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#### February 2025

The Corporation of the Township of Hornepayne 30 Baker Street PO Box 447 Red Rock, ON P0T 2P0

Re: For the Hornepayne Water Treatment Plant; Waterworks No.: 260092040

O. Reg. 170 Section 11 & Schedule 22 Annual Reporting under SDWA

O. Reg 387 Section 9 Annual Reporting under OWRA

Attached are the 2024 Annual and Summary Reports for the Hornepayne Drinking Water System. The Reports are based on information provided by Operators in accordance with Section 11 and Schedule 22 of O. Reg. 170/03, under the Safe Drinking Water Act. A confirmation of submission of the PTTW reporting, as required by O.Reg 387, is included as part of the report.

Please note that any Orders that you have received directly from the MECP or any major expense incurred by the Municipality which is not listed should be reviewed and added to the report.

As per Schedule 22 of O. Reg. 170/03, this Summary Report is to be provided to the members of the municipal council no later than March 31, 2025. Please ensure this distribution.

Section 12 of O. Reg. 170/03, requires both the Summary Report and the Annual Report be made available for inspection by any member of the public during normal business hours, without charge. The reports should be made available for inspection at the office of the municipality or at a location that is reasonably convenient to the users of the water system

Yours truly,

Patrick Couture

Patrick Couture Senior Operations Manager Northwestern Ontario Regional Hub 807-228-2617

Copy to: Jennifer Hill – Deputy Clerk

Operations Staff – Hornepayne Drinking Water System

### Hornepayne Drinking Water System

Large Municipal Residential Drinking Water System

January 1 – December 31, 2024

O.Reg 170/03 Schedule 22 Summary Report
O.Reg 170/03 Section 11 Annual Report
&

O.Reg 387/04 Annual Record of Water Taking

Issued: February 2025

Prepared by the





Drinking-Water System Number: 260092040

Drinking-Water System Name: Hornepayne Drinking Water System

Drinking-Water System Owner: The Corporation of the Township of Hornepayne Drinking-Water System Category: Large Municipal Residential Drinking Water-System

Period being reported: January 1 – December 31, 2024

#### **SECTION 1: INTRODUCTION**

This document is prepared in accordance with Section 11 and Schedule 22 of O.Reg.170/03 under the Safe Drinking Water Act and with Section 9 of O.Reg.387/04 under the Ontario Water Resources Act.

The reports are prepared by the Ontario Clean Water Agency on behalf of the Corporation of the Township of Hornepayne. Acronyms and definitions can be found at the end of the report.

A copy of the Summary Report must be provided to the members of the municipal council by March 31, 2025.

#### **SECTION 2: REQUIREMENTS OF THE REPORTS**

#### Schedule 22 Report

The report must list the requirements of the Act, the regulations, the system's approval and any order that the system <u>failed to meet</u> at any time during the period covered by the report. It must also specify the duration of the failure, and for each failure referred to, describe the measures that were taken to correct the failure.

For the purpose of enabling the owner of the system to assess the rated capability of their system to meet existing and future planned water uses, the following information is required to be included in this report:

- A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
- A comparison of the summary to the rated capacity and flow rates approved in the systems approval.

#### Section 11 Report

The annual report must contain the following:

- A brief description of the drinking water system and a list of chemicals used by the system.
- A description of any major expenses incurred during the period covered by the report to install, repair or replace required equipment.
- A summary of all adverse water quality incidents (AWQI) reported to the Ministry
- A summary of corrective actions taken in response all AWQIs



- A summary of all test results required under the regulation, under an approval, municipal drinking water license or order, including an OWRA order.
- A statement of where a Schedule 22 report will be available for inspection.

The report must be prepared not later than February 28 of the following year.

#### Regulation 387 Report

On or before March 31 in every year, every holder of a permit to take water (PTTW) shall submit to a Director the data collected and recorded for the previous year.

A record of annual water taking can be found in Appendix A – Annual Water Taking Data

#### **SECTION 3: SECTION 11 REPORT**

Information					
Population Served	1050				
Does your Drinking-Water System serve more than 10,000 people?	Yes[] No[X]				
Is your annual report available to the public at no charge on a web site on the Internet?	Yes[] No[X]				
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Township of Hornepayne, Municipal Office 68 Front Street Hornepayne, ON P0M 1Z0				
Number of Designated Facilities served:	N/A				
Did you provide a copy of your annual report to all Designated Facilities you serve?					
Number of Interested Authorities you report to:	N/A				
Did you provide a copy of your annual report					
to all Interested Authorities you report to for					
each Designated Facility?					
List all Drinking-Water Systems (if any), which					
your syst					
DWS Name:	DWS: #				
Did you provide a copy of your annual report t					
are connected to you and to whom you Yes [ ] N	•				
Indicate how you notified system users that you	- L - L				
charge	<u>-</u>				
Public access/notice via the web					
[X] Public access/notice via Government Office (Mu	nicipal)				
[X] Public access/notice via a newspaper	•				
[X] Public access/notice via Public Request					
Public access/notice via a Public Library					
Public access/notice via other method - Commu	ınity Television Channel				
	•				



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

#### **Facility Description**

Located on Moonlight Lake, the raw water pumping station provides screening and chlorination if required for pre-disinfection/zebra mussel control. A standby diesel generator provides emergency power. The station pumps water approximately 5.5 km to the Herbert Avenue water treatment plant.

