 2023. However, it did not exceed PTTW allowance of 75 L/s for less than an hour to allow for maintenance on any of the days.

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate.



For the period of:
JANUARY 1, 2023 TO DECEMBER 31, 2023

Prepared for the Town of South Bruce Peninsula by the Ontario Clean Water Agency



Drinking Water System Regulation: O. Reg 170/03
 Section 11 Annual Report: January 1, 2023 to December 31, 2023
 Town of South Bruce Peninsula: Wiarton Drinking Water System

This report was prepared in accordance with the requirements of [O.Reg 170/03, Section 11, Annual reports](#) for the following system and reporting period:

Drinking Water System Number:	220002681
Drinking Water System Name:	Warton Drinking Water System
Drinking Water System Owner:	Town of South Bruce Peninsula
Drinking Water System Category:	Large Municipal Residential
Reporting Period:	January 1, 2023 – December 31, 2023

Does your Drinking Water System serve more than 10,000 people?

No

Is your Annual Report available to the public at no charge on a website on the Internet?

Yes

Note: If a large municipal residential system serves more than 10,000 people, the owner of the system shall ensure that a copy of every report prepared under this section is available to the public at no charge on a website on the Internet. O. Reg. 170/03, Section 11. (10)

Location where Summary Report required under O. Reg 170/03, Schedule 22 will be available for inspection. (O. Reg 170/03, Section 11.(6)(5)):

- Town of South Bruce Peninsula, 315 George Street, Wiarton ON, N0H 2T0
- <https://www.southbrucepeninsula.com/en/town-hall/water-and-sewer-reports.aspx>

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
Oliphant Drinking Water System	220007695
Oxenden Distribution System	260004215

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

How system users are notified that the annual report is available, and is free of charge:

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Public access/notice via the web |
| <input checked="" type="checkbox"/> | Public access/notice via Government Office |
| <input type="checkbox"/> | Public access/notice via a newspaper |
| <input checked="" type="checkbox"/> | Public access/notice via Public Request |
| <input type="checkbox"/> | Public access/notice via a Public Library |

Public access/notice via other method: _____

Note: The owner of a drinking water system shall ensure that a copy of an annual report for the system is given, without charge, to every person who requests a copy. ((O.Reg 170/03, Section 11.(7)).

Description of Drinking Water System (O.Reg 170/03, Section 11.(6)(a)):

The Wiarton Drinking Water System (DWS) is classified as a Class III Treatment and Class II Distribution and categorized as a Large Municipal Residential Drinking Water System servicing an approximate population of 2,300 persons. The Wiarton Drinking Water System is owned by the Corporation of the Town of South Bruce Peninsula and operated by the Ontario Clean Water Agency (OCWA) in Wiarton, Ontario. The Wiarton Water Treatment Plant is supplied by Colpoy's Bay (Georgian Bay) and the treatment system consists of the following components:

- Sodium hypochlorite (pre-chlorination for zebra mussel control and chlorination after filtration)
- A bar screen and standby travelling screen (low lift station section)
- Coagulation and Flocculation
- Filtration (dual media gravity filters)
- Waste Residual Management (filter backwash wastewater sedimentation tank with sludge withdrawal. Sludge is discharged to the sanitary sewer and the supernatant is dechlorinated and then discharged to Colpoy's Bay)
- Polymer system (for enhancing settling in the wastewater sedimentation tank)
- Sodium Bisulphate feed system (prior to flocculation or to raw water well for dechlorination/pH correction and to the wastewater residual management system for dechlorination)
- UV Disinfection System
- Activated carbon feed system for taste and odour control (currently is not being used)
- Clearwell (for storage and to achieve required contact time)
- SCADA System (for monitoring and control)
- Diesel generator set (for emergency back-up power)

The distribution system consists of the following:

- Wiarton Standpipe and Booster Station.
- Approximately 23.5 kilometers of distribution water mains

The Wiarton water treatment plant also supplies treated drinking water via transportation to Oliphant DWS, located within the Town of South Bruce Peninsula and Oxenden DS, which is located within the Town of Georgian Bluffs.

