



TOWNSHIP OF / CANTON DE
Tiny

The Corporation of the Township of Tiny

Water Department

2021 Annual Drinking Water Reports

Bluewater
Castle Cove
Cook's Lake
Georgian Bay Estates
Lafontaine
Lefaive
Pennorth
Perkinsfield

Rayko
Sawlog Bay
Tee Pee Point
Thunder Bay
Vanier Woods
Whippoowill
Woodland Beach
Wyevale



Township of Tiny 2021 Annual Drinking Water Report Bluewater Drinking Water System

Drinking Water System Number: 220005269

Drinking Water System Category: Large Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Bluewater Drinking Water System is comprised of two pump stations, three groundwater wells, one storage reservoir and approximately 8.6 km of distribution watermain. The system serves 315 properties, with 93 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Bluewater Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Distribution service repairs	8,887.56
PH 18 Heater repair	673.48
PH 18 Piping repair	470.08
Total Expenditure:	
	\$10,031.12

6. 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
14-Jul-21	Microbiological	1 TC	CFU/100ml	Resample-results negative	15-Jul-21

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	156	0	0	n/a	n/a
Treated	104	0	0	104	10-170
Distribution	104	0	0-1	32	0-10



Township of Tiny 2021 Annual Drinking Water Report Bluewater Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	36	0.04	0.34	NTU
Chlorine – Treated	312	0.81	2.54	mg/L
Chlorine - Distribution	364	0.87	2.56	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
<i>None</i>				

10. Summary of O.Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND= Not Detected

Parameter	Sample Date	Results	Results	Unit of Measure	Exceedance
		PH 08	PH 18		
Alkalinity	2021	133-154*		mg/L	no
Antimony	20-May-21	<0.0001	<0.0001	mg/L	no
Arsenic	20-May-21	0.0007	0.0004	mg/L	no
Barium	20-May-21	0.053	0.076	mg/L	no
Boron	20-May-21	0.012	0.009	mg/L	no
Cadmium	20-May-21	<0.000015	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	<0.00002	mg/L	no
Selenium	20-May-21	<0.001	<0.001	mg/L	no
Uranium	20-May-21	0.	1.2	µg/L	no
Flouride	24-Apr-18	ND	0.62	mg/L	no
Sodium	24-Apr-18	6200	5700	µg/L	no
Lead	2021	0.03 - 0.17*		mg/L	no
Nitrite	2021	<0.1	<0.1	mg/L	no
Nitrate	2021	<0.1	<0.1-0.3	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Bluewater Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Results	Unit	Exceedance
		PH 08	PH 18		
Aalachlor	20-May-21	<0.3	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	<1	µg/L	no
Benzene	20-May-21	<0.5	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	<0.5	µg/L	no
Carbaryl	20-May-21	<3	<3	µg/L	no
Carbofuran	20-May-21	<1	<1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	<0.5	µg/L	no
Diazinon	20-May-21	<1	<1	µg/L	no
Dicamba	20-May-21	<10	<10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	<0.5	µg/L	no
Dichloromethane	20-May-21	<5	<5	µg/L	no
2,4-Dichlorophenol	20-May-21	<0.2	<0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	<10	<10	µg/L	no
Diclofop-methyl	20-May-21	<0.9	<0.9	µg/L	no
Dimethoate	20-May-21	<1	<1	µg/L	no
Diquat	20-May-21	<5	<5	µg/L	no
Diuron	20-May-21	<5	<5	µg/L	no
Glyphosate	20-May-21	<25	<25	µg/L	no
Malathion	20-May-21	<5	<5	µg/L	no
Metolachlor	20-May-21	<3	<3	µg/L	no
Metribuzin	20-May-21	<3	<3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	<0.5	µg/L	No
Paraquat	20-May-21	<1	<1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Phorate	20-May-21	<0.3	<0.3	µg/L	no
Picloram	20-May-21	<15	<15	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Bluewater Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results	Results	Unit	Exceedance
		PH 08	PH 18		
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	<0.05	µg/L	no
Prometryne	20-May-21	<0.1	<0.1	µg/L	no
Simazine	20-May-21	<0.5	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Triallate	20-May-21	<10	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.3	ug/L	no
Trihalomethanes Average	6	ug/L	no

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny

2021 Annual Drinking Water Report

Castle Cove Drinking Water System

Drinking Water System Number: 220005296

Drinking Water System Category: Large Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Castle Cove Drinking Water System is comprised of five drilled groundwater wells, three pumpstations and approximately 5.2 kilometers of distribution main. The system serves 160 properties, with 106 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny
2021 Annual Drinking Water Report
Castle Cove Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Distribution service repair	5,267.50
PH 13 well 13-2 well rehab and pump replacement	11,566.18
PH 13 well 13-1 well rehab and pump replacement	11,587.29
PH 04 Well pump electrical repair	863.32
PH 30 Piping replacement	4,048.80

Total Expenditure: \$33,333.09

6. 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
24-Mar-21	Microbiological	1 TC	CFU/100ml	Resample-results negative	26-Mar-21

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	260	0	0-5	n/a	n/a
Treated	157	0	0-1	158	0-980
Distribution	104	0	0	32	0-60



Township of Tiny 2021 Annual Drinking Water Report Castle Cove Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	60	0.03	0.77	NTU
Chlorine – Treated	468	0.96	2.26	mg/L
Chlorine - Distribution	364	0.78	2.26	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O.Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Results	Results	Unit of Measure	Exceedance
		PH 04	PH 13	PH 30		
Alkalinity	2021	143-186*			mg/L	no
Antimony	20-May-21	<0.0001	<0.0001	<0.0001	mg/L	no
Arsenic	20-May-21	0.0003	0.0002	0.0002	mg/L	no
Barium	20-May-21	0.027	0.024	0.024	mg/L	no
Boron	20-May-21	0.006	0.006	0.008	mg/L	no
Cadmium	20-May-21	<0.000015	<0.000015	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	<0.002	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	<0.00002	<0.00002	mg/L	no
Selenium	20-May-21	0.001	<0.001	<0.001	mg/L	no
Uranium	20-May-21	0.00262	0.00694	0.00122	mg/L	no
Flouride	24-Apr-18	ND	ND	ND	mg/L	no
Sodium	24-Apr-18	6900	5100	5100	µg/L	no
Lead	2021	0.02-0.04 *			µg/L	no
Nitrite	2021	<0.1	<0.1	<0.1	mg/L	no
Nitrate	2021	2.2-2.6	4.3-5.1	<0.1	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Castle Cove Drinking Water System