The Herbert Avenue Water Treatment Plant is a surface water treatment system providing coagulation, membrane filtration and primary/secondary disinfection. The treatment process consists of three membrane filter trains, each preceded by a flocculation tank with mixer. Coagulant and sulphuric acid are used in the flocculation process with the chemically treated water being fed directly to the filters. Filtered water is directed to a two-cell clear well with a total capacity of 280.2 m3 for treated water storage and post filtration disinfection. There is a third chamber, a high lift well containing the high lift pumps. Sodium hypochlorite is injected with the filtered water discharge for primary disinfection. Additional chlorine dosing is available at the plant discharge to distribution for the purpose of secondary disinfection. Sodium Hydroxide is used for pH adjustment of the treated water.

The town's original distribution system is approximately 40 years old. In the area of the standpipe the lines are approximately 25 years old. A variety of materials have been used for water mains in the distribution system including ductile iron, AC and PVC. PVC is now being used for all repairs/replacements. Fire hydrants are located throughout the distribution system which is well looped but has several lengthy dead ends. Depending on the elevation, the system pressure ranges from 60 – 105 psi. The distribution system includes a concrete pedestal standpipe (water tower) with a capacity of 1100m3. A separate pressure zone in the vicinity of the standpipe is normally kept at 60 psi. Water from the treatment plant can either enter the standpipe or supply the distribution and consumers directly. The valve at the tower remains in the open position and treated water flows in or out through the same piping. When the standpipe is full, high-lift pumps at the treatment plant shutoff and the distribution system is then supplied from the standpipe.

#### **Chemicals Used During Reporting Period**

- Sulphuric Acid 50%
- Sodium hydroxide solution 25%
- Pax-XL 1900
- Sodium Hypochlorite Jex 12



#### **Significant Expenses**

Significant expenses were incurred to:

Install Required Equipment

X Repair Required Equipment

X Replace Required Equipment

Install	Install Repair Replace X		Description	Expense
			Filter train New membrane replacement train x20	\$ 75,793.66
	X		Distribution Repair 73 third Ave	\$8,730
	X		Distribution repair 73 Third Ave part 2	\$8,955
	X		Spare high lift motor rewind	\$3,901.52
	X		Third Ave 73 – revisit	\$11,511.50
	X		Repair water line 16 Willow Ave	\$7,674.05
	X		Emergency SCADA troubleshooting train #3	\$4,705.68
		X	Spare High lift pump	\$ 5,061.30
	Х		60 + 49 Third Ave Leak repairs	\$13,811.22
	Х		49 Third Ave Leak repair	\$6,434.08
	Х		57 Leslie Leak Repair	\$11, 547.88
	Х		Main Valve box cleaning	\$1,925.28
	X		120 Front water/waste connection, repairs 89 Fourth Ave, 92 Third Ave	\$22,394.76
	X		196 Marathon Leak Repairs	\$7, 316.14

# 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 (yyyy/mm/dd)	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date (yyyy/mm/dd)
Feb 15 2024	HAA RAA exceed 80 ug/l	104.2	ug/l		Feb 15 2024
April 30 2024	HAA RAA exceed 80 ug/l	100.5	ug/l		April 30 2024
July 16 2024	THM and HAA RAA exceed 100/80 ug/l	103/193.9	ug/l		July 16 2024
Nov 14 2024	HAA RAA exceed 80 ug/l	104.6	ug/l		Nov 14 2024

### 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 Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	51	0 – 20	0 -> 2000	N/A	N/A
Treated	51	0 - 0	0 – 0	51	<10 – 10
Distribution	114	0 – 0	0 – 0	51	<10 – 10



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

covered by this Annual Report						
	Number of Grab	Range of Results				
	Samples	(min #)-(max #)				
Turbidity						
Raw	156	0.70 – 2.33 NTU				
Filter #1	8760	0.00 – 1.00 NTU				
Filter #2	8760	0.00 - 1.00 NTU				
Filter #3	8760	0.00 - 1.00 NTU				
Chlorine						
Treated	8760	0.04 - 5.00  mg/L				
Distribution	567	0.24 – 2.30 mg/L				
Fluoride						
(If the DWS provides	N/A	N/A				
fluoridation)						

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

\* Turbidity & chlorine Min/Max (lows/highs) are due to planned maintenance and not plant upset.

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

Date of legal instrument issued	Parameter	Date Sampled (yyyy/mm/dd)	Result	Unit of Measure
N/A	N/A	N/A	N/A	N/A

