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**Hydrogeological Assessment
Sawlog Draft Plan**

Township of Tiny, ON



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Hydrogeological Assessment Sawlog Draft Plan

Township of Tiny, ON

**R.J. Burnside & Associates Limited
292 Speedvale Avenue West Unit 20
Guelph ON N1H 1C4 CANADA**

**October 2025
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Disclaimer

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1.0 Introduction

R.J. Burnside & Associates Limited (Burnside) has been retained to complete a desktop hydrogeological assessment to characterize the hydrogeological conditions in the area of the proposed lot severances located west of the intersection of Sawlog Point Rd and Clearwater Crescent in the Township of Tiny, Ontario (hereinafter referred to as the subject lands).

1.1 Scope of Work

This hydrogeological assessment has been completed in general accordance with the Township of Tiny's "Protocol for Evaluation of Potable Groundwater Supplies for Proposed Lot Severances on Private Services for Residential Purposes".

The objectives of the hydrogeological assessment include:

- Characterization of the local and regional geological and hydrogeological setting.
- Assessment of adequate and safe potable water supply viability.

The hydrogeological assessment included the following components:

- a) **Background Review:** Review of available background reports and information pertaining to the local and regional area, including published geological reference material, Ministry of the Environment, Conservation and Parks (MECP) water well records and locally available geological and hydrogeological studies. Identification of existing land uses on the subject lands and within the local area to identify potential contamination sources and other environmental concerns.
- b) **Water Well Survey:** A door-to-door water well survey was completed at properties within 300 m of the subject lands to identify private supply wells and collect information about depth, construction, quantity and quality.
- c) **Water Quality Sample:** One groundwater quality sample from a nearby private well was collected and submitted to an accredited laboratory for analysis of general chemistry, select metals, nutrients (including nitrate and nitrite) and microbiology (E. coli and total coliforms). Groundwater potability was assessed by comparing the results to the Ontario Drinking Water Quality Standards.

2.0 Property Description

The subject lands are located in the Township of Tiny, west of the intersection of Sawlog Point Road and Clearwater Crescent (Figure 1). The property is approximately 3 hectares in size and is currently undeveloped and vegetated. The subject lands are

bordered by Sawlog Point Road to the east, Clearwater Crescent and Champlain Road to the south, residential properties to the west and Georgian Bay to the north.

It is proposed that the subject lands will be severed into 6 residential lots.

3.0 Regional Setting

3.1 Topography and Drainage

The subject lands gradually slope down to the north towards Georgian Bay with elevations ranging from 186 metres above sea level (masl) in the south corner to 177 masl along the north property limit (Figure 2). Published topographic mapping of the property (Figure 2) does not indicate the presence of any drainage features on the subject lands, however it is our understanding that there is a drainage ditch along the northern boundary of the subject lands adjacent to Sawlog Point Road.

3.2 Surficial and Bedrock Geology

The subject lands are located in the physiographic region known as Simcoe Uplands. The region is characterized by broad, rolling till plains, well-drained sandy loam soils and a slightly higher elevation above the adjacent lowlands (Chapman & Putnam, 1984). The subject lands are located within the Severn Sound watershed which is part of the South Georgian Bay Lake Simcoe Source Protection Region.

Surficial geology mapping published by the Ontario Geological Survey (OGS, 2011) shows that the subject lands are located within an area mapped as sand and gravel lacustrine deposits (Figure 3).

A review of the OGS bedrock mapping (OGS, 2011) indicates that the subject lands are underlain by the Shadow Lake Formation, which consists of limestone, dolostone, shale, arkose and sandstone (Figure 4). A review of the MECP well records within 500 m of the subject lands indicates that granite was encountered beneath the limestone in some of the supply wells. Depths to bedrock range from 13.7 m to 53.6 m below ground level (Appendix A).

3.3 Stratigraphy

MECP water well records in the vicinity of the subject lands are mapped on Figure 5. The well locations are based on the UTM coordinates on the well records and have not been checked for accuracy. The MECP water well records were used to create one interpreted cross-section of the stratigraphy underlying the subject lands (Figure 6). The cross-section shows a layer of fine-grained sediments (till) of up to 17 m interbedded with coarse-grained sediments (sand and gravel) overlying limestone from Shadow Lake Formation. Granite is also present in most of the wells underlying limestone. The top of

the bedrock was encountered at elevations ranging from 163 m above sea level (masl) to 174 masl (limestone) and from 146 masl to 156 masl (granite).

3.4 Local Groundwater Use

Municipal water supply servicing is available in the vicinity of the subject lands. PTTW #7784-C25JS9 was issued to Tiny Township for three municipal supply wells (Well #19-1, Well #19-4 and Well #19-5) located approximately 600 m from the subject lands (Figure 5). One of the wells is completed in the bedrock and two of the wells are screened in the overburden aquifer (SGBLS SPR, 2015). The wells are known as the Georgian Bay Estates Water System and service lots within 500 m of the subject lands along Champlain Road, Chippewa Crescent, Coppercliff Crescent, Wigwam Trail, Tonawanda Road and Hiwatha Road.

The MECP maintains a database that provides geological records of wells drilled in the province. MECP well records in the vicinity of the subject lands are mapped on Figure 5. A review of MECP water well records within 500 m of the subject lands (Appendix A) identified 18 well records in which 13 are water supply wells, 2 are observation wells, 1 is a test hole and 2 are abandonment records. Out of the 13 water supply well records reviewed, 10 wells are completed in the bedrock (8 in granite and 2 in limestone) and 3 are completed in the overburden. Bedrock well depths range from 19.2 mbgl to 53.6 mbgl and overburden well depths range from 12.2 mbgl to 15.2 mbgl. Static water levels in the supply wells ranged from 2.7 mbgl to 20.1 mbgl in the granite, from 3.0 mbgl to 5.2 mbgl in the limestone, and from 4.9 mbgl to 8.7 mbgl in the overburden. Pumping test records indicate a low to moderate yield in the granite with recommended pumping rates ranging from 13.6 L/min (3 GPM) to 45.5 L/min (10 GPM). Limestone and overburden have slightly better yields with recommended pumping rates ranging from 22.7 L/min (5 GPM) to 36.4 L/min (8 GPM) and from 35 L/min (7.7 GPM) to 54.5 L/min (12 GPM), respectively.