11. Summary of O. Reg. Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Results	Results	Unit	Exceedance
		PH 04	PH 13	PH 30		
Alachlor	20-May-21	<0.3	<0.3	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	<1	<1	µg/L	no
Benzene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	<0.006	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Carbaryl	20-May-21	<3	<3	<3	µg/L	no
Carbofuran	20-May-21	<1	<1	<1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Diazinon	20-May-21	<1	<1	<1	µg/L	no
Dicamba	20-May-21	<10	<10	<10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	<0.5	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Dichloromethane	20-May-21	<5	<5	<5	µg/L	no
2,4-Dichlorophenol	20-May-21	<0.2	<0.2	<0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	<10	<10	<10	µg/L	no
Diclofop-methyl	20-May-21	<0.9	<0.9	<0.9	µg/L	no
Dimethoate	20-May-21	<1	<1	<1	µg/L	no
Diquat	20-May-21	<5	<5	<5	µg/L	no
Diuron	20-May-21	<5	<5	<5	µg/L	no
Glyphosate	20-May-21	<25	<25	<25	µg/L	no
Malathion	20-May-21	<5	<5	<5	µg/L	no
Metolachlor	20-May-21	<3	<3	<3	µg/L	no
Metribuzin	20-May-21	<3	<3	<3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Paraquat	20-May-21	<1	<1	<1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Phorate	20-May-21	<0.3	<0.3	<0.3	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Castle Cove Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results	Results	Results	Unit	Exceedance
		PH 04	PH 13	PH 30		
Picloram	20-May-21	<15	<15	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	<0.05	<0.05	µg/L	no
Prometryne	20-May-21	<0.1	<0.1	<0.1	µg/L	no
Simazine	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	<0.5	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Triallate	20-May-21	<10	<10	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	<0.2	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.3	ug/L	no
Trihalomethanes Average	6	ug/L	no

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
Nitrates- PH 13	5.1	mg/L	22-Nov-21



Township of Tiny 2021 Annual Drinking Water Report Cook's Lake Drinking Water System

Drinking Water System Number: 220005278

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Cook's Lake Drinking Water System is comprised of one pumping station, two groundwater wells, one storage reservoir (currently not in use), and approximately 2 km of distribution water mains. The system serves 91 properties, with 12 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Cook's Lake Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Reservoir entry Davit arm installation	3,282.65
Distribution service installation	5,146.73
PH 12 Pressure tank replacement x 2	2,746.56
Well pump alternating relay replacement	851.49

Total Expenditure: \$12,027.43

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-20



Township of Tiny 2021 Annual Drinking Water Report Cook's Lake Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.00	0.45	NTU
Chlorine – Treated	156	0.72	2.52	mg/L
Chlorine - Distribution	104	1.35	2.19	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg. Schedule 24 inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 12	Unit of Measure	Exceedance
Alkalinity	2021	107-122*	mg/L	no
Antimony	20-May-21	<0.0001	mg/L	no
Arsenic	20-May-21	0.0001	mg/L	no
Barium	20-May-21	0.028	mg/L	no
Boron	20-May-21	<0.005	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	mg/L	no
Selenium	20-May-21	<0.001	mg/L	no
Uranium	20-May-21	0.00049	mg/L	no
Flouride	24-Apr-18	ND	mg/L	no
Sodium	24-Apr-18	4000	µg/L	no
Lead	2021	0.02-0.03*	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	0.1-0.2	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Cook's Lake Drinking Water System

11. Summary of O. Reg. Schedule 23 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 12	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	<3	µg/L	no
Carbofuran	20-May-21	<1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	µg/L	no
Diazinon	20-May-21	<1	µg/L	no
Dicamba	20-May-21	<10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	µg/L	no
Dichloromethane	20-May-21	<5	µg/L	no
2,4-Dichlorophenol	20-May-21	<0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	<10	µg/L	no
Diclofop-methyl	20-May-21	<0.9	µg/L	no
Dimethoate	20-May-21	<1	µg/L	no
Diquat	20-May-21	<5	µg/L	no
Diuron	20-May-21	<5	µg/L	no
Glyphosate	20-May-21	<25	µg/L	no
Malathion	20-May-21	<5	µg/L	no
Metolachlor	20-May-21	<3	µg/L	no
Metribuzin	20-May-21	<3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	µg/L	no
Paraquat	20-May-21	<1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Cook's Lake Drinking Water System

Note: ND = not detected

Parameter	Sample Date	PH 12	Unit	Exceedance
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.3	ug/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny 2021 Annual Drinking Water Report Georgian Bay Estates Drinking Water System

Drinking Water System Number: 220005287

Drinking Water System Category: Large Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Georgian Bay Estates Drinking Water System is comprised of one pumping station, three groundwater wells, one storage reservoir, and approximately 7.6 km of distribution watermains. The system serves 249 properties, with 100 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)

Polyphosphate (ClearHib 5)



Township of Tiny
2021 Annual Drinking Water Report
Georgian Bay Estates Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Emergency pump repairs – generator/electrical failure	19,299.02
Generator Oil Pan repair	16,045.10
PH 19 Pressure tank replacement	2,746.56
Distribution service repairs	12,580.97
Electrical repairs	878.44

Total Expenditure: \$51,550.09

6. 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
22-May-21	Operational	0	Psi	Repaired and replaced pumps	25-May-21

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	156	0	0-14	n/a	n/a
Treated	52	0	0	52	10-70
Distribution	104	0	0	32	10-250



Township of Tiny 2021 Annual Drinking Water Report Georgian Bay Estates Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	36	0.06	1.49	NTU
Chlorine – Treated	156	0.94	2.04	mg/L
Chlorine - Distribution	364	0.38	2.01	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
<i>None</i>				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 19	Unit of Measure	Exceedance
Alkalinity	2021	220-250*	mg/L	no
Antimony	09-Feb-21	<0.0001	mg/L	no
Arsenic	09-Feb-21	0.0001	mg/L	no
Barium	09-Feb-21	0.173	mg/L	no
Boron	09-Feb-21	0.022	mg/L	no
Cadmium	09-Feb-21	<0.000015	mg/L	no
Chromium	09-Feb-21	<0.002	mg/L	no
Mercury	09-Feb-21	<0.00002	mg/L	no
Selenium	09-Feb-21	<0.001	mg/L	no
Uranium	09-Feb-21	0.00022	mg/L	no
Flouride	24-Apr-18	ND	mg/L	no
Sodium	24-Apr-18	5000-5600	µg/L	no
Lead	2021	0.02-0.17*	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	0.2-0.5	mg/L	no

**Distribution sample*



Township of Tiny 2021 Annual Drinking Water Report Georgian Bay Estates Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 19	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	µg/L	no
Benzene	19-May-20	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	<3	µg/L	no
Carbofuran	20-May-21	<1	µg/L	no
Carbon Tetrachloride	19-May-20	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	µg/L	no
Diazinon	20-May-21	<1	µg/L	no
Dicamba	20-May-21	<10	µg/L	no
1,2-Dichlorobenzene	19-May-20	<0.5	µg/L	no
1,4-Dichlorobenzene	19-May-20	<0.5	µg/L	no
1,2-Dichloroethane	19-May-20	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	19-May-20	<0.5	µg/L	no
Dichloromethane	19-May-20	<5	µg/L	no
2,4-Dichlorophenol	20-May-21	<0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	<10	µg/L	no
Diclofop-methyl	20-May-21	<0.9	µg/L	no
Dimethoate	20-May-21	<1	µg/L	no
Diquat	20-May-21	<5	µg/L	no
Diuron	20-May-21	<5	µg/L	no
Glyphosate	20-May-21	<25	µg/L	no
Malathion	20-May-21	<5	µg/L	no
Metolachlor	20-May-21	<3	µg/L	no
Metribuzin	20-May-21	<3	µg/L	no
Monochlorobenzene	19-May-20	<0.5	µg/L	no
Paraquat	20-May-21	<1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Georgian Bay Estates Drinking Water System

Note: ND = not detected

Parameter	Sample Date	PH 19	Unit	Exceedance
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	19-May-20	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	<10	µg/L	no
Trichloroethylene	19-May-20	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	19-May-20	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	10.8	ug/L	no
Trihalomethanes Average	22	ug/L	no

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny 2021 Annual Drinking Water Report Lafontaine Drinking Water System