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

	Sample Date		Unit of		Exce	edance
Parameter	(yyyy/mm/dd)	Result Value	Measure	MAC	MAC	½ MAC
Antimony	2024/04/09	< MDL 0.5	μg/L	6	No	No
Arsenic	2024/04/09	< MDL 1	μg/L	10	No	No
Barium	2024/04/09	18	μg/L	1000	No	No
Boron	2024/04/09	< MDL 2	μg/L	5000	No	No
Cadmium	2024/04/09	< MDL 0.1	μg/L	5	No	No
Chromium	2024/04/09	2	μg/L	50	No	No
Mercury	2024/04/09	< MDL 0.1	μg/L	1	No	No
Selenium	2024/04/09	0.3	μg/L	50	No	No
Uranium	2024/04/09	< MDL 1	μg/L	20	No	No
Fluoride	2021/04/07	0.05	mg/L	1.5	No	No
	2024/01/09	0.06	mg/L	10	No	No
Nitrate	2024/04/02	< MDL 0.05	mg/L	10	No	No
NILI ale	2024/07/03	< MDL 0.05	mg/L	10	No	No
	2024/07/03	< MDL 0.05	mg/L	10	No	No
	2024/10/01	< MDL 0.05	mg/L	1	No	No
Nitrite	2024/01/09	< MDL 0.05	mg/L	1	No	No
Nitrite	2024/04/02	< MDL 0.05	mg/L	1	No	No
	2024/07/03	> MDL 0.05	mg/L	1	No	No
Sodium	2021/04/07	16	mg/L	20**	No	Yes
*Lead		R	efer to Sumi	mary Table Belov	v	

<sup>\*</sup>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

<sup>\*\*</sup>There is no MAC for Sodium. The aesthetic objective 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.



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 #)	Number of Exceedances
Plumbing N/A		N/A	N/A
Distribution	4	0.1 - 0.45	0
Distribution - Alkalinity_CaCO3: (mg/L)	4	109-135	

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

Parameter	Sample Date	Result Value	Unit of	MAC	Exceedance	
Parameter	(yyyy/mm/dd)		Measure	WAC	MAC	½ MAC
	Treated	Water				
1,1-Dichloroethylene (ug/L)-TW	2024/04/09	< MDL 0.3	μg/L	14	No	No
1,2-Dichlorobenzene (ug/L)-TW	2024/04/09	< MDL 0.2	μg/L	200	No	No
1,2-Dichloroethane (ug/L)-TW	2024/04/09	< MDL 0.2	μg/L	5	No	No
1,4-Dichlorobenzene (ug/L)-TW	2024/04/09	< MDL 0.3	μg/L	5	No	No
2,3,4,6-Tetrachlorophenol (ug/L)-TW	2024/04/09	< MDL 0.3	μg/L	100	No	No
2,4,6-Trichlorophenol (ug/L)-TW	2024/04/09	< MDL 0.2	μg/L	5	No	No
2,4-Dichlorophenol (ug/L)-TW	2024/04/09	< MDL 0.2	μg/L	900	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW	2024/04/09	< MDL 0.478	μg/L	100	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW	2024/04/09	< MDL 7.97	μg/L	100	No	No
Alachlor (ug/L) -TW	2024/04/09	< MDL 0.244	μg/L	5	No	No
Atrazine + N-dealkylated metabolites (ug/L)-TW	2024/04/09	< MDL 0.5	μg/L	5	No	No
Azinphos-methyl (ug/L)-TW	2024/04/09	< MDL 0.183	μg/L	20	No	No
Benzene (ug/L)-TW	2024/04/09	< MDL 0.1	μg/L	1	No	No
Benzo(a)pyrene (ug/L)-TW	2024/04/09	< MDL 0.01	μg/L	0.01	No	Yes
Bromoxynil (ug/L)-TW	2024/04/09	< MDL 0.128	μg/L	5	No	No
Carbaryl (ug/L)-TW	2024/04/09	< MDL 2	μg/L	90	No	No
Carbofuran (ug/L) -TW	2024/04/09	< MDL 3	μg/L	90	No	No
Carbon Tetrachloride (ug/L) -TW	2024/04/09	< MDL 0.2	μg/L	2	No	No
Chlorpyrifos (ug/L) -TW	2024/04/09	< MDL 0.183	μg/L	90	No	No
Diazinon (ug/L)-TW	2024/04/09	< MDL 0.183	μg/L	20	No	No
Dicamba (ug/L)-TW	2024/04/09	< MDL 0.112	μg/L	120	No	No
Dichloromethane (Methylene Chloride) (ug/L)-TW	2024/04/09	< MDL 1	μg/L	50	No	No
Diclofop-methyl (ug/L)-TW	2024/04/09	< MDL 0.159	μg/L	9	No	No
Dimethoate (ug/L)-TW	2024/04/09	< MDL 0.183	μg/L	20	No	No
Diquat (ug/L)-TW	2024/04/09	< MDL 0.2	μg/L	70	No	No
Diuron (ug/L)-TW	2024/04/09	< MDL 10	μg/L	150	No	No
Glyphosate (ug/L)-TW	2024/04/09	< MDL 20	μg/L	280	No	No
Malathion (ug/L)-TW	2024/04/09	< MDL 0.183	μg/L	190	No	No
Metolachlor (ug/L)-TW	2024/04/09	< MDL 0.122	μg/L	50	No	No
Metribuzin (ug/L)-TW	2024/04/09	< MDL 0.122	μg/L	80	No	No