4.0 Site Setting

4.1 Well Survey

A water well survey was completed by Burnside staff on September 25, 2025, to identify and obtain information about surrounding private supply wells. If the resident was not home at the time of the survey, a letter and survey were left at the house. A copy of the letter and well survey and copies of the returned surveys distributed are provided in Appendix B. It is important to note that the subject lands are in cottage country, therefore many properties in the survey area were vacant at the time of the survey.

A total of 24 properties were visited along Sawlog Point Road, Clearwater Crescent, Champlain Road and Wigwam Trail. During the survey information from three properties was collected through discussions with the residents. Two additional response were

received by email and mail on a later date. The results of the survey are summarized in Table B-1, Appendix B.

Three properties owners along Champlain Road and Wigwam Trail indicated that they were connected to municipal water. Houses along Sawlog Point Road and Clearwater Crescent had private water supply wells. The surveys identified that water quantity is not an issue for nearby properties with no reported wells going dry. Water quality was noted not to be a concern however most survey respondents had water treatment such as filters, softeners, UV and reverse osmosis.

4.2 Water Quality

With the permission of the owner, a raw water quality sample was collected from a drilled bedrock well located at 220 Sawlog Point Road on September 25, 2025. The well is approximately 200 m southeast of the subject lands (Figure 5) and has a reported depth of 103 m. Burnside was not permitted access into the house to collect the sample so provided instructions and laboratory supplied containers to the resident to collect the sample from their storage tank before the treatment systems. The samples were submitted to Bureau Veritas for analysis of general chemistry, metals, nutrients and microbiology. The analytical results are provided in Table C-1, Appendix C with comparison to the Ontario Drinking Water Quality Standards (ODWQS). The Certificate of Analysis provided by Bureau Veritas is also presented in Appendix C.

4.2.1 Health Parameters

Microbiological parameters E.Coli and Total Coliforms were sampled for and compared to the ODWQS. E.Coli, which is an indicator of contamination from sewage or animal fecal matter was not detected. Total Coliforms were reported as 2 CFU/100 mL. The ODWQS for total coliforms is non-detect. Coliforms are bacteria associated with environmental sources such as vegetation and soil or possibly faecal material. Many factors can influence total coliform counts (including seasonal variations, precipitation events and improper sampling techniques); however, a low count of total coliforms may indicate the presence of more harmful bacteria with similar life cycles. Detections of total coliforms is common in wells that have not been properly or recently disinfected. It is recommended that the well owner submit a sample to a local health unit to see if total coliform is still present.

Fluoride exceeded the ODWQS Maximum Acceptable Concentration (MAC) of 1.5 mg/L with a reported concentration of 1.8 mg/L. Fluoride is naturally occurring and is common in bedrock aquifers. While low levels of fluoride in drinking water are essential to prevent tooth decay, high concentrations can lead to dental fluorosis which consists of white spots on teeth considered a non-serious health risk.

Table 1 below summarizes the water quality exceedances that were reported for the private well near the subject lands.

4.2.2 Aesthetic/Operational Objective Parameters

Aesthetic and operational objectives do not pose any threats to health. They may impair the taste, smell or colour of the water or interfere with good water quality control. Some parameters, if not controlled, may negatively impact the efficient and effective treatment, disinfection and distribution of water.

The well sample exceeded the ODWQS aesthetic/operational guidelines for the following parameters.

- Hardness exceeded the ODWQS of 80 to 100 mg/L, with a concentration of 1,000 mg/L. Hardness in groundwater is caused by dissolved calcium and magnesium and is typically a result of the geologic material of the aquifer. The MOE D-5-5 guideline indicates that water with a hardness value of more than 300 mg/L is considered “very hard” and that water with a hardness in excess of 500 mg/L to be unacceptable for most domestic purposes. The D-5-5 guideline does not provide a maximum treatable value.
- Calculated total dissolved solids (TDS) were reported with a concentration of 2,400 mg/L, exceeding the ODWQS of 500 mg/L. High concentrations of TDS contribute to hard water and can lead to issues such as scaling, corrosion and salty or bitter tastes.
- Dissolved sulphate exceeded the ODWQS of 500 mg/L with a concentration of 1,300 mg/L. Concentrations above 500 mg/L can cause a bitter taste, a temporary laxative effect, and plumbing issues and stain clothing.
- Sodium also exceeded the ODWQS of 200 mg/L with a reported concentration of 390 mg/L; even though it is not a health-based guideline, it is recommended that a physician be notified if the users of the well are on a sodium restricted diet. High levels of sodium can cause a salty taste.

No other parameters exceeded the ODWQS guidelines.

Table 1: Exceedances of Ontario Drinking Water Quality Standards (ODWQS)

Parameter	Guideline Type	Guideline mg/L	Result mg/L	Impact
Total Coliforms	MAC*	0	2	Indicator of contamination/poor disinfection.
Fluoride	MAC*	1.5	1.8	Can cause dental fluorosis.

Parameter	Guideline Type	Guideline mg/L	Result mg/L	Impact
Hardness	AO*	80 – 100	1,000	Can form scale deposits on fixtures.
TDS	AO*	500	2,400	Can form scale deposits, cause corrosion and salty or bitter tastes.
Dissolved Sulphate	AO*	500	1,300	Can cause bitter taste and digestive issues.
Sodium	AO*	200 (20)	390	Physician should be notified if users are on sodium restricted diet.

*MAC – maximum acceptable concentration

*AO – aesthetic/operational objectives

4.2.3 Water Quality Discussion

The well is currently in use and treatment of the water includes water softener, filter, reverse osmosis and UV.