Drinking Water System Number: 220006277

Drinking Water System Category: Large Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There is one Designated Facility served by this Drinking Water System. A copy of this annual report was provided to the Designated Facility and is also available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Lafontaine Drinking Water System is comprised of three pumping stations, six groundwater wells, one underground storage reservoir, one elevated storage tank, one booster station and approximately 26.5 km of distribution watermains. The system serves 865 properties, with 158 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Lafontaine Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

PH 01/14 Nitrate blending project	231,431.30
PH 14 electrical repairs	2,702.87
PH 02 well probe replacement	1,356.00
PH 02 electrical repairs	1,277.75
PH 02 piping replacement	4,870.07
PH 02 Cl2 pump replacement	657.40

Total Expenditure: \$242,295.39

6. 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
15-Mar-21	Operational	0.06	mg/L	Back flushing low residual	15-Mar-21

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	186	0	0-NDOGT	n/a	n/a
Treated	189	0	0-1	189	0-40
Distribution	121	0	0	132	10-50

NDOGT- No Data: overgrown with Target Bacteria

A raw water sample was taken at Pump Station 23 and transported to an external, accredited analytical laboratory for testing. After testing the result was returned as NDOGT which means the result was indeterminate as a result of excessive growth making it impossible to accurately determine the count of target organisms that were present. In most cases of NDOGT results the



Township of Tiny 2021 Annual Drinking Water Report Lafontaine Drinking Water System

root cause is found to be contamination of the sample during collection or testing. The sample bottle may have touched the collection tap which may not have been disinfected properly prior to collecting the sample, or the operator/lab technician may have touched the bottle or cap in such a way that contamination was transferred to the water prior to testing. Contamination could also have occurred during testing at the laboratory.

Pump station 01 was shut down for a piping project on December 2, 2020 that was carried over into 2021. Pump station 01 raw water was piped directly to Pump station 14 for mixing in an effort to further reduce nitrate concentrations. The shut downs resulted in fewer microbiological samples being taken at these two stations in 2021. Pump station 14 officially included well 1-1 as of May 20, 2021 when the well was put back online.

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)	Unit	
Turbidity - Raw	68	0.05	0.67	NTU
Chlorine – Treated	463	0.99	2.39	mg/L
Chlorine - Distribution	364	0.62	2.07	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
MDWL-Nov 19, 2020	Nitrate PH 23	04-Jan-21	7.0	mg/L
		18-Jan-21	7.2	mg/L
		01-Mar-21	7.3	mg/L
		29-Mar-21	7.7	mg/L
		12-Apr-21	7.4	mg/L
		26-Apr-21	7.2	mg/L
		10-May-21	7.1	mg/L
		25-May-21	6.2	mg/L
		07-Jun-21	7.8	mg/L
		21-Jun-21	7.1	mg/L
		05-Jul-21	7.3	mg/L
		19-Jul-21	6.9	mg/L
		03-Aug-21	7.0	mg/L
		16-Aug-21	7.0	mg/L
		30-Aug-21	7.3	mg/L
13-Sep-21	7.6	mg/L		



Township of Tiny 2021 Annual Drinking Water Report Lafontaine Drinking Water System

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
MDWL-Nov 19, 2020	Nitrate PH 23	27-Sep-21	8.0	mg/L
		12-Oct-21	6.9	mg/L
		25-Oct-21	6.6	mg/L
		08-Nov-21	7.2	mg/L
		22-Nov-21	7.4	mg/L
		06-Dec-21	6.7	mg/L
		20-Dec-21	6.8	mg/L
		29-Mar-21	7.0	mg/L
		12-Apr-21	7.2	mg/L
		26-Apr-21	7.3	mg/L

10. Summary of O. Reg. Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 02	Results PH 14	Results PH 23	Unit of Measure	Exceedance
Alkalinity	2021	165-191*			mg/L	no
Antimony	20-May-21	<0.0001	<0.0001	<0.0001	µg/L	no
Arsenic	20-May-21	0.0002	0.0003	0.0001	µg/L	no
Barium	20-May-21	0.72	0.061	0.058	µg/L	no
Boron	20-May-21	0.012	0.008	0.009	µg/L	No
Cadmium	20-May-21	<0.000015	<0.000015	<0.000015	µg/L	no
Chromium	20-May-21	<0.002	<0.002	<0.002	µg/L	no
Mercury	20-May-21	<0.00002	<0.00002	<0.00002	µg/L	no
Selenium	20-May-21	<0.001	<0.001	<0.001	µg/L	no
Uranium	20-May-21	2.01	2.61	1.39	µg/L	no
Flouride	24-Apr-18	ND	ND	ND	mg/L	no
Sodium	24-Apr-18	8500	6400	6400	µg/L	no
Lead	2021	0.06-0.15*			µg/L	no
Nitrite	2021	<0.1	<0.1	<0.1	mg/L	no
Nitrate	2021	5.9-6.7	0.8-9.2	6.2-8.0	mg/L	no

**Distribution sample*



Township of Tiny 2021 Annual Drinking Water Report Lafontaine Drinking Water System

11. Summary of O. Reg. Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	PH 02	PH 14	PH 23	Unit	Exceedance
Alachlor	20-May-21	<0.3	<0.3	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	<1	<1	µg/L	no
Benzene	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	<0.006	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Carbaryl	20-May-21	<3	<3	<3	µg/L	no
Carbofuran	20-May-21	<1	<1	<1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Diazinon	20-May-21	<1	<1	<1	µg/L	no
Dicamba	20-May-21	<10	<10	<10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	<0.5	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Dichloromethane	20-May-21	<5	<5	<5	µg/L	no
2,4-Dichlorophenol	20-May-21	<0.2	<0.2	<0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	<10	<10	<10	µg/L	no
Diclofop-methyl	20-May-21	<0.9	<0.9	<0.9	µg/L	no
Dimethoate	20-May-21	<1	<1	<1	µg/L	no
Diquat	20-May-21	<5	<5	<5	µg/L	no
Diuron	20-May-21	<5	<5	<5	µg/L	no
Glyphosate	20-May-21	<25	<25	<25	µg/L	no
Malathion	20-May-21	<5	<5	<5	µg/L	no
Metolachlor	20-May-21	<3	<3	<3	µg/L	no
Metribuzin	20-May-21	<3	<3	<3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Paraquat	20-May-21	<1	<1	<1	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Lafontaine Drinking Water System

Note: ND = not detected

Parameter	Sample Date	PH 02	PH 14	PH 23	Unit	Exceedance
Pentachlorophenol	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Phorate	20-May-21	<0.3	<0.3	<0.3	µg/L	no
Picloram	20-May-21	<15	<15	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	<0.05	<0.05	µg/L	no
Prometryne	20-May-21	<0.1	<0.1	<0.1	µg/L	no
Simazine	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	<0.5	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Triallate	20-May-21	<10	<10	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	<0.5	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	<0.2	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	<0.5	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	<0.2	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Avg. East	5.3	ug/L	no
Haloacetic Acids Avg. West	5.3	ug/L	no
Trihalomethanes Avg. East	6.0	ug/L	no
Trihalomethanes Avg. West	8.5	ug/L	no

The Lafontaine drinking water system is licensed as one Drinking Water System but as a Best Management Practice the Water Department has been sampling for Trihalomethanes and Haloacetic Acids on the upper and lower sides of the system as either side has different water qualities.