Monochlorobenzene	2024/04/09	< MDL 0.5	//	00	NI.	NT.	
(Chlorobenzene) (ug/L)-TW			μg/L	80	No	No	
Paraquat (ug/L)-TW	2024/04/09	< MDL 0.2	μg/L	10	No	No	
PCB (ug/L)-TW	2024/04/09	< MDL 0.06	μg/L	3	No	No	
Pentachlorophenol (ug/L)-TW	2024/04/09	< MDL 0.3	μg/L	60	No	No	
Phorate (ug/L)-TW	2024/04/09	< MDL 0.122	μg/L	2	No	No	
Picloram (ug/L)-TW	2024/04/09	< MDL 0.112	μg/L	190	No	No	
Prometryne (ug/L)-TW	2024/04/09	< MDL 0.0611	μg/L	1	No	No	
Simazine (ug/L)-TW	2024/04/09	< MDL 0.183	μg/L	10	No	No	
Terbufos (ug/L)-TW	2024/04/09	< MDL 0.122	μg/L	1	No	No	
Tetrachloroethylene (ug/L)-TW	2024/04/09	< MDL 0.3	μg/L	10	No	No	
Triallate (ug/L) -TW	2024/04/09	< MDL 0.122	μg/L	230	No	No	
Trichloroethylene (ug/L)-TW	2024/04/09	< MDL 0.2	μg/L	5	No	No	
Trifluralin (ug/L)-TW	2024/04/09	< MDL 0.122	μg/L	45	No	No	
Vinyl Chloride (ug/L)-TW	2024/04/09	< MDL 0.1	μg/L	1	No	No	
Distribution Water							
THM	2024/10/01	86.9	μg/L		N/A		
(NOTE: show latest annual average)	2024 Average	99.25	μg/L	100	No	Yes	
Haloacetic acids (HAA)	2024/12/23	71.0	μg/L		N/A		
(NOTE: show latest annual average)	2024 Average	109.9	μg/L	80	Yes	Yes	

#### **SECTION 4: SCHEDULE 22 REPORT**

#### Flows - Treated

In accordance with the *Municipal Drinking Water Licence* 226-101 Schedule C: System – Specific Conditions 1.0 Performance Limits, the Hornepayne drinking-water system shall not be operated to exceed the rated capacity for maximum flow rate from the treatment subsystem to the distribution system of 1800 m<sup>3</sup> / day.

The drinking-water system may be operated temporarily at a rate above the rated capacity where necessary for

- i. The purposes if fighting a large fire or,
- ii. The maintenance of the drinking-water system

In 2024, the average monthly treated flow rate was 17057 m³; the average daily treated flow rate was 559.05 m³; and the maximum daily treated flow rate for the year was 1360.8 m³ representing 75.6% of the allowable daily volume.

The Hornepayne Drinking-Water facility operated below the rated capacity in 2024.

#### Flows – Raw

The daily raw maximum flow is stated in the PTTW as a maximum rate of flow of **1650 L/min** (27.5 L/s) and a maximum daily volume of **2376 m³/d**.

The average monthly raw flow rate was 16533 m<sup>3</sup>; the average raw daily flow rate was 541.93 m<sup>3</sup>, with a maximum raw daily flow rate of 1313m<sup>3</sup>.



The quantity of raw water supplied during the reporting period <u>did not</u> exceed the terms and conditions of the *Permit to Take Water*.

#### **Summary of Flows**

A summary of raw and treated flows are included in the tables/graphs below.

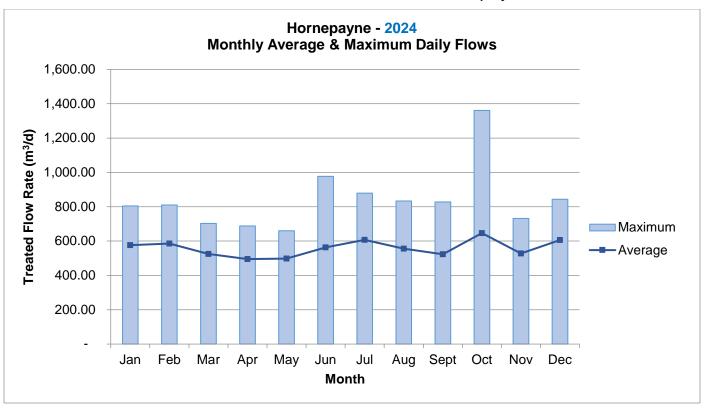
Monthly Raw & Treated Flow Rates for 2024

Month	Average Daily Flow	Maximum Daily Flow	Average Daily Flow	Maximum Daily Flow	Total Monthly
WOITH	Rate Raw (m³/d)	Rate Raw (m³/d)	Rate Treated (m <sup>3</sup> /d)	Rate Treated (m³/d)	Flow Rate Treated (m³/month)
January	569.34	784.00	576.12	388.20	17859.60
February	577.75	822.10	585.86	423.30	16989.80
March	512.47	627.20	525.31	393.20	16284.50
April	480.78	648.20	495.03	297.50	14851.00
May	481.18	625.40	497.97	339.70	15437.10
June	542.34	949.50	562.72	400.30	16881.50
July	582.06	831.40	606.58	427.00	18804.00
August	524.53	758.70	555.80	188.90	17229.80
September	508.51	796.50	523.27	335.60	15698.10
October	625.67	1313.00	646.47	300.50	20040.70
November	514.17	683.50	527.22	404.40	15816.60
December	584.36	800.90	606.27	407.20	18794.50

**2024 Total Treated Flows (m³) 204687.20** 

\*Raw - The daily raw maximum rate of flow is 27.5 L/s and a maximum daily volume of 2376 m³/d.
\*Treated - The maximum flow rate from the treatment subsystem to the distribution system is 1800 m³/
day





#### **System Failures & Corrective Actions**

The Ministry of Environment did not conduct an inspection of the Hornepayne Drinking Water System in 2024.