List of water treatment chemicals used by the system during the reporting period (O.Reg 170/03, Section 11.(6)(a)):

- Sodium Hypochlorite 12%
- PAX-XL1900 Coagulation

- LIPQIPAM A-307PG Flocculation
- Sodium Metabisulfite

Significant expenses were incurred to:

- | | |
|-------------------------------------|---------------------------------------|
| <input checked="" type="checkbox"/> | Install required equipment |
| <input checked="" type="checkbox"/> | Repair required equipment |
| <input checked="" type="checkbox"/> | Replace required equipment |
| <input type="checkbox"/> | No significant expenses were incurred |

Description of major expenses during the reporting period to install, repair or replace required equipment (O.Reg 170/03, Section 11.(6)(e)):

- PLC Upgrade
- Reservoir inspection and cleaning
- Inline analyzer feed pump
- Miscellaneous distribution parts

Summary of any reports/notices submitted to the Ministry and/or Spills Action Centre in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 during the reporting period, including a description of any corrective actions taken under Schedule 17 or 18 (O. Reg 170/03, Section 11.(6)(b),(d)):

Incident Date (yyyy/mm/dd)	Parameter/ Notice of	Result & Unit	Summary of Reporting, Corrective Actions & Resolution
N/A	N/A	N/A	N/A

Table 1. Microbiological testing done under the Schedule 11 of Regulation 170/03 during this reporting period (O.Reg 170/03, Section 11.(6)(c)).

Location	Number of Samples	Range of E. Coli or Fecal Results		Range of Total Coliform Results		Number of HPC Samples	Range of HPC Samples	
		Min.	Max.	Min.	Max.		Min.	Max.
Raw^{1a}	52	0	NDOGT*	0	NDOGT*	N/A	N/A	N/A
Treated^{1b}	52	0	0	0	0	52	0	1
Distribution^{1c}	156	0	0	0	0	52	0	1

Note: HPC = Heterotrophic Plate Count, NDOGT = No Data: Target Overgrown with Target Bacteria

Note: Units for E.Coli or Fecal Results are cfu/100 mL, units for Total Coliform Results are cfu/100 mL, units for HPC results are cfu/1mL.

^{1a}O.Reg 170/03, Schedule 10-4. (1)(3) requires for a large municipal residential system that a water sample is taken at least once every week from the drinking water system's raw water, before any treatment is applied to the water and tested for E.Coli and total coliforms.

^{1b}O Reg 170/03, Schedule 10-3 requires for a large municipal residential system that a treated water sample is taken at least once every week and tested for E.Coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic count (HPC).

^{1c}O.Reg. 170/03 Schedule 10-2.(1)(2)(3) requires that a system that serves 100,000 people or less, at least eight distribution samples, plus one additional sample for every 1,000 people served by the system to be taken every month, with at least one of the samples being taken in each week and be tested for E.Coli, Total Coliforms. At least 25 percent of the samples required must be tested for general bacteria population expressed as colony counts on heterotrophic plate count (HPC). The number of people served by the system is 2,300 (as confirmed with the Owner on March 9, 2023), and therefore requires at minimum ten distribution samples per month.

Table 2. Operational testing done under Schedule 7 of Regulation 170/03 during the period covered by this Annual Report (O. Reg 170/03, Section 11.(6)(c)).

Parameter & Location	Number of Samples	Range of Results	
		Min.	Max.
Turbidity, Filter A (NTU) ^{2a}	8760	0.01	0.18 ^{2a}
Turbidity, Filter B (NTU) ^{2a}	8760	0.01	0.29 ^{2a}
Free Chlorine Residual, Treated Water (mg/L) ^{2b}	8760	0.77	1.89
Free Chlorine Residual, Distribution Water (mg/L) ^{2c}	975	0.48	1.56

Note: The number of samples used for continuous monitoring units is 8760.

^{2a}If a drinking water system obtains water from a raw water supply that is surface water and the system provides filtration, subsection 7-3(1) does not apply and the owner of a system shall ensure that sampling and testing for turbidity is carried out by continuous monitoring equipment on each filter effluent line (O.Reg.170/03, Schedule 7-3.(2)(b)). Monthly filter efficiency requirements met.