Township of Tiny 2021 Annual Drinking Water Report Lafontaine Drinking Water System

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
Nitrates	Various	mg/L	See note below

The Lafontaine nitrate issue is ongoing and is monitored closely. Section 9 above includes a chart of extra sampling required as we exceed half the standard regularly.



Township of Tiny 2021 Annual Drinking Water Report Lefaive Drinking Water System

Drinking Water System Number: 220005321

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Lefaive Drinking Water System is comprised of one pumping station, two groundwater wells, and approximately 1.4 km of distribution water mains. The system serves 69 properties, with 18 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Lefaive Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Well 3-3 pump replacement and well repair	16,499.02
PH 03 piping replacement	4,753.80
Well 3-2 pump replacement	7,347.03
Total Expenditure: \$28,599.85	

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	52	0	0-12	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-20

Following Best Management Practices each well used for municipal drinking water supply in the Township is on a schedule for maintenance and rehabilitation. The Lefaive wells 3-2 and 3-3 were scheduled for rehabilitation in 2021 resulting in fewer bacteriological tests being taken during these shutdowns.



Township of Tiny 2021 Annual Drinking Water Report Lefaive Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.06	0.85	NTU
Chlorine – Treated	156	1.05	2.03	mg/L
Chlorine - Distribution	104	1.06	2.00	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
<i>None</i>				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 03	Unit of Measure	Exceedance
Alkalinity	2021	225-256*	mg/L	no
Antimony	20-May-21	<0.0001	mg/L	no
Arsenic	20-May-21	0.0001	mg/L	no
Barium	20-May-21	0.055	mg/L	no
Boron	20-May-21	0.013	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	mg/L	no
Selenium	20-May-21	<0.001	mg/L	no
Uranium	20-May-21	0.00071	mg/L	no
Flouride	24-Apr-18	ND	mg/L	no
Sodium	24-Apr-18	8900	µg/L	no
Lead	2021	0.04-0.06*	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.1-0.5	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Lefaive Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 03	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	<1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	µg/L	no
Diazinon	20-May-21	< 1	µg/L	no
Dicamba	20-May-21	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	< 0.5	µg/L	no
Dichloromethane	20-May-21	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	< 0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	<0.10	µg/L	no
Diclofop-methyl	20-May-21	< 0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	< 5	µg/L	no
Diuron	20-May-21	< 5	µg/L	no
Glyphosate	20-May-21	< 25	µg/L	no
Malathion	20-May-21	< 5	µg/L	no
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	µg/L	no
Paraquat	20-May-21	<1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Lefaive Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 03	Unit	Exceedance
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.2	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	< 10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.3	ug/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny 2021 Annual Drinking Water Report Pennorth Drinking Water System

Drinking Water System Number: 220005358

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Pennorth Drinking Water System is comprised of one pumping station, two groundwater wells, and approximately 0.7 km of distribution water mains. The system serves 32 properties, with 7 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Pennorth Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

<i>None</i>	
Total Expenditure:	\$0.00

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	10-100



Township of Tiny 2021 Annual Drinking Water Report Pennorth Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.08	0.62	NTU
Chlorine – Treated	156	1.15	2.54	mg/L
Chlorine - Distribution	104	0.77	1.89	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 07	Unit of Measure	Exceedance
Alkalinity	2021	191-225*	mg/L	no
Antimony	20-May-21	<0.0001	mg/L	no
Arsenic	20-May-21	0.0001	mg/L	no
Barium	20-May-21	0.027	mg/L	no
Boron	20-May-21	0.009	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	mg/L	no
Selenium	20-May-21	<0.001	mg/L	no
Uranium	20-May-21	0.00073	mg/L	no
Flouride	24-Apr-18	ND	mg/L	no
Sodium	24-Apr-18	5700	µg/L	no
Lead	2021	0.08-0.09*	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.1-0.1	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Pennorth Drinking Water System

11. Summary of O. Reg. 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 07	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	< 0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	µg/L	no
Diazinon	20-May-21	< 1	µg/L	no
Dicamba	20-May-21	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	< 0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	< 0.5	µg/L	no
1,2-dichloroethane	20-May-21	< 0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	< 0.5	µg/L	no
Dichloromethane	20-May-21	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	< 0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	µg/L	no
Diclofop-methyl	20-May-21	< 0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	< 5	µg/L	no
Diuron	20-May-21	< 5	µg/L	no
Glyphosate	20-May-21	<25	µg/L	no
Malathion	20-May-21	<5	µg/L	no
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	µg/L	no
Paraquat	20-May-21	< 1	µg/L	no
Pentachlorophenol	20-May-21	< 0.2	µg/L	no
Phorate	20-May-21	< 0.3	µg/L	no
Picloram	20-May-21	< 15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Pennorth Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 07	Unit	Exceedance
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.2	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	< 0.2	µg/L	no
Triallate	20-May-21	< 10	µg/L	no
Trichloroethylene	20-May-21	<0.2	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	8.1	ug/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny 2021 Annual Drinking Water Report Perkinsfield Drinking Water System

Drinking Water System Number: 220005544

Drinking Water System Category: Large Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Perkinsfield Drinking Water System is comprised of two pumping stations, four groundwater wells (only three are currently in use), two storage reservoirs, and approximately 10.2 km of distribution watermains. The system serves 209 properties, with 8 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Perkinsfield Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

PH 26 PRV replacement	4,251.04
PH 22 raw FCV replacement x 2	8,266.00
PH 26 Electrical repairs	1,044.04
PH 26 Chlorine pump replacement	624.30
PH 22 Flow meter replacement	4,757.04

Total Expenditure: \$19,342.42

6. 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
3-Nov-21	Microbiological	1 TC	CFU/100ml	Resample-results negative	4-Nov-21

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	156	0	0-21	n/a	n/a
Treated	105	0	0	104	0-90
Distribution	104	0	0-1	34	0-100



Township of Tiny 2021 Annual Drinking Water Report Perkinsfield Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	36	0.06	0.72	NTU
Chlorine – Treated	312	0.64	2.57	mg/L
Chlorine - Distribution	365	0.71	2.90	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Results	Unit of Measure	Exceedance
		PH 22	PH 26		
Alkalinity	2021	134-271*		mg/L	no
Antimony	20-May-21	<0.0001	<0.0001	mg/L	no
Arsenic	20-May-21	0.0002	0.0005	mg/L	no
Barium	20-May-21	0.042	0.022	mg/L	no
Boron	20-May-21	0.112	0.201	mg/L	no
Cadmium	20-May-21	<0.000015	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	<0.00002	mg/L	no
Selenium	20-May-21	<0.001	0.002	mg/L	no
Uranium	20-May-21	0.00162	0.00040	mg/L	no
Flouride	24-Apr-18	ND	0.62	mg/L	no
Sodium	24-Apr-18	17000	53000	µg/L	no
Lead	2021	<0.02-0.12		mg/L	no
Nitrite	2021	<0.1	<0.1	mg/L	no
Nitrate	2021	0.8-2.5	<0.1	mg/L	no