The untreated sampled well water had exceedances for total coliforms, fluoride, hardness, TDS, dissolved sulphate and sodium. Total coliforms can be a result of contamination; therefore, the untreated water is unsuitable for drinking and food prep. UV treatment is effective to remove bacteria and it is already in use. The treated water should be sampled for bacteria to verify the UV disinfection treatment is working properly.

Fluoride, TDS, dissolved sulphate and sodium are treated through a reverse osmosis system, while hardness is reduced by a water softener. Regular water sampling is recommended.

5.0 Impact to Local Receptors

5.1 Source Water Protection

The subject lands are located within the Severn Sound Source Protection Area of the South Georgian Bay Lake Simcoe Source Protection Region (MECP, 2023). The northwest portion of the subject lands is located within Highly Vulnerable Aquifer and the closest mapped wellhead protection areas are located around 400 m southeast of the subject lands. There are no source protection policies that apply to the subject lands and proposed development.

5.2 Surface Water Impacts

There are no drainage features shown on the topographic maps of the area. However, the function of the ditch which is found along the northern property boundary adjacent to Sawlog Point Road will need to be maintained. The use of individual groundwater wells on the subject lands should not impact surface flows in the drainage ditch.

6.0 Summary

- The stratigraphy of the area consists of a fine-grained (clayey till) and coarse-grained (sand and gravel) overburden overlying bedrock (limestone and / or granite). Overburden thickness at the subject lands is interpreted to be around 12 m.
- MECP water well records within 500 m of the subject lands show 13 supply wells with 8 wells located in granite, 2 in limestone and 3 in the overburden.
- Pumping testing results from the MECP water well records indicate low to moderate yields with granite having the lowest yields, followed by limestone and overburden, which had the highest yields. The reported yields are suitable for a typical domestic water supply well.
- A door-to-door well survey within 300 m of the subject lands was completed on September 25, 2025. A total of 24 properties were visited and the information of 4 was collected. Three of the properties have a drilled well and one has a dug well. There were no concerns related to water quantity or quality.
- An untreated sample from a nearby private well was collected and results were compared to the Ontario Drinking Water Quality Standards (ODWQS). Total coliforms and fluoride exceeded health guidelines, while hardness, total dissolved solids, sulphate and sodium exceeded aesthetic/operational standards. These parameters are treated with a water filter, softener, reverse osmosis and UV.

7.0 Recommendations

- Based on the hydrogeological information collected, it is likely that a suitable potable water supply may be obtained using an individual groundwater supply well on each lot on the subject lands. Depending on the conditions found during drilling, an overburden well or bedrock well may be suitable. If possible, an overburden well within the coarse-grained sediments is recommended due to better yields. It is also likely that water in the overburden will be less mineralized.
- The wells should be drilled by a certified well contractor and a pumping test should be completed in accordance with O.Reg. 903 to confirm that the capacity of each well will meet the needs of the proposed development.

8.0 References

Ontario Geological Survey. 2010. Surficial Geology of Southern Ontario, Miscellaneous Release – Data 128, Revised.

Ontario Geological Survey. 2011. Bedrock geology of Ontario, Miscellaneous Release – Data 126, Revision 1; scale: 1:250,000.

Ontario Ministry of the Environment, Conservation and Parks, 1996. Procedure D-5-5 Private Wells: Water Supply Assessment.

Ontario Ministry of the Environment, Conservation and Parks (MECP). 2025. Source Protection Information Atlas, Approved Source Protection Plan. Land Information Ontario.

Ontario Ministry of the Environment, Conservation and Parks (MECP). 2025. Water Well Records Database.

ORMGP. 2025. Oak Ridges Moraine Groundwater Program, Partner Agency Mapping Portal.

SGBLS SPR, 2015. Approved Assessment Report Severn Sound Source Protection Area, South Georgian Bay Lake Simcoe Source Protection Region, January 2015.

Township of Tiny. Protocol for Evaluation of Potable Groundwater Supplies for Proposed Lot Severances on Private Services for Residential Purposes.