Ite m	Non-Compliance Identified	Complianc e Date yyyy/mm/dd	Action Being Taken to Address item	Status
1				

There have been three occasions when the weekly bacteriological sampling failed to be delivered to the lab on time. The deliveries have been late due to weather and replacement delivery drivers failing to deliver on time. If the operator are aware of road condition delays going to the Garson lab, they have delivered the samples to White River to be delivered to the Thunder Bay lab.



#### Adverse Water Quality Incidents (AWQIs)

In the reporting year of 2024, there were four adverse water quality incident (AWQI) reports filed as summarized in the table below.

Incident Date yyyy/mm/dd	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date yyyy/mm/dd
Feb 15	HAA RAA	104.2	ug/l		Feb 15
2024	exceed 80 ug/l				2024
April 30	HAA RAA	100.5	ug/l		April 30
2024	exceed 80 ug/l				2024
July 16	THM and HAA	103/193.9	ug/l		July 16
2024	RAA exceed				2024
	100/80 ug/l				
Nov 14	HAA RAA	104.6	ug/l		Nov 14
2024	exceed 80 ug/l				2024

#### **SECTION 5: RAW WATER SUBMISSIONS**

The raw water flows were submitted to the Ministry on February 18, 2025.



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: 7067-ABUHV5

Permit Holder: THE CORPORATION OF THE TOWNSHIP OF HORNEPAYNE.

Received on: Feb 18, 2025 2:22 PM

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.

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#### **SECTION 6: CONCLUSION**

For the operating year of 2024, the Hornepayne Drinking-Water System delivered water that, in all its treated and distribution samples, indicates the water to be free of bacteriological contamination.



In addition, the system was able to meet the demand of water use within the town without exceeding the Permit to Take Water or the Municipal Drinking Water Licence and Permit.



	List of Acronyms and Definitions
Alkalinity	The capacity of water for neutralizing an acid solution
AWQI	Adverse Water Quality Incident- when a water sample test result exceeds the Ontario Drinking Water Quality Standards
Backwash	Water pumped backwards to clean filters
BWA	Boil Water Advisory; Issued when risk of contamination is possible in drinking water
CFU	Colony Forming Units
Chlorine Residual	A low level of chlorine remaining in water after disinfection occurs
DW	Distribution Water
DWA	Drinking Water Advisory; Issued when water cannot be consumed by any means
DWWP	Drinking Water Works Permit - provides a description of the overall system
E.Coli	Bacteria used as indicators to measure the degree of pollution and sanitary quality of water
GUDI	Groundwater Under Direct Influence – Considered to be surface water under O.Reg 170/03
HPC	Heterotrophic Plant Count
L/s	Litres per Second
m3/d	Cubic Metres per Day
MAC	Maximum Acceptable Concentration
MDL	Minimum Detection Level
MDWL	Municipal Drinking Water Licence - relates to the operation and performance requirements
mg/L	Miligrams per Litre
Ministry	Ministry of the Environment, Conservation and Parks
MECP	Ministry of the Environment, Conservation and Parks
NDOGN	No Data: Overgrown with Non Target Bacteria
NDOGT	No Data: Overgrown with Target Bacteria
O.Reg	Ontario Regulation
PTTW	Permit to Take Water – Permit which allows water taking from groundwater or surface water
RW	Raw Water
TC	Total Coliforms
TSS	Total Suspended Solids
Turbidity	Cloudiness or haziness of water
TW	Treated Water



### **Appendix A – Annual Water Taking Data**

## Ontario Clean Water Agency Annual Water Taking and Transfer Report

From 1/1/2024 To 12/31/2024

Facility: HORNEPAYNE DRINKING WATER SYSTEM - 5987

Tag: Flow: Sum(m³/d)
Tag Group: Raw Water

Permit#: 7067-ABUHV5 Coordinate Zone:

Source Name: Moonlight Lake
Source: Lake
Northing:
Type:
Method deter:

Type:
Purpose: Municipal

Date Measured	Value (m³/d)	Value(Liters)
01/01/2024	656.0000	656000.0000
02/01/2024	741.3000	741299.9878
03/01/2024	433.4000	433399.9939
04/01/2024	569.8000	569799.9878
05/01/2024	549.2000	549200.0122
06/01/2024	435.5000	435500.0000
07/01/2024	500.9000	500899.9939
08/01/2024	480.9000	480899.9939
09/01/2024	385.9000	385899.9939
10/01/2024	499.5000	499500.0000
11/01/2024	572.2000	572200.0122
12/01/2024	449.5000	449500.0000
13/01/2024	696.4000	696400.0244
14/01/2024	582.3000	582299.9878
15/01/2024	411.2000	411200.0122
16/01/2024	533.2000	533200.0122
17/01/2024	389.5000	389500.0000
18/01/2024	621.9000	621900.0244
19/01/2024	497.6000	497600.0061
20/01/2024	572.7000	572700.0122
21/01/2024	531.5000	531500.0000
22/01/2024	512.0000	512000.0000
23/01/2024	683.4000	683400.0244
24/01/2024	700.8000	700799.9878
25/01/2024	571.2000	571200.0122
26/01/2024	514.9000	514900.0244
27/01/2024	770.3000	770299.9878
28/01/2024	740.8000	740799.9878