*Distribution Sample



Township of Tiny 2021 Annual Drinking Water Report Perkinsfield Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Results	Unit	Exceedance
		PH 22	PH 26		
Alachlor	20-May-21	<0.3	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	<0.5	µg/L	no
Azinphos-methyl	20-May-21	< 1	< 1	µg/L	no
Benzene	20-May-21	<0.5	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	<0.05	µg/L	no
Carbaryl	20-May-21	< 3	< 3	µg/L	no
Carbofuran	20-May-21	< 1	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	< 0.2	< 0.2	µg/L	no
Chlorpyrifos	20-May-21	< 0.5	<0.5	µg/L	no
Diazinon	20-May-21	< 1	< 1	µg/L	no
Dicamba	20-May-21	< 10	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	<0.5	µg/L	no
1,2-dichloroethane	20-May-21	<0.5	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	<0.5	µg/L	no
Dichloromethane	20-May-21	<5	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	< 0.2	< 0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	< 10	µg/L	no
Diclofop-methyl	20-May-21	< 0.9	< 0.9	µg/L	no
Dimethoate	20-May-21	< 1	< 1	µg/L	no
Diquat	20-May-21	< 5	< 5	µg/L	no
Diuron	20-May-21	< 5	< 5	µg/L	no
Glyphosate	20-May-21	< 25	< 25	µg/L	no
Malathion	20-May-21	< 5	< 5	µg/L	no
Metolachlor	20-May-21	< 3	< 3	µg/L	no
Metribuzin	20-May-21	< 3	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	<0.5	µg/L	no
Paraquat	20-May-21	< 1	< 1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Phorate	20-May-21	<0.3	<0.3	µg/L	no
Picloram	20-May-21	< 15	< 15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	<0.05	µg/L	no
Prometryne	20-May-21	<0.1	<0.1	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Perkinsfield Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results	Results	Unit	Exceedance
		PH 22	PH 26		
Simazine	20-May-21	<0.5	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Triallate	20-May-21	<10	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	23.5	ug/L	no
Trihalomethanes Average	55	ug/L	no

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
Trihalomethanes	60	µm	9-Feb-21
Trihalomethanes	69	µm	20-May-21
Trihalomethanes	70	µm	22-Nov-21



Township of Tiny

2021 Annual Drinking Water Report

Rayko Drinking Water System

Drinking Water System Number: 220005367

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Rayko Drinking Water System is comprised of one pumping station, two groundwater wells, one storage reservoir (currently not in use), and approximately 1.4 km of distribution watermains. The system serves 40 properties, with 12 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Rayko Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

PH 06 piping upgrades	6,412.75

Total Expenditure: \$6,412.75

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0-6	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-50



Township of Tiny 2021 Annual Drinking Water Report Rayko Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.15	0.76	NTU
Chlorine – Treated	156	1.01	2.14	mg/L
Chlorine - Distribution	104	0.97	2.18	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Unit of Measure	Exceedance
		PH 06		
Alkalinity	2020	120-137*	mg/L	no
Antimony	20-May-21	<0.0001	mg/L	no
Arsenic	20-May-21	0.0002	mg/L	no
Barium	20-May-21	0.060	mg/L	no
Boron	20-May-21	0.009	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	mg/L	no
Selenium	20-May-21	<0.001	mg/L	no
Uranium	20-May-21	0.00016	mg/L	no
Flouride	24-Apr-18	ND	mg/L	no
Sodium	24-Apr-18	6000	µg/L	no
Lead	2021	0.43-1*	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.1-0.4	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Rayko Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 06	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	< 1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	µg/L	no
Diazinon	20-May-21	< 1	µg/L	no
Dicamba	20-May-21	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	µg/L	no
Dichloromethane	20-May-21	<5	µg/L	no
2,4-Dichlorophenol	20-May-21	<0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	<10	µg/L	no
Diclofop-methyl	20-May-21	<0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	<5	µg/L	no
Diuron	20-May-21	<5	µg/L	no
Glyphosate	20-May-21	<25	µg/L	no
Malathion	20-May-21	<5	µg/L	no
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	µg/L	no
Paraquat	20-May-21	< 1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Rayko Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 06	Unit	Exceedance
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	11.6	ug/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny 2021 Annual Drinking Water Report Sawlog Bay Drinking Water System

Drinking Water System Number: 220006259

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Sawlog Bay Drinking Water System is comprised of one pumping station, two groundwater wells, one storage reservoir, and approximately 1.5 km of distribution watermains. The system serves 49 properties, with 21 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)

Polyphosphate (ClearHib 5)



Township of Tiny 2021 Annual Drinking Water Report Sawlog Bay Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

PH 16 treated piping replacement	16,118.16
PH 16 Electrical repairs	1370.65
PH chlorine pump replacement x2	1401.97

Total Expenditure: \$18,890.78

6. 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
27-Aug-21	Chemical- Lead	14.4	mg/L	Flush and Resample	2-Sep-21

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-20



Township of Tiny 2021 Annual Drinking Water Report Sawlog Bay Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.09	0.34	NTU
Chlorine – Treated	156	0.63	2.67	mg/L
Chlorine - Distribution	104	1.01	2.16	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
<i>None</i>				

10. Summary of O. Reg 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Unit of Measure	Exceedance
		PH 16		
Alkalinity	2021	185-209*	mg/L	no
Antimony	20-May-21	<0.0001	mg/L	no
Arsenic	20-May-21	<0.0001	mg/L	no
Barium	20-May-21	499-594	µg/L	no
Boron	20-May-21	0.024	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	mg/L	no
Selenium	20-May-21	<0.001	mg/L	no
Uranium	20-May-21	0.00024	mg/L	no
Flouride	24-Apr-18	ND	mg/L	no
Sodium	24-Apr-18	8900	µg/L	no
Lead	2021	ND*	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.1	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Sawlog Bay Drinking Water System

11. Summary of O. Reg. 169/03 Schedule Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 16	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	< 1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	µg/L	no
Diazinon	20-May-21	<1	µg/L	no
Dicamba	20-May-21	<10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	µg/L	no
Dichloromethane	20-May-21	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	<0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	µg/L	no
Diclofop-methyl	20-May-21	<0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	< 5	µg/L	no
Diuron	20-May-21	< 5	µg/L	no
Glyphosate	20-May-21	< 25	µg/L	no
Malathion	20-May-21	< 5	µg/L	no
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	µg/L	no
Paraquat	20-May-21	< 1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Sawlog Bay Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 16	Unit	Exceedance
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	44.1	ug/L	no
Trihalomethanes Average	58	N/A	no

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
Haloacetic Acids	48.9	µg/L	9-Feb-21
Haloacetic Acids	45.0	µg/L	20-May-21
Haloacetic Acids	45.0	µg/L	22-Nov-21
Trihalomethanes	53	µg/L	9-Feb-21
Trihalomethanes	56	µg/L	20-May-21
Trihalomethanes	56	µg/L	24-Aug-21
Trihalomethanes	66	µg/L	22-Nov-21
Barium	520	µg/L	9-Feb-21
Barium	594	µg/L	20-May-21
Barium	580	µg/L	24-Aug-21



Township of Tiny

2021 Annual Drinking Water Report

Tee Pee Point Drinking Water System

Drinking Water System Number: 220005394

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Tee Pee Point Drinking Water System is comprised of one pumping station, two groundwater wells, and approximately 2.2 km of distribution watermains. The system serves 94 properties, with 3 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)

Polyphosphate (ClearHib 5)



Township of Tiny
2021 Annual Drinking Water Report
Tee Pee Point Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Install yard hydrant	1593.30

Total Expenditure: \$1593.30

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0-2	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-270