Township of Tiny. 2022. Georgian Bay Estates Water System; scale: 1:7,000

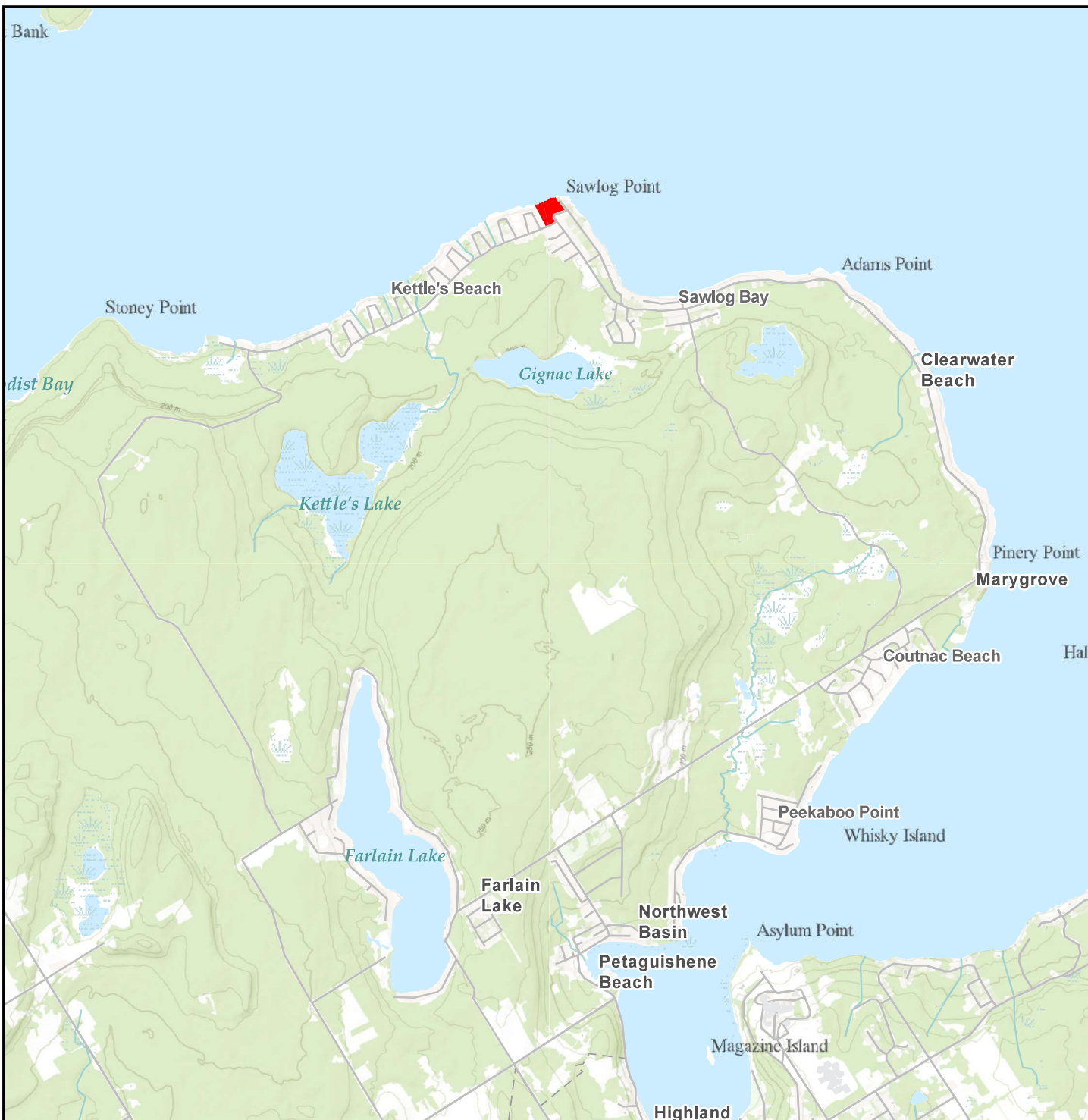


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Figures



LEGEND

SUBJECT LANDS

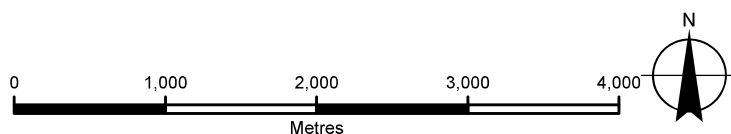


Client / Report

TOWNSHIP OF TINY
HYDROGEOLOGICAL ASSESSMENT
SAWLOG DRAFT PLAN

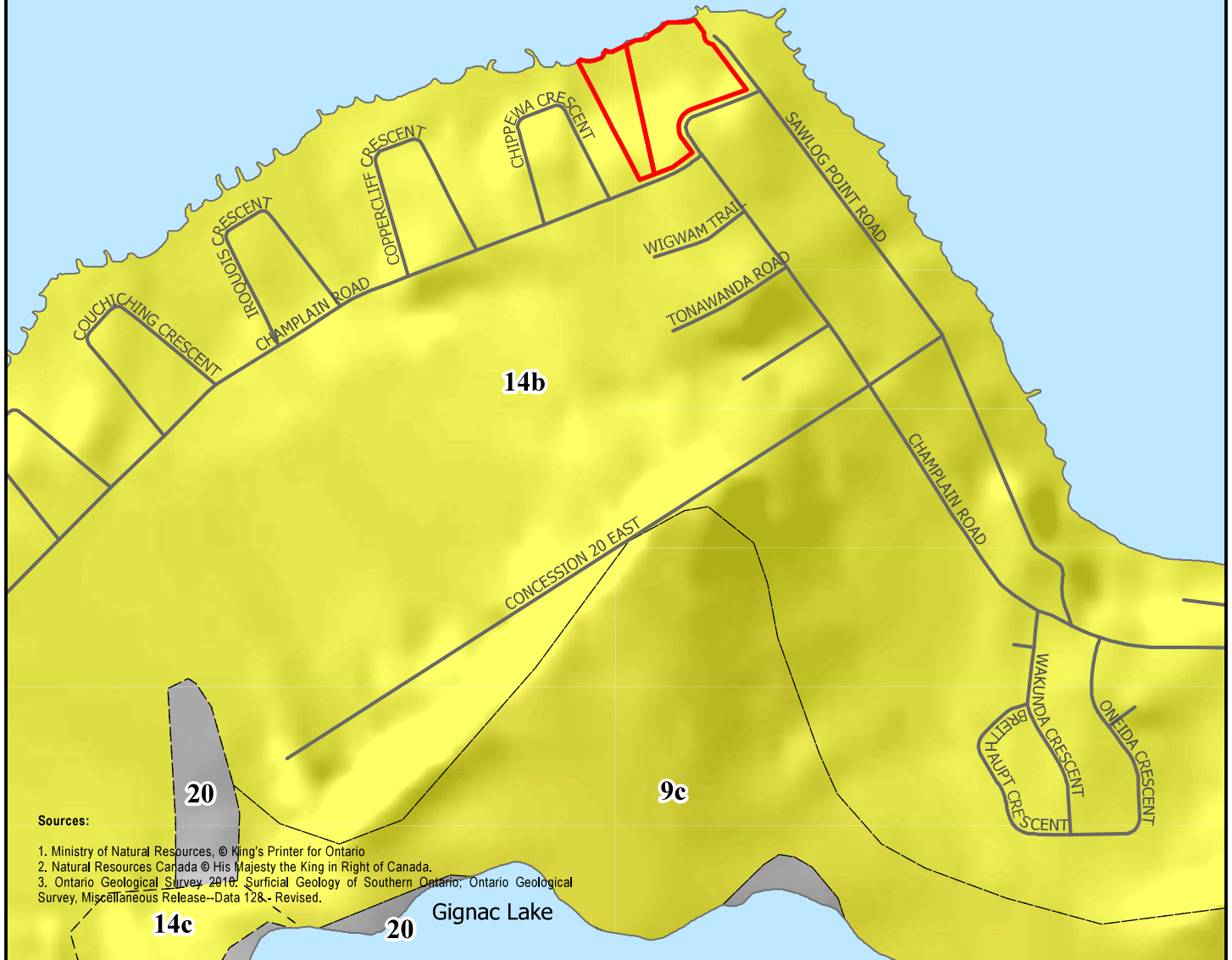
Figure Title:

SITE LOCATION



Drawn SK	Checked RN	Date October 2025	Figure No. 1
Scale 1:50,000		Project No. 300060798	

Georgian
Bay (baie
Georgienne)

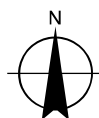
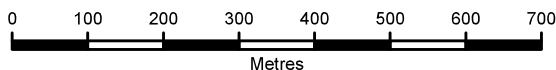


Sources:

1. Ministry of Natural Resources, © King's Printer for Ontario
2. Natural Resources Canada © His Majesty the King in Right of Canada.
3. Ontario Geological Survey 2010: Surficial Geology of Southern Ontario, Ontario Geological Survey, Miscellaneous Release--Data 128.- Revised.

LEGEND

- SUBJECT LANDS**
- ROADWAY**
- WATERBODY**
- 9c: Coarse-textured glaciolacustrine deposits: Foreshore-basinal deposits**
- 14b: Coarse-textured lacustrine deposits: Littoral-foreshore deposits**
- 14c: Coarse-textured lacustrine deposits: Foreshore-basinal deposits**
- 20: Organic deposits**



Client / Report

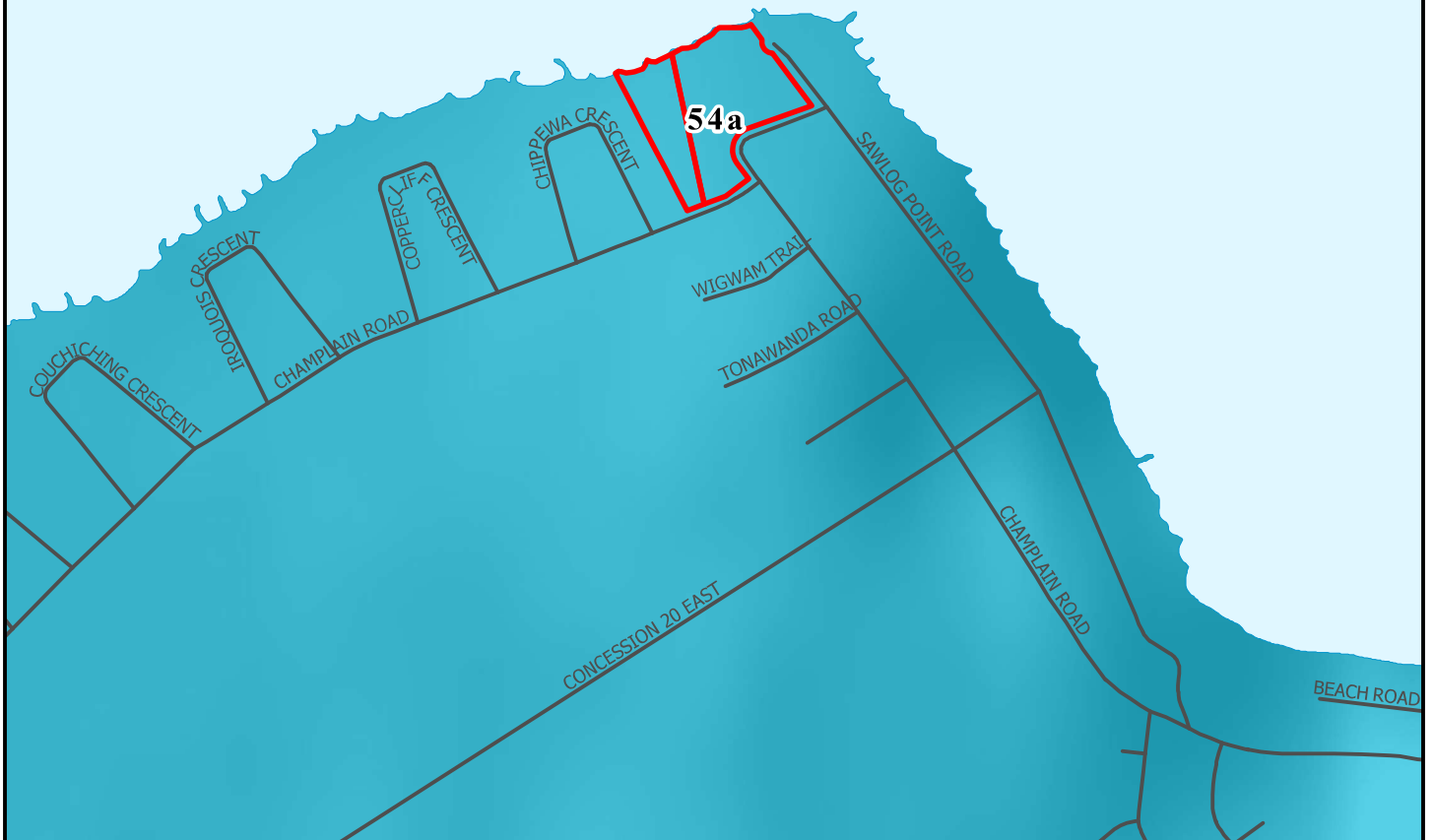
TOWNSHIP OF TINY
HYDROGEOLOGICAL ASSESSMENT
SAWLOG DRAFT PLAN

Figure Title:

SURFICIAL GEOLOGY

Drawn SK	Checked RN	Date October 2025	Figure No. 3
Scale 1:10,000		Project No. 300060798	

Georgian
Bay (baie
Georgienne)

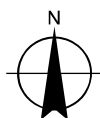
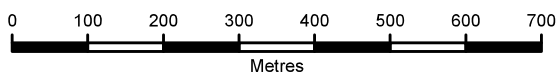


LEGEND

-  SUBJECT LANDS
-  ROADWAY
-  WATERBODY
- MIDDLE ORDOVICIAN - 54 Limestone, dolostone, shale, arkose, sandstone
-  54a Ottawa Gp.; Simcoe Gp.; Shadow Lake Fm.