29/01/2024	665.5000	665500.0000
30/01/2024	596.1000	596099.9756
31/01/2024	784.0000	784000.0000
01/02/2024	582.3000	582299.9878
02/02/2024	532.5000	532500.0000
03/02/2024	737.3000	737299.9878
04/02/2024	728.1000	728099.9756
05/02/2024	487.5000	487500.0000
06/02/2024	822.1000	822099.9756
07/02/2024	706.8000	706799.9878
08/02/2024	623.0000	623000.0000
09/02/2024	599.1000	599099.9756
10/02/2024	488.7000	488700.0122
11/02/2024	771.9000	771900.0244
12/02/2024	451.0000	451000.0000
13/02/2024	765.7000	765700.0122
14/02/2024	460.5000	460500.0000
15/02/2024	539.0000	539000.0000
16/02/2024	519.1000	519099.9756
17/02/2024	689.2000	689200.0122
18/02/2024	533.2000	533200.0122
19/02/2024	476.3000	476299.9878
20/02/2024	447.9000	447899.9939
21/02/2024	633.8000	633799.9878
22/02/2024	451.0000	451000.0000
23/02/2024	604.5000	604500.0000
24/02/2024	597.3000	597299.9878
25/02/2024	507.0000	507000.0000
26/02/2024	468.6000	468600.0061
27/02/2024	420.3000	420299.9878
28/02/2024	695.8000	695799.9878
29/02/2024	415.2000	415200.0122
01/03/2024	485.6000	485600.0061
02/03/2024	627.2000	627200.0122
03/03/2024	616.3000	616299.9878
04/03/2024	402.0000	402000.0000
05/03/2024	552.1000	552099.9756
06/03/2024	515.8000	515799.9878
07/03/2024	546.6000	546599.9756
08/03/2024	597.8000	597799.9878
09/03/2024	569.9000	569900.0244
10/03/2024	476.0000	476000.0000
11/03/2024	472.4000	472399.9939
12/03/2024	504.9000	504899.9939

13/03/2024	502.9000	502899.9939
14/03/2024	611.1000	611099.9756
15/03/2024	440.5000	440500.0000
16/03/2024	570.5000	570500.0000
17/03/2024	543.1000	543099.9756
18/03/2024	413.7000	413700.0122
19/03/2024	500.6000	500600.0061
20/03/2024	560.2000	560200.0122
21/03/2024	518.8000	518799.9878
22/03/2024	378.4000	378399.9939
23/03/2024	499.2000	499200.0122
24/03/2024	613.9000	613900.0244
25/03/2024	494.6000	494600.0061
26/03/2024	386.3000	386299.9878
27/03/2024	529.9000	529900.0244
28/03/2024	381.2000	381200.0122
29/03/2024	625.1000	625099.9756
30/03/2024	436.5000	436500.0000
31/03/2024	513.6000	513599.9756
01/04/2024	456.2000	456200.0122
02/04/2024	480.9000	480899.9939
03/04/2024	491.9000	491899.9939
04/04/2024	605.5000	605500.0000
05/04/2024	393.5000	393500.0000
06/04/2024	411.9000	411899.9939
07/04/2024	648.2000	648200.0122
08/04/2024	424.9000	424899.9939
09/04/2024	416.9000	416899.9939
10/04/2024	637.1000	637099.9756
11/04/2024	402.6000	402600.0061
12/04/2024	625.4000	625400.0244
13/04/2024	519.1000	519099.9756
14/04/2024	491.4000	491399.9939
15/04/2024	529.9000	529900.0244
16/04/2024	382.2000	382200.0122
17/04/2024	413.6000	413600.0061
18/04/2024	477.5000	477500.0000
19/04/2024	644.0000	644000.0000
20/04/2024	418.8000	418799.9878
21/04/2024	410.8000	410799.9878
22/04/2024	431.6000	431600.0061
23/04/2024	477.1000	477100.0061
24/04/2024	411.1000	411100.0061
25/04/2024	470.0000	470000.0000