^{2b}O.Reg 170/03 Schedule 7-2.(1) requires a drinking water system that provides chlorination for primary disinfection to sample and test for free chlorine residual with continuous monitoring equipment in the treatment process at or near a location where the intended contact time has just been completed.

^{2c}O.Reg 170/03 Schedule 7-2.(3) requires a large municipal residential system that provides secondary disinfection to take at least seven distribution samples each week and immediately tested for free chlorine residual, if the system provides chlorination and does not provide chloramination, unless at least one sample is taken on each day of the week. At Wiarton DWS, secondary disinfection is monitored by taking one sample each day of the week.

Table 3. Summary of additional testing and sampling results carried out in accordance with the requirement of an approval, municipal drinking water licence or order (including OWRA) or other legal instrument. (O. Reg 170/03, Section 11.(6)(c))

Legal Instrument & Issue Date (yyyy/mm/dd)	Parameter	Date Sampled	Number of Samples	Annual Average	Allowable Annual Average
2020-03-06 MDWL #094-102 (Issue 4)	Total Suspended Solids (Filter backwash)	2023 (Monthly)	12	12.4	25 mg/L
2020-03-06 MDWL #094-102 (Issue 4)	Total Chlorine Residual (Filter backwash)	2023 (Monthly)	12	0.00	0.02 mg/L

Table 4. Summary of Inorganic parameters tested during this reporting period or the most recent sample results (O.Reg 170/03, Section 11.(6)(c))

Parameter & Location	Sample Date ^{4a} (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Antimony: Sb (µg/L) - TW	2023/01/03	<MDL 0.6	6.0	No
Arsenic: As (µg/L) - TW	2023/01/03	0.4	10.0	No
Barium: Ba (µg/L) - TW	2023/01/03	12.9	1000.0	No
Boron: B (µg/L) - TW	2023/01/03	13.0	5000.0	No
Cadmium: Cd (µg/L) - TW	2023/01/03	<MDL 0.003	5.0	No
Chromium: Cr (µg/L) - TW	2023/01/03	0.20	50.0	No
Mercury: Hg (µg/L) - TW	2023/01/03	<MDL 0.01	1.0	No
Selenium: Se (µg/L) - TW	2023/01/03	0.08	50.0	No
Uranium: U (µg/L) - TW	2023/01/03	0.076	20.0	No
Fluoride (mg/L) - TW	2023/01/03 ^{4b}	<MDL 0.06	1.5	No
Nitrite (mg/L) - TW	2023/01/03	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2023/04/04	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2023/07/04	<MDL 0.003	1.0	No
Nitrite (mg/L) - TW	2023/10/03	<MDL 0.003	1.0	No
Nitrate (mg/L) - TW	2023/01/03	0.257	10.0	No
Nitrate (mg/L) - TW	2023/04/04	0.272	10.0	No
Nitrate (mg/L) - TW	2023/07/04	0.210	10.0	No
Nitrate (mg/L) - TW	2023/10/03	0.204	10.0	No

Note: MDL = Minimum Detection Limit, TW = Treated Water

^{4a}The owner of a large municipal residential system that obtains water from a raw water supply that is surface water shall ensure that at least one water sample for inorganics is taken every 12

months (O.Reg 170/03, Schedule 13-2.(1)). The last set of samples were collected and tested in 2023, the next set of samples are scheduled to be collected and tested in 2024.

^{4b}Fluoride is reportable every 60 months. The most recent Fluoride samples were tested in 2023. The next set of samples is scheduled to be tested in 2028.

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result	Aesthetic Objective (AO)	Exceedance	
				AO	> 20 mg/L
Sodium: Na (mg/L) - TW	2023/01/03 ^{4c}	6.7	200	No	No

Note: MDL = Minimum Detection Limit, TW = Treated Water

Note: There is no regulatory Maximum Allowable Concentration (MAC) for Sodium. The aesthetic objective (AO) for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be 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.