Sources:

1. Ministry of Natural Resources, © King's Printer for Ontario
2. Natural Resources Canada © His Majesty the King in Right of Canada.
3. 2006 Bedrock topography and overburden thickness mapping, southern Ontario; Ontario Geological Survey, Miscellaneous Release - Data 207.



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TOWNSHIP OF TINY
HYDROGEOLOGICAL ASSESSMENT
SAWLOG DRAFT PLAN

Figure Title:

BEDROCK GEOLOGY

Drawn

SK

Scale

1:10,000

Checked

RN

Date

October 2025

Project No.

300060798

Figure No.

4

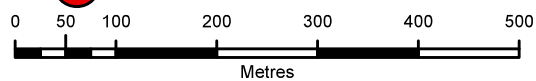


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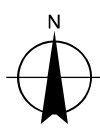
LEGEND

SUBJECT LANDS
MECP WELL FINAL STATUS:

- WATER SUPPLY
- OBSERVATION
- TEST HOLE
- ABANDONED - OTHER
- UNKNOWN
- WATER SAMPLE LOCATION
- ⊕ MUNICIPAL SUPPLY WELL
- ACTIVE PERMITS TO TAKE WATER



A A' CROSS-SECTION LOCATION KEY



Client / Report

TOWNSHIP OF TINY
HYDROGEOLOGICAL ASSESSMENT
SAWLOG DRAFT PLAN

Figure Title:

MECP WELL AND CROSS-SECTION LOCATIONS

Drawn SK	Checked RN	Date October 2025	Figure No. 5
Scale 1:7,500		Project No. 300060798	



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Appendix A

MECP Water Well Records

Table A-1: MECP Water Well Records Summary

Pumping Test Data from Well Record											
MECP Well #	Well Use	Well Depth (m)	Aquifer	Date Constructed	Static Water Level (m)	Pumping Test Rate (GPM)	Static Level (ft)	Final Pumping Level (ft)	Pumping Test Duration (hrs)	Recommended Pump Depth (ft)	Recommended Pumping Rate (GPM)
5711099	Domestic Water Supply	42.7	Bedrock	6/19/1974	7.6	3.0	25.0	0.0	2	138.0	3.0
5726597	Domestic Water Supply	53.6	Bedrock	4/25/1990	2.7	3.0	9.0	0.0	1	171.0	3.0
7152622	Domestic Water Supply	41.8	Bedrock	6/7/2010	20.1	3.0	66.0	0.0	1	125.0	3.0
5736673	Domestic Water Supply	32.0	Bedrock	8/3/2001	2.7	5.0	9.0	105.0	2	100.0	4.0
5736674	Domestic Water Supply	35.0	Bedrock	8/3/2001	3.4	4.0	11.0	115.0	2	110.0	4.0
7404179	Domestic Water Supply	72.5	Bedrock	10/22/2021	16.2	6.0			1	150.0	4.5
5707655	Domestic Water Supply	29.6	Bedrock	9/25/1970	2.7	10.0	9.0	88.0	2	90.0	10.0
5737797	Domestic Water Supply	48.2	Bedrock	5/21/2003	9.1	0.0	30.0	75.0	4	120.0	10.0
7153214	Domestic Water Supply	15.3	Overburden	8/30/2010	8.7	7.7	8.7	8.8	1		7.7
5735103	Domestic Water Supply	19.2	Bedrock	4/17/2000	5.2	6.0	17.0	0.0	3	60.0	5.0
5737692	Domestic Water Supply	24.4	Bedrock	4/8/2002	3.0	8.0	10.0	80.0	1	75.0	8.0
5715424	Observation Well	14.6	Bedrock	5/10/1978	0.9	5.0	3.0				
5715426	Test Hole	13.7	Bedrock	5/11/1978	0.0						
5735569	Domestic Water Supply	12.2	Overburden	9/19/2000	4.9	20.0	16.0	32.0	1	26.0	10.0
7208205	Domestic Water Supply	12.2	Overburden	7/3/2013	7.0	12.0	23.0	28.4	1	35.0	12.0
7053932	Abandoned-Other			11/20/2007							
7115458	Abandoned-Other			10/11/2008							
5715423	Observation Well	12.2	Overburden	5/9/1978	2.7	5.0	9.0				