Township of Tiny 2021 Annual Drinking Water Report Tee Pee Point Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.13	0.43	NTU
Chlorine – Treated	156	1.10	2.20	mg/L
Chlorine - Distribution	104	0.71	2.17	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 09	Unit of Measure	Exceedance
Alkalinity	2021	188-203*	mg/L	no
Antimony	20-May-21	<0.0001	mg/L	no
Arsenic	20-May-21	0.0007	mg/L	no
Barium	20-May-21	0.059	mg/L	no
Boron	20-May-21	0.189	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	<0.002	mg/L	no
Mercury	20-May-21	<0.00002	mg/L	no
Selenium	20-May-21	<0.001	mg/L	no
Uranium	20-May-21	0.00040	mg/L	no
Flouride	24-Apr-18	0.36	mg/L	No
Sodium	21-Feb-18	23000	µg/L	Yes**
Sodium Resample	06-Mar-18	23000	µg/L	Yes**
Sodium	24-Apr-18	20000	µg/L	Yes**
Lead	2021	<0.02-0.53*	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.1	mg/L	no



Township of Tiny 2021 Annual Drinking Water Report Tee Pee Point Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 09	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	µg/L	no
Chlorpyrifos	20-May-21	< 0.5	µg/L	no
Diazinon	20-May-21	< 1	µg/L	no
Dicamba	20-May-21	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	µg/L	no
Dichloromethane	20-May-21	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	< 0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	µg/L	no
Diclofop-methyl	20-May-21	< 0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	< 5	µg/L	no
Diuron	20-May-21	< 5	µg/L	no
Glyphosate	20-May-21	<25	µg/L	no
Malathion	20-May-21	< 5	µg/L	no
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	µg/L	no
Paraquat	20-May-21	< 1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	< 15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Tee Pee Point Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 09	Unit	Exceedance
Prometryne	20-May-21	< 0.1	µg/L	no
Simazine	20-May-21	< 0.5	µg/L	no
Terbufos	20-May-21	< 0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	< 10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	< 0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	No

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.9	µg/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
Sodium	23000	µg/L	21-Feb-18
Sodium	23000	µg/L	06-Mar-18
Sodium	20000	µg/L	24-Apr-18

**The first adverse sodium event was discovered during testing for lead in the distribution system. A resample was taken and it confirmed high amounts of naturally occurring sodium in the drinking water. The third adverse test was taken during the regulated 3-5-year sampling, no resample was done as it was a known issue.



Township of Tiny 2021 Annual Drinking Water Report Thunder Bay Drinking Water System

Drinking Water System Number: 220006268

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Thunder Bay Drinking Water System is comprised of one pumping station, two groundwater wells, and approximately 1.1 km of distribution watermains. The system serves 24 properties, with 13 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny
2021 Annual Drinking Water Report
Thunder Bay Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Raw FCV replacement	8,076.00
Raw piping replacement	5,720.26
Flow meter replacement	4,757.04

Total Expenditure: \$18,553.30

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-20



Township of Tiny 2021 Annual Drinking Water Report Thunder Bay Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.08	0.53	NTU
Chlorine – Treated	156	1.30	1.96	mg/L
Chlorine - Distribution	104	1.10	1.94	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 20	Unit of Measure	Exceedance
Alkalinity	2021	110-122*	mg/L	no
Antimony	20-May-21	< 0.0001	mg/L	no
Arsenic	20-May-21	0.0003	mg/L	no
Barium	20-May-21	0.108	mg/L	no
Boron	20-May-21	0.007	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	< 0.002	mg/L	no
Mercury	20-May-21	< 0.00002	mg/L	no
Selenium	20-May-21	< 0.001	mg/L	no
Uranium	20-May-21	0.40	µg/L	no
Flouride	24-Apr-18	ND	mg/L	no
Sodium	24-Apr-18	5400	µg/L	no
Lead	2021	0.03-0.12*	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.1	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Thunder Bay Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 20	Unit	Exceedance
Alachlor	20-May-21	< 0.3	µg/L	no
Atrazine + metabolites	20-May-21	< 0.5	µg/L	no
Azinphos-methyl	20-May-21	< 1	µg/L	no
Benzene	20-May-21	< 0.5	µg/L	no
Benzo(a)pyrene	20-May-21	< 0.006	µg/L	no
Bromoxynil	20-May-21	< 0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	< 0.2	µg/L	no
Chlorpyrifos	20-May-21	< 0.5	µg/L	no
Diazinon	20-May-21	< 1	µg/L	no
Dicamba	20-May-21	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	< 0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	< 0.5	µg/L	no
1,2-dichloroethane	20-May-21	< 0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	< 0.5	µg/L	no
Dichloromethane	20-May-21	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	< 0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	µg/L	no
Diclofop-methyl	20-May-21	< 0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	< 5	µg/L	no
Diuron	20-May-21	< 5	µg/L	no
Glyphosate	20-May-21	< 25	µg/L	no
Malathion	20-May-21	< 5	µg/L	no
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	< 3	µg/L	no
Monochlorobenzene	20-May-21	< 0.5	µg/L	no
Paraquat	20-May-21	< 1	µg/L	no
Pentachlorophenol	20-May-21	< 0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Thunder Bay Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 20	Unit	Exceedance
Prometryne	20-May-21	< 0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	< 0.2	µg/L	no
Triallate	20-May-21	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	< 0.5	µg/L	no
Vinyl Chloride	20-May-21	< 0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.3	ug/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny 2021 Annual Drinking Water Report Vanier Woods Drinking Water System

Drinking Water System Number: 220005401

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Vanier Woods Drinking Water System is comprised of one pumping station, two groundwater wells, one storage reservoir, and approximately 1.7 km of distribution watermains. The system serves 71 properties, with 2 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Vanier Woods Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Reservoir entry Davit arm installation	3,282.65
Total Expenditure: \$ 3,282.65	

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0-NDOGN	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-20

NDOGN- No Data: overgrown with Non-Target Bacteria

A raw water sample was taken at Pump Station 15 and transported to an external, accredited analytical laboratory for testing. The result was returned as NDOGN which means the result was indeterminate as a result of excessive growth making it impossible to accurately determine the count of target organisms that were present. In most cases of NDOGN results the



Township of Tiny 2021 Annual Drinking Water Report Vanier Woods Drinking Water System

root cause is found to be contamination of the sample during collection or testing. The sample bottle may have touched the collection tap may not have been disinfected properly prior to collecting the sample, or the operator/lab technician may have touched the bottle or cap in such a way that contamination was transferred to the water prior to testing.