^{4c}Sodium is reportable every 60 months. The most recent Sodium samples were tested in 2023, the next set of reportable samples is scheduled to be tested in 2028

Table 5: Summary of lead testing under Schedule 15.1 during this reporting period (O.Reg 170/03, Section 11.(6)(g))

Location/Type & Parameter	Number of Samples ^{5a}	Range of Results		Number of Lead Exceedances (MAC = 10 µ/L)
		Min.	Max.	
Period: January 1 to April 15				
Plumbing – Lead (µg/L) ^{5b}	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L) ^{5c}	N/A	N/A	N/A	N/A
Distribution – Alkalinity (mg/L as CaCO ₃)	2	74	75	N/A
Distribution – pH	2	8.14	8.15	N/A
Period: June 15 to October 15				
Plumbing – Lead (µg/L) ^{5b}	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L) ^{5c}	N/A	N/A	N/A	N/A
Distribution – Alkalinity (mg/L as CaCO ₃)	2	72	72	N/A
Distribution – pH	2	8.14	8.23	N/A
Period: December 15 to 31				
Plumbing – Lead (µg/L) ^{5b}	N/A	N/A	N/A	N/A
Distribution – Lead (µg/L) ^{5c}	N/A	N/A	N/A	N/A
Distribution – Alkalinity (mg/L as CaCO ₃)	N/A	N/A	N/A	N/A
Distribution - pH	N/A	N/A	N/A	N/A

Note: this is required for large municipal residential systems, small municipal residential systems or non-municipal year-round residential system. (O.Reg 170/03, Section 11.(6)(g))

^{5a}This system follows a reduced sampling schedule (O.Reg. 170/03, Section 15.1.5). The number of sampling points for the system is based on the population served by the system. The number

of people served by the system is 2,300 (as confirmed with the Owner on March 9, 2023), and therefore requires 2 distribution sampling points per sampling period.

^{5b}Plumbing samples are not applicable as this system qualifies for the plumbing exemption per O. Reg 170/03 Schedule 15.1-5 (9) (10).

^{5c}This system follows a reduced sampling schedule (O.Reg 170/03, Section 15.1.5). Distribution lead samples are collected every 36 months. The most recent set of distribution lead samples were collected within the winter period of December 15, 2020 to April 15, 2021 and summer period of June 15, 2021 to October 15, 2021. The next set of distribution lead samples is scheduled to be collected within the winter period of December 15, 2023 to April 15, 2024 and summer period of June 15, 2024 to October 15, 2024.

Table 6: Summary of Organic parameters sampled during this reporting period or the most recent sample results (O.Reg 170/03, Section 11.(6)(c)).

Parameter & Location	Sample Date ^{6a} (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Alachlor (µg/L) - TW	2023/01/03	<MDL 0.02	5.0	No
Atrazine + N-dealkylated metabolites (µg/L) - TW	2023/01/03	<MDL 0.01	5.0	No
Azinphos-methyl (µg/L) - TW	2023/01/03	<MDL 0.05	20.0	No
Benzene (µg/L) - TW	2023/01/03	<MDL 0.32	1.0	No
Benzo(a)pyrene (µg/L) - TW	2023/01/03	<MDL 0.004	0.01	No
Bromoxynil (µg/L) - TW	2023/01/03	<MDL 0.33	5.0	No
Carbaryl (µg/L) - TW	2023/01/03	<MDL 0.05	90.0	No
Carbofuran (µg/L) - TW	2023/01/03	<MDL 0.01	90.0	No
Carbon Tetrachloride (µg/L) - TW	2023/01/03	<MDL 0.17	2.0	No
Chlorpyrifos (µg/L) - TW	2023/01/03	<MDL 0.02	90.0	No
Diazinon (µg/L) - TW	2023/01/03	<MDL 0.02	20.0	No
Dicamba (µg/L) - TW	2023/01/03	<MDL 0.2	120.0	No
1,2-Dichlorobenzene (µg/L) - TW	2023/01/03	<MDL 0.41	200.0	No
1,4-Dichlorobenzene (µg/L) - TW	2023/01/03	<MDL 0.36	5.0	No
1,2-Dichloroethane (µg/L) - TW	2023/01/03	<MDL 0.35	5.0	No
1,1-Dichloroethylene (µg/L) - TW	2023/01/03	<MDL 0.33	14.0	No
Dichloromethane (Methylene Chloride) (µg/L) - TW	2023/01/03	<MDL 0.35	50.0	No