26/04/2024	429.5000	429500.0000
27/04/2024	598.3000	598299.9878
28/04/2024	533.7000	533700.0122
29/04/2024	332.2000	332200.0122
30/04/2024	457.5000	457500.0000
01/05/2024	435.9000	435899.9939
02/05/2024	413.1000	413100.0061
03/05/2024	490.0000	490000.0000
04/05/2024	529.3000	529299.9878
05/05/2024	527.0000	527000.0000
06/05/2024	457.5000	457500.0000
07/05/2024	596.9000	596900.0244
08/05/2024	402.2000	402200.0122
09/05/2024	474.9000	474899.9939
10/05/2024	539.3000	539299.9878
11/05/2024	486.1000	486100.0061
12/05/2024	451.8000	451799.9878
13/05/2024	329.9000	329899.9939
14/05/2024	482.9000	482899.9939
15/05/2024	625.4000	625400.0244
16/05/2024	495.9000	495899.9939
17/05/2024	394.1000	394100.0061
18/05/2024	401.1000	401100.0061
19/05/2024	501.9000	501899.9939
20/05/2024	574.8000	574799.9878
21/05/2024	498.5000	498500.0000
22/05/2024	408.5000	408500.0000
23/05/2024	503.0000	503000.0000
24/05/2024	435.7000	435700.0122
25/05/2024	456.6000	456600.0061
26/05/2024	473.2000	473200.0122
27/05/2024	382.7000	382700.0122
28/05/2024	472.6000	472600.0061
29/05/2024	512.9000	512900.0244
30/05/2024	590.8000	590799.9878
31/05/2024	572.2000	572200.0122
01/06/2024	458.8000	458799.9878
02/06/2024	489.0000	489000.0000
03/06/2024	521.4000	521400.0244
04/06/2024	566.7000	566700.0122
05/06/2024	564.6000	564599.9756
06/06/2024	452.9000	452899.9939
07/06/2024	448.1000	448100.0061
08/06/2024	486.5000	486500.0000

09/06/2024	438.8000	438799.9878
10/06/2024	387.7000	387700.0122
11/06/2024	575.2000	575200.0122
12/06/2024	735.7000	735700.0122
13/06/2024	443.0000	443000.0000
14/06/2024	421.2000	421200.0122
15/06/2024	435.7000	435700.0122
16/06/2024	622.4000	622400.0244
17/06/2024	429.8000	429799.9878
18/06/2024	474.0000	474000.0000
19/06/2024	514.9000	514900.0244
20/06/2024	525.6000	525599.9756
21/06/2024	549.8000	549799.9878
22/06/2024	735.4000	735400.0244
23/06/2024	652.1000	652099.9756
24/06/2024	417.9000	417899.9939
25/06/2024	451.4000	451399.9939
26/06/2024	949.5000	949500.0000
27/06/2024	753.9000	753900.0244
28/06/2024	462.9000	462899.9939
29/06/2024	754.4000	754400.0244
30/06/2024	550.8000	550799.9878
01/07/2024	481.1000	481100.0061
02/07/2024	422.7000	422700.0122
03/07/2024	472.7000	472700.0122
04/07/2024	648.3000	648299.9878
05/07/2024	477.7000	477700.0122
06/07/2024	610.8000	610799.9878
07/07/2024	703.4000	703400.0244
08/07/2024	465.0000	465000.0000
09/07/2024	711.0000	711000.0000
10/07/2024	456.5000	456500.0000
11/07/2024	580.2000	580200.0122
12/07/2024	831.4000	831400.0244
13/07/2024	640.2000	640200.0122
14/07/2024	587.0000	587000.0000
15/07/2024	480.9000	480899.9939
16/07/2024	512.8000	512799.9878
17/07/2024	425.2000	425200.0122
18/07/2024	683.4000	683400.0244
19/07/2024	563.0000	563000.0000
20/07/2024	530.9000	530900.0244
21/07/2024	701.8000	701799.9878
22/07/2024	590.6000	590599.9756

23/07/2024	411.5000	411500.0000
24/07/2024	794.4000	794400.0244
25/07/2024	549.4000	549400.0244
26/07/2024	649.5000	649500.0000
27/07/2024	712.8000	712799.9878
28/07/2024	805.2000	805200.0122
29/07/2024	492.7000	492700.0122
30/07/2024	606.3000	606299.9878
31/07/2024	445.5000	445500.0000
01/08/2024	706.5000	706500.0000
02/08/2024	474.3000	474299.9878
03/08/2024	758.7000	758700.0122
04/08/2024	497.0000	497000.0000
05/08/2024	528.3000	528299.9878
06/08/2024	460.7000	460700.0122
07/08/2024	557.5000	557500.0000
08/08/2024	580.9000	580900.0244
09/08/2024	426.9000	426899.9939
10/08/2024	441.2000	441200.0122
11/08/2024	478.8000	478799.9878
12/08/2024	575.4000	575400.0244
13/08/2024	549.0000	549000.0000
14/08/2024	461.4000	461399.9939
15/08/2024	676.8000	676799.9878
16/08/2024	418.1000	418100.0061
17/08/2024	433.5000	433500.0000
18/08/2024	711.2000	711200.0122
19/08/2024	178.4000	178399.9939
20/08/2024	530.2000	530200.0122
21/08/2024	465.3000	465299.9878
22/08/2024	385.8000	385799.9878
23/08/2024	635.4000	635400.0244
24/08/2024	644.1000	644099.9756
25/08/2024	665.1000	665099.9756
26/08/2024	370.7000	370700.0122
27/08/2024	746.7000	746700.0122
28/08/2024	357.9000	357899.9939
29/08/2024	740.4000	740400.0244
30/08/2024	347.8000	347799.9878
31/08/2024	456.4000	456399.9939
01/09/2024	530.6000	530599.9756
02/09/2024	562.9000	562900.0244
03/09/2024	345.7000	345700.0122
04/09/2024	452.8000	452799.9878