FID	WELL TAG AUDIT	TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELLS USE	SCREEN	FORMATION
1	7053932 (Z48269) A	TINY TOWNSHIP 20 D	17 582787 4968278 W	2007/11 5528	35.4			NU		
2	5707655 ()	TINY TOWNSHIP CON 20 C	17 582414 4968584 W	1970/09 4816	6 6	UK 0095	9/88/10/2:0	DO		CLAY BLDL 0037 LMSN 0076 RED GRNT 0097
3	5711099 ()	TINY TOWNSHIP CON 20 D	17 583064 4968474 W	1974/06 4816	6 6	UK 0097 UK 0137	25//3/2:0	DO		SAND STNS 0026 CLAY GRVL 0037 LMSN 0098 GRNT 0140
4	5715423 ()	TINY TOWNSHIP CON 20 D	17 582914 4968474 W	1978/05 4816	3		9//5/:	NU MN	0037 3	FSND STNS 0012 CSND 0024 FGVL 0040
5	5715424 ()	TINY TOWNSHIP CON 20 D	17 582864 4968224 W	1978/05 4816	3		3//5/:	NU MN	0032 3	SAND GRVL 0004 CLAY STNS 0032 FGVL 0044 LMSN 0048
6	5715426 ()	TINY TOWNSHIP CON 20 D	17 582914 4968474 W	1978/05 4816				NU MN		SAND GRVL BDLR 0020 SAND GRVL 0035 GRVL 0042 LMSN 0045
7	5726597 (47936)	TINY TOWNSHIP CON 20 003	17 583007 4968374 W	1990/04 2652	6	FR 0168	9//3/1:0	DO		BRWN SAND GRVL BDLR 0052 GREY MUCK 0085 BLCK GRNT 0176
8	5735103 (205450)	TINY TOWNSHIP CON 20 D	17 582666 4968305 L	2000/04 2514	6	FR 0063	17//6/3:0	DO		BLCK SAND LOAM 0001 BRWN SAND GRVL BDLR 0023 GREY LMSN 0063
9	5735569 (211558)	TINY TOWNSHIP CON 20 D	17 582662 4968304 L	2000/09 2513	6	FR 0040	16/32/20/1:	DO	0037 3	LOAM 0001 BRWN SAND GRVL SILT 0023 YLLW CSND 0040
10	5736673 (244053)	TINY TOWNSHIP CON 20 024	17 582944 4968438 W	2001/08 7068	6 6	FR 0100	9/105/5/2:0	DO		BRWN LOAM 0001 BRWN SAND BLDR 0016 GREY SAND BLDR 0027 BLCK GRNT 0105
11	5736674 (244054)	TINY TOWNSHIP CON 20 023	17 582921 4968430 W	2001/08 7068	6 6	FR 0110	11/115/4/2:0	DO		BRWN SAND BLDR 0014 GREY SAND BLDR 0025 BLCK GRNT 0115
12	5737692 (244138)	TINY TOWNSHIP CON 20 011	17 582640 4968454 W	2002/04 7068	6 6	FR 0075	10/80/8/1:0	DO		BRWN LOAM 0002 BRWN SAND 0004 BRWN CLAY 0017 GREY CLAY 0032 GREY HPAN 0039 GREY GRVL 0043 GREY LMSN LYRD 0080
13	5737797 (249940)	TINY TOWNSHIP CON 20 E	17 582931 4968577 W	2003/05 7074	6	FR 0080 UK 0158	30/75//4:0	DO		BRWN CLAY STNS 0020 GREY LMSN 0085 GRNT 0158
14	7115458 (Z88471) A	TINY TOWNSHIP CON 20 D	17 582842 4968416 W	2008/10 2431	35.4 35.4					
15	7152622 (Z114869) A093378	TINY TOWNSHIP CON 20 D	17 582865 4968489 W	2010/06 2576	6 6	FR 0080 UT FR 0110 UT	66//3/1:0	DO		BRWN SAND FILL 0002 BRWN SAND CLAY GRVL 0009 GREY CLAY GRVL 0032 GREY LMSN 0050 GREY SHLE LMSN 0079 RED GRNT 0120 BLCK GRNT 0137
16	7153214 (Z102836) A068723	TINY TOWNSHIP CON 20 D	17 582950 4968395 W	2010/08 5528	6.09	UT 0036	28/29/8/1:0	DO		BRWN SAND 0025 BRWN CLAY GRVL STNS 0030 BRWN GRVL 0037 GREY CLAY 0050
17	7208205 (Z155559) A127588	TINY TOWNSHIP	17 582998 4968330 W	2013/07 7075	6.11 5.88	UT 0040	23/28/12/1:0	DO	0036 4	BRWN SAND GRVL LOOS 0040
18	7404179 (Z375338) A299178 P	TINY TOWNSHIP CON 20 D	17 582864 4968465 W	2021/10 2576						

Wells Total

TOWNSHIP	CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
----------	---------	-----	-----------	------------	-------	-----------	----------	--------	------	-----------

Notes:
UTM: UTM in Zone, Easting, Northing and Datum is NAD83; L: UTM estimated from Centroid of Lot; W: UTM not from Lot Centroid
DATE CNTR: Date Work Completed and Well Contractor Licence Number
CASING DIA: Casing diameter in inches
WATER: Unit or Depth in Fee. See Table 4 for Meaning of Code

PUMP TEST: Static Water Level in Feet / Water Level After Pumping in Feet / Pump Test Rate in GPM / Pump Test Duration in Hour - Minutes
WELL USE: See Table 3 for Meaning of Code
SCREEN: Screen Depth and Length in feet
WELL: WEL (AUDIT #) Well Tag - A: Abandonment; P: Partial Data Entry Only
FORMATION: See Table 1 and 2 for Meaning of Code

1. Core Material and Descriptive terms

Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
BDR	BOULDERS	FCRD	FRACTURED	IREM	IRON FORMATION	PORS	POROUS	SOFT	SOFT	WHIT	WHITE	DO	Domestic	OT	Other						
BSIT	BASALT	FGVD	FINE-GRAINED	LIMY	LIMY	PRDR	PREVIOUSLY DUG	SPFT	SOAPSTONE	GRY	GREY	ST	Livestock	TH	Test Hole						
CGRD	COARSE-GRAINED	FGVL	FINE GRAVEL	IMSN	LIMESTONE	QRTZ	PREV. DRILLED	STRY	STICKY	BLU	BLUE	IR	Irrigation	DE	Dewatering						
CGVL	COARSE GRAVEL	FILL	FILL	LOAM	TOPSOIL	QRTZ	QUARTZITE	STNS	STONES	GRN	GREEN	IN	Industrial	MO	Monitoring						
CHRT	CHEERT	FILDS	FELDSPAR	LOOS	LOOSE	QSD	QUICKSAND	STNY	STONE	YLLW	YELLOW	CO	Commercial	MT	Monitoring						
CLAY	CLAY	FLNT	FLINT	LTCL	LIGHT-COLOURED	QSZ	QUARTZ	THIK	THICK	BRWN	BROWN	MN	Municipal								
CLN	CLEAN	FOSS	FOSILIFEROUS	LYRD	LAYERED	ROCK	ROCK	THIN	THIN	RED	RED	PS	Public								
CLY	CLAYEY	FSND	FINE SAND	MARL	MARL	SAND	SAND	TILL	TILL	BLCK	BLACK	AC	Cooling And A/C								
CMTD	CEMENTED	GNIS	GNEISS	MGRD	MEDIUM-GRAINED	SHLE	SHALE	UNKN	UNKNOWN TYPE	BLGY	BLUE-GREY	NU	Net Used								
CONG	CONGLOMERATE	GRNT	GRANITE	MGVL	MEDIUM GRAVEL	SHLY	SHALY	VERY	VERY												
CRYS	CRYSTALLINE	GRSN	GREENSTONE	MREL	MARBLE	SHRP	SHARP	WRG	WATER-BEARING												
CNSD	COARSE SAND	GRVL	GRAVEL	MSND	MEDIUM SAND	SHST	SCHIST	WDR	WOOD FRAGMENTS												
DKCL	DARK-COLOURED	GRWK	GREYWACKE	MUCK	MUCK	SILT	SILT	WTHD	WEATHERED												
DLMT	DOLOMITE	GVLY	GRAVELLY	OBDN	OVERBURDEN	SLTE	SLATE														
DNSE	DENSE	GYPG	GYPSUM	PCRD	PACKED	SLTY	SILTY														
DRTY	DIRTY	HARD	HARD	PEAT	PEAT	SND	SANDSTONE														
DRY	DRY	HPAN	HARDPAN	PGVL	PEA GRAVEL	SNDY	SANDY SOAPSTONE														