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.06	0.58	NTU
Chlorine – Treated	156	0.96	2.17	mg/L
Chlorine - Distribution	104	1.11	2.09	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
<i>None</i>				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Unit of Measure	Exceedance
		PH 15		
Alkalinity	2021	134-163*	mg/L	no
Antimony	20-May-21	< 0.0001	mg/L	no
Arsenic	20-May-21	0.0006	mg/L	no
Barium	20-May-21	0.027	mg/L	no
Boron	20-May-21	0.007	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	< 0.002	mg/L	no
Mercury	20-May-21	< 0.00002	mg/L	no
Selenium	20-May-21	< 0.001	mg/L	no
Uranium	20-May-21	0.00169	mg/L	no
Flouride	24-Apr-18	ND	mg/L	no
Sodium	24-Apr-18	4700	µg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Vanier Woods Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results	Unit of Measure	Exceedance
		PH 15		
Lead	2021	0.02-0.03*	mg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.1	mg/L	no

**Distribution Sample*

11. Summary of O. Reg. 169/04 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 15	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	< 1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	< 0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	µg/L	no
Diazinon	20-May-21	< 1	µg/L	no
Dicamba	20-May-21	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	< 0.5	µg/L	no
Dichloromethane	20-May-21	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	< 0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	µg/L	no
Diclofop-methyl	20-May-21	<0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	< 5	µg/L	no
Diuron	20-May-21	< 5	µg/L	no
Glyphosate	20-May-21	<25	µg/L	no
Malathion	20-May-21	< 5	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Vanier Woods Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 15	Unit	Exceedance
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	<0.3	µg/L	no
Monochlorobenzene	20-May-21	< 0.5	µg/L	no
Paraquat	20-May-21	< 1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	< 0.3	µg/L	no
Picloram	20-May-21	< 15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	ND	µg/L	no
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.3	ug/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
None			



Township of Tiny 2021 Annual Drinking Water Report Whippoorwill Drinking Water System

Drinking Water System Number: 220007481

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Whippoorwill Drinking Water System is comprised of one pumping station, two groundwater wells, one storage reservoir, and approximately 2.6 km of distribution water mains. The system serves 71 properties, with 2 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)



Township of Tiny 2021 Annual Drinking Water Report Whippoorwill Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

PH 21 install cellular modem to replace tower	791.00
Total Expenditure: \$791.00	

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0-2	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-10



Township of Tiny 2021 Annual Drinking Water Report Whippoorwill Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.04	0.69	NTU
Chlorine – Treated	156	1.13	2.34	mg/L
Chlorine - Distribution	104	0.90	1.85	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Unit of Measure	Exceedance
		21		
Alkalinity	2021	158-194*	mg/L	no
Antimony	20-May-21	< 0.0001	mg/L	no
Arsenic	20-May-21	0.0002	mg/L	no
Barium	20-May-21	0.091	mg/L	no
Boron	20-May-21	0.017	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	< 0.002	mg/L	no
Mercury	20-May-21	< 0.00002	mg/L	no
Selenium	20-May-21	< 0.001	mg/L	no
Uranium	20-May-21	0.00061	mg/L	no
Flouride	24-Apr-08	0.11	mg/L	no
Sodium	24-Apr-08	9400	µm	no
Lead	2021	0.12-0.49*	µm	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.2-0.9	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Whippoorwill Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 21	Unit	Exceedance
Alachlor	20-May-21	< 0.3	µg/L	no
Atrazine + metabolites	20-May-21	< 0.5	µg/L	no
Azinphos-methyl	20-May-21	< 1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	< 0.006	µg/L	no
Bromoxynil	20-May-21	< 0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	µg/L	no
Chlorpyrifos	20-May-21	< 0.5	µg/L	no
Diazinon	20-May-21	< 1	µg/L	no
Dicamba	20-May-21	<10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	µg/L	no
Dichloromethane	20-May-21	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	< 0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	µg/L	no
Diclofop-methyl	20-May-21	< 0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	< 5	µg/L	no
Diuron	20-May-21	< 5	µg/L	no
Glyphosate	20-May-21	< 25	µg/L	no
Malathion	20-May-21	< 5	µg/L	no
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	µg/L	no
Paraquat	20-May-21	< 1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Whippoorwill Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 21	Unit	Exceedance
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	< 10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.3	ug/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny 2021 Annual Drinking Water Report Woodland Beach Drinking Water System

Drinking Water System Number: 260002330

Drinking Water System Category: Small Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There are no Designated Facilities served by this Drinking Water System but a copy of this report is available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Woodland Beach Drinking Water System is comprised of one pumping station, two groundwater wells, and approximately 1.2 km of distribution watermains. The system serves 34 properties, with 11 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)

Polyphosphate (ClearHib 5)



Township of Tiny 2021 Annual Drinking Water Report Woodland Beach Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Install yard hydrant	3,949.63
PH 25 Electrical repair	1,068.09
PH 25 Chlorine pump replacement	1,374.80
Total Expenditure: \$6392.52	

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	56	0	0-12	n/a	n/a
Treated	28	0	0	n/a	n/a
Distribution	28	0	0	28	0-20



Township of Tiny 2021 Annual Drinking Water Report Woodland Beach Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	24	0.08	0.46	NTU
Chlorine – Treated	156	0.43	1.96	mg/L
Chlorine - Distribution	104	0.48	1.74	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Unit of Measure	Exceedance
		PH 25		
Alkalinity	2021	154-174*	mg/L	no
Antimony	20-May-21	< 0.0001	mg/L	no
Arsenic	20-May-21	0.0004	mg/L	no
Barium	20-May-21	0.109	mg/L	no
Boron	20-May-21	0.026	mg/L	no
Cadmium	20-May-21	<0.000015	mg/L	no
Chromium	20-May-21	< 0.002	mg/L	no
Mercury	20-May-21	< 0.00002	mg/L	no
Selenium	20-May-21	< 0.001	mg/L	no
Uranium	20-May-21	0.00029	mg/L	no
Flouride	24-Apr-08	0.12	mg/L	no
Sodium	24-Apr-08	12000	µg/L	no
Lead	2021	0.02-0.193	µg/L	no
Nitrite	2021	<0.1	mg/L	no
Nitrate	2021	<0.1	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Woodland Beach Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results PH 25	Unit	Exceedance
Alachlor	20-May-21	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	µg/L	no
Azinphos-methyl	20-May-21	<1	µg/L	no
Benzene	20-May-21	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	µg/L	no
Carbaryl	20-May-21	< 3	µg/L	no
Carbofuran	20-May-21	<1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	µg/L	no
Chlorpyrifos	20-May-21	< 0.5	µg/L	no
Diazinon	20-May-21	< 1	µg/L	no
Dicamba	20-May-21	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	µg/L	no
Dichloromethane	20-May-21	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	<0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	µg/L	no
Diclofop-methyl	20-May-21	< 0.9	µg/L	no
Dimethoate	20-May-21	< 1	µg/L	no
Diquat	20-May-21	< 5	µg/L	no
Diuron	20-May-21	<5	µg/L	no
Glyphosate	20-May-21	< 25	µg/L	no
Malathion	20-May-21	< 5	µg/L	no
Metolachlor	20-May-21	< 3	µg/L	no
Metribuzin	20-May-21	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	µg/L	no
Paraquat	20-May-21	< 1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	µg/L	no
Phorate	20-May-21	<0.3	µg/L	no
Picloram	20-May-21	< 15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Woodland Beach Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 25	Unit	Exceedance
Prometryne	20-May-21	<0.1	µg/L	no
Simazine	20-May-21	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	µg/L	no
Triallate	20-May-21	< 10	µg/L	no
Trichloroethylene	20-May-21	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	18.9	ug/L	no
Trihalomethanes Average	N/A	N/A	N/A

In accordance with O. Reg 170/03, Schedule 13, trihalomethanes were not sampled in 2021 as it is the second year in the reduced sampling schedule. Sampling to resume in 2022.

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			



Township of Tiny 2021 Annual Drinking Water Report Wyevale Drinking Water System

Drinking Water System Number: 220005410

Drinking Water System Category: Large Municipal Residential

Owned and Operated by: The Corporation of the Township of Tiny

Report covering: January 1st to December 31st, 2021

1. Notification and Availability of Reports:

The annual reports and annual summary reports are available to the public at no charge on the Township of Tiny website:

www.Tiny.ca

The Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection at the Township of Tiny Municipal Office:

130 Balm Beach Road W,
Tiny, Ontario
L0L 2J0

System users were notified that annual reports are available, free of charge, through the Township of Tiny website and when the public requests a report.