Drinking Water System Regulation: O. Reg 170/03
 Section 11 Annual Report: January 1, 2023 to December 31, 2023
 Town of South Bruce Peninsula: Wiarton Drinking Water System

Parameter & Location	Sample Date ^{6a} (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
2,4-Dichlorophenol (µg/L) - TW	2023/01/03	<MDL 0.15	900.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (µg/L) - TW	2023/01/03	<MDL 0.19	100.0	No
Diclofop-methyl (µg/L) - TW	2023/01/03	<MDL 0.4	9.0	No
Dimethoate (µg/L) - TW	2023/01/03	<MDL 0.06	20.0	No
Diquat (µg/L) - TW	2023/01/03	<MDL 1.0	70.0	No
Diuron (µg/L) - TW	2023/01/03	<MDL 0.03	150.0	No
Glyphosate (µg/L) - TW	2023/01/03	<MDL 1.0	280.0	No
Malathion (µg/L) - TW	2023/01/03	<MDL 0.02	190.0	No
Metolachlor (µg/L) - TW	2023/01/03	<MDL 0.01	50.0	No
Metribuzin (µg/L) - TW	2023/01/03	<MDL 0.02	80.0	No
Monochlorobenzene (Chlorobenzene) (µg/L) - TW	2023/01/03	<MDL 0.3	80.0	No
Paraquat (µg/L) - TW	2023/01/03	<MDL 1.0	10.0	No
PCB (µg/L) - TW	2023/01/03	<MDL 0.04	3.0	No
Pentachlorophenol (µg/L) - TW	2023/01/03	<MDL 0.15	60.0	No
Phorate (µg/L) - TW	2023/01/03	<MDL 0.01	2.0	No
Picloram (µg/L) - TW	2023/01/03	<MDL 1.0	190.0	No
Prometryne (µg/L) - TW	2023/01/03	<MDL 0.03	1.0	No
Simazine (µg/L) - TW	2023/01/03	<MDL 0.01	10.0	No
Terbufos (µg/L) - TW	2023/01/03	<MDL 0.01	1.0	No
Tetrachloroethylene (µg/L) - TW	2023/01/03	<MDL 0.35	10.0	No
2,3,4,6-Tetrachlorophenol (µg/L) - TW	2023/01/03	<MDL 0.2	100.0	No
Triallate (µg/L) - TW	2023/01/03	<MDL 0.01	230.0	No
Trichloroethylene (µg/L) - TW	2023/01/03	<MDL 0.44	5.0	No
2,4,6-Trichlorophenol (µg/L) - TW	2023/01/03	<MDL 0.25	5.0	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (µg/L) - TW	2023/01/03	<MDL 0.12	100.0	No
Trifluralin (µg/L) - TW	2023/01/03	<MDL 0.02	45.0	No
Vinyl Chloride (µg/L) - TW	2023/01/03	<MDL 0.17	1.0	No

Drinking Water System Regulation: O. Reg 170/03
 Section 11 Annual Report: January 1, 2023 to December 31, 2023
 Town of South Bruce Peninsula: Wiarton Drinking Water System

Parameter & Location	Sample Date ^{6a} (yyyy/mm/dd)	Sample Result	Maximum Allowable Concentration (MAC)	Exceedance of MAC
Trihalomethane: Total (µg/L) Annual Average - DW	2023 (Quarterly)	42.0	100.0	No
HAA Total (µg/L) Annual Average - DW	2023 (Quarterly)	14.4	80.0	No

Note: DW = Distribution Water, TW = Treated Water, MDL = Minimum Detection Limit, MAC = Maximum Allowable Concentration

^{6a}The owner of a large municipal residential system that obtains water from a raw water supply that is surface water shall ensure that at least one water sample for organics is taken every 12 months (O.Reg 170/03, Schedule 13-4.(1)). The last set of samples were collected and tested in 2023, the next set of samples are scheduled to be collected and tested in 2024.

Table 7: List of Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards for the reporting period.

Parameter & Location	Sample Date (yyyy/mm/dd)	Sample Result
N/A	N/A	N/A