05/09/2024	478.9000	478899.9939
06/09/2024	503.9000	503899.9939
07/09/2024	440.8000	440799.9878
08/09/2024	570.6000	570599.9756
09/09/2024	535.1000	535099.9756
10/09/2024	457.6000	457600.0061
11/09/2024	404.6000	404600.0061
12/09/2024	506.8000	506799.9878
13/09/2024	488.1000	488100.0061
14/09/2024	600.4000	600400.0244
15/09/2024	594.9000	594900.0244
16/09/2024	330.2000	330200.0122
17/09/2024	456.4000	456399.9939
18/09/2024	521.4000	521400.0244
19/09/2024	577.5000	577500.0000
20/09/2024	411.0000	411000.0000
21/09/2024	592.6000	592599.9756
22/09/2024	467.2000	467200.0122
23/09/2024	360.0000	360000.0000
24/09/2024	454.2000	454200.0122
25/09/2024	407.6000	407600.0061
26/09/2024	689.0000	689000.0000
27/09/2024	394.8000	394799.9878
28/09/2024	548.6000	548599.9756
29/09/2024	774.6000	774599.9756
30/09/2024	796.5000	796500.0000
01/10/2024	532.6000	532599.9756
02/10/2024	698.7000	698700.0122
03/10/2024	913.1000	913099.9756
04/10/2024	888.9000	888900.0244
05/10/2024	895.4000	895400.0244
06/10/2024	1189.7000	1189699.9512
07/10/2024	1118.9000	1118900.0244
08/10/2024	1313.0000	1313000.0000
09/10/2024	1175.0000	1175000.0000
10/10/2024	495.1000	495100.0061
11/10/2024	459.4000	459399.9939
12/10/2024	497.8000	497799.9878
13/10/2024	455.8000	455799.9878
14/10/2024	472.6000	472600.0061
15/10/2024	428.2000	428200.0122
16/10/2024	552.1000	552099.9756
17/10/2024	558.5000	558500.0000
18/10/2024	414.8000	414799.9878

19/10/2024	470.1000	470100.0061
20/10/2024	436.4000	436399.9939
21/10/2024	573.2000	573200.0122
22/10/2024	472.4000	472399.9939
23/10/2024	667.2000	667200.0122
24/10/2024	365.0000	365000.0000
25/10/2024	548.1000	548099.9756
26/10/2024	499.9000	499899.9939
27/10/2024	305.0000	305000.0000
28/10/2024	306.0000	306000.0000
29/10/2024	716.0000	716000.0000
30/10/2024	437.6000	437600.0061
31/10/2024	539.4000	539400.0244
01/11/2024	550.9000	550900.0244
02/11/2024	482.2000	482200.0122
03/11/2024	489.3000	489299.9878
04/11/2024	478.4000	478399.9939
05/11/2024	566.3000	566299.9878
06/11/2024	590.5000	590500.0000
07/11/2024	442.7000	442700.0122
08/11/2024	503.4000	503399.9939
09/11/2024	681.6000	681599.9756
10/11/2024	488.6000	488600.0061
11/11/2024	455.1000	455100.0061
12/11/2024	393.1000	393100.0061
13/11/2024	453.7000	453700.0122
14/11/2024	625.2000	625200.0122
15/11/2024	455.3000	455299.9878
16/11/2024	467.8000	467799.9878
17/11/2024	634.1000	634099.9756
18/11/2024	513.6000	513599.9756
19/11/2024	469.2000	469200.0122
20/11/2024	470.8000	470799.9878
21/11/2024	597.0000	597000.0000
22/11/2024	453.8000	453799.9878
23/11/2024	451.8000	451799.9878
24/11/2024	683.5000	683500.0000
25/11/2024	444.8000	444799.9878
26/11/2024	502.0000	502000.0000
27/11/2024	509.5000	509500.0000
28/11/2024	456.5000	456500.0000
29/11/2024	546.3000	546299.9878
30/11/2024	568.0000	568000.0000
01/12/2024	677.0000	677000.0000

02/12/2024	406.6000	406600.0061
03/12/2024	650.2000	650200.0122
04/12/2024	508.6000	508600.0061
05/12/2024	442.1000	442100.0061
06/12/2024	507.2000	507200.0122
07/12/2024	735.5000	735500.0000
08/12/2024	586.1000	586099.9756
09/12/2024	375.7000	375700.0122
10/12/2024	486.5000	486500.0000
11/12/2024	571.3000	571299.9878
12/12/2024	549.0000	549000.0000
13/12/2024	507.0000	507000.0000
14/12/2024	744.5000	744500.0000
15/12/2024	676.9000	676900.0244
16/12/2024	459.4000	459399.9939
17/12/2024	728.0000	728000.0000
18/12/2024	491.4000	491399.9939
19/12/2024	521.7000	521700.0122
20/12/2024	753.5000	753500.0000
21/12/2024	580.4000	580400.0244
22/12/2024	605.4000	605400.0244
23/12/2024	615.2000	615200.0122
24/12/2024	590.5000	590500.0000
25/12/2024	505.9000	505899.9939
26/12/2024	744.6000	744599.9756
27/12/2024	460.4000	460399.9939
28/12/2024	800.9000	800900.0244
29/12/2024	633.6000	633599.9756
30/12/2024	412.7000	412700.0122
31/12/2024	787.3000	787299.9878

Metered