This Drinking Water System does not serve more than 10,000 people.

There is one Designated Facility served by this Drinking Water System. A copy of this annual report was provided to the Designated Facility and is also available upon request.

The Township of Tiny does not report to any Interested Authorities.

There are no other Drinking Water Systems that receive all of their drinking water from this system.

2. Drinking Water System Descriptions:

The Wyevale Drinking Water System is comprised of two pumping stations, five groundwater wells, one pumping station and reservoir, and approximately 8.4 km of distribution water mains. The system serves 288 properties, with 22 vacant lots slated for future service.

3. Water treatment chemicals used in this reporting period:

Sodium Hypochlorite (Flochem-12)

Polyphosphate (ClearHib 5)



Township of Tiny 2021 Annual Drinking Water Report Wyevale Drinking Water System

4. Significant expenses were incurred to:

- a. Install required equipment
- b. Repair required equipment
- c. Replace required equipment
- d. Studies/Engineering

5. Description and breakdown of monetary expenses incurred:

Install yard hydrants x2	4,638.99
PH 29 piping upgrades	3,417.80
PH 29 electrical repairs	5,797.89
PH 24 electrical repairs	1,551.75
Water meter installation project (partial carried over to 2022)	134,447.43

Total Expenditure: \$149,853.86

6. 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
<i>None</i>					

7. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period:

Sample Locations	Number of Samples	Range of E. Coli results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	260	0	0-1	n/a	n/a
Treated	104	0	0	104	0-100
Distribution	104	0	0	32	0-40



Township of Tiny 2021 Annual Drinking Water Report Wyevale Drinking Water System

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

Parameter	Number of Grab Samples	Range of Results		
		(min #)-(max #)		Unit
Turbidity - Raw	60	0.04	0.84	NTU
Chlorine – Treated	320	1.14	1.89	mg/L
Chlorine - Distribution	580	0.69	1.69	mg/L
Fluoride – not required	N/A	N/A	N/A	N/A

9. 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	Result	Unit of Measure
None				

10. Summary of O. Reg. 169/03 Schedule 23 Inorganic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Results	Unit of Measure	Exceedance
		PH 17	PH 29		
Alkalinity	2020	132-175*		mg/L	no
Antimony	20-May-21	<0.0001	<0.0001	µg/L	no
Arsenic	20-May-21	0.0005	0.0003	µg/L	no
Barium	20-May-21	0.119	0.105	µg/L	no
Boron	20-May-21	0.009	0.011	µg/L	no
Cadmium	20-May-21	<0.000015	<0.000015	µg/L	no
Chromium	20-May-21	< 0.002	< 0.002	µg/L	no
Mercury	20-May-21	< 0.00002	< 0.00002	µg/L	no
Selenium	20-May-21	< 0.001	< 0.001	µg/L	no
Uranium	20-May-21	0.00186	0.00052	µg/L	no
Flouride	24-Apr-18	ND	ND	mg/L	no
Sodium	24-Apr-18	6400	6100	µm	no
Lead	2018	ND		µm	no
Nitrite	2020	<0.1	<0.1	mg/L	no
Nitrate	2020	<0.1	1.8-2.2	mg/L	no

**Distribution Sample*



Township of Tiny 2021 Annual Drinking Water Report Wyevale Drinking Water System

11. Summary of O. Reg. 169/03 Schedule 24 Organic parameters tested during this reporting period or the most recent sample results:

Note: ND = not detected

Parameter	Sample Date	Results	Results	Unit	Exceedance
		PH 17	PH 29		
Alachlor	20-May-21	<0.3	<0.3	µg/L	no
Atrazine + metabolites	20-May-21	<0.5	<0.5	µg/L	no
Azinphos-methyl	20-May-21	< 1	<1	µg/L	no
Benzene	20-May-21	< 0.5	<0.5	µg/L	no
Benzo(a)pyrene	20-May-21	<0.006	<0.006	µg/L	no
Bromoxynil	20-May-21	<0.5	<0.5	µg/L	no
Carbaryl	20-May-21	< 3	< 3	µg/L	no
Carbofuran	20-May-21	< 1	< 1	µg/L	no
Carbon Tetrachloride	20-May-21	<0.2	<0.2	µg/L	no
Chlorpyrifos	20-May-21	<0.5	<0.5	µg/L	no
Diazinon	20-May-21	< 1	< 1	µg/L	no
Dicamba	20-May-21	< 10	< 10	µg/L	no
1,2-Dichlorobenzene	20-May-21	< 0.5	< 0.5	µg/L	no
1,4-Dichlorobenzene	20-May-21	<0.5	<0.5	µg/L	no
1,2-Dichloroethane	20-May-21	<0.5	<0.5	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	20-May-21	<0.5	<0.5	µg/L	no
Dichloromethane	20-May-21	< 5	< 5	µg/L	no
2,4-Dichlorophenol	20-May-21	< 0.2	< 0.2	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	20-May-21	< 10	<10	µg/L	no
Diclofop-methyl	20-May-21	< 0.9	<0.9	µg/L	no
Dimethoate	20-May-21	< 1	< 1	µg/L	no
Diquat	20-May-21	< 5	< 5	µg/L	no
Diuron	20-May-21	< 5	< 5	µg/L	no
Glyphosate	20-May-21	< 25	< 25	µg/L	no
Malathion	20-May-21	< 3	< 3	µg/L	no
Metribuzin	20-May-21	< 3	< 3	µg/L	no
Monochlorobenzene	20-May-21	<0.5	<0.5	µg/L	no
Paraquat	20-May-21	< 1	< 1	µg/L	no
Pentachlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Phorate	20-May-21	<0.3	<0.3	µg/L	no
Picloram	20-May-21	<15	<15	µg/L	no
Polychlorinated Biphenyls (PCB)	20-May-21	<0.05	<0.05	µg/L	no



Township of Tiny 2021 Annual Drinking Water Report Wyevale Drinking Water System

Note: ND = not detected

Parameter	Sample Date	Results PH 17	Results PH 29	Unit	Exceedance
Prometryne	20-May-21	<0.01	<0.01	µg/L	no
Simazine	20-May-21	<0.5	<0.5	µg/L	no
Terbufos	20-May-21	<0.5	<0.5	µg/L	no
Tetrachloroethylene (perchloroethylene)	20-May-21	<0.5	<0.5	µg/L	no
2,3,4,6-Tetrachlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Triallate	20-May-21	<10	<10	µg/L	no
Trichloroethylene	20-May-21	<0.5	<0.5	µg/L	no
2,4,6-Trichlorophenol	20-May-21	<0.2	<0.2	µg/L	no
Trifluralin	20-May-21	<0.5	<0.5	µg/L	no
Vinyl Chloride	20-May-21	<0.2	<0.2	µg/L	no

Drinking water samples were collected from the drinking water system and analyzed for all parameters in accordance with O.Reg. 170/03, Schedule 13. All samples analyzed met the requirements and did not exceed the applicable standards stipulated in O.Reg. 169/03.

Distribution Parameter	RAA	Unit	Exceedance
Haloacetic Acids Average	5.3	ug/L	no
Trihalomethanes Average	6	ug/L	no

12. The following inorganic or organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards:

Parameter	Result Value	Unit of Measure	Date of Sample
<i>None</i>			