4. Water Detail

Code	Description	Code	Description
FR	Fresh	GS	Gas
SA	Salty	IR	Iron
SU	Sulphur		
MN	Mineral		
UK	Unknown		



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix B

Well Survey Results

Table B-1: Water Well Survey Results

Address	Response to Survey	Well Description	Year Constructed	Formation/Aquifer	Well Depth (m)	Water Quantity	Water Quality	Treatment	Potential MECP Well #
195 Sawlog Point Rd	No response	-				-	-	-	-
197 Sawlog Point Rd	Survey completed.	Dug well		Assumed to be Overburden	Unknown	No concerns	No concerns	Filter, softener, reverse osmosis	-
201 Sawlog Point Rd	No response	-				-	-	-	-
209 Sawlog Point Rd	No response	Drilled well	1974	Limestone and Granite	42.7	-	-	-	5711099
216 Sawlog Point Rd	No response	Drilled well	2010	Overburden	15.3				7153214
220 Sawlog Point Rd	Survey completed. Water Sampled	Drilled well	1993	Granite	103	No concerns	No concerns	Filter, softener, reverse osmosis, UV	-
222 Sawlog Point Rd	No response	Drilled well	2021	Granite	72.5				7404179
224 Sawlog Point Rd	No response	-				-	-	-	-
225 Sawlog Point Rd	No response	-				-	-	-	-
226 Sawlog Point Rd	No response	Drilled well	2010	Granite	41.8	-	-	-	7152622
227 Sawlog Point Rd	No response	-				-	-	-	-
231 Sawlog Point Rd	No response	-				-	-	-	-
234 Sawlog Point Rd	Survey completed.	Drilled well	2001	Granite	35.1	No concerns	No concerns	does not know	5736674
235 Sawlog Point Rd	No response	-				-	-	-	-
237 Sawlog Point Rd	No response	-				-	-	-	-
241 Sawlog Point Rd	No response	Drilled well	2003	Limestone and Granite	48.2	-	-	-	5737797
245 Sawlog Point Rd	Survey completed	Drilled well	1999	Bedrock	24	No concerns	No concerns	Filter, softener, UV, reverse osmosis	-
249 Sawlog Point Rd	Survey completed.	Drilled well			45.7	No concerns	Previous E. Coli result	Filter, softener, UV	-
251 Sawlog Point Rd	No response	-				-	-	-	-
2153 Champlain Rd	No response	-				-	-	-	-
2157 Champlain Rd	Survey completed.	Municipal Water				-	-	-	-
2173 Champlain Rd	No response	-				-	-	-	-
2174 Champlain Rd	Survey completed.	Municipal Water				-	-	-	-
10 Wigwam Trail	Survey completed.	Municipal Water				-	-	-	-
17 Wigwam Trail	No response	-				-	-	-	-
1 Clearwater Crescent	No response	Drilled well	2001	Granite	32	-	-	-	5736673



September 25, 2025

Via: Mail / Hand Delivery

Dear Property Owner / Tenant:

Re: Private / Residential Well Survey
Project No.: 300060798.0000

Water Well Survey - Township of
Tiny (West of Sawlog Point Rd at
Clearwater Crescent)



R.J. Burnside & Associates Limited (Burnside) has been retained to complete a survey of existing private / residential water supply wells in the vicinity of the vacant lot located west of the intersection of Sawlog Point Rd and Clearwater Crescent in the Township of Tiny Ontario. The well survey is required as part of the approvals process supporting the proposed land development.

The purpose of the survey is to identify the location and use of neighbouring private groundwater supply wells, with the intent of gathering information about water resources in the area. Participation in the survey is voluntary and any information you provide will be kept confidential. To participate in the survey, please find attached a brief water well information form which can be filled out and returned to us by email. Alternatively, you may scan the provided QR code to complete the survey digitally. You may also complete the survey over the phone using the contact information provided below.

As part of the process, an untreated water quality sample from a nearby well is also required. The sample will be analyzed for general chemistry (such as metals, nitrate, phosphate, etc.) and microbiology (E. coli and total coliforms). Please indicate on Page 2 of the attached survey whether you are interested in having your well sampled. If chosen for the water quality sample, the results of the water quality sample would be provided.

We would greatly appreciate your participation in this survey and receiving any information you can provide. For any questions or concerns, please do not hesitate to contact the undersigned.

Yours truly,

A handwritten signature in black ink that reads 'Rebeca Nascimento'.

Rebeca Nascimento, B.Sc., GIT
Environmental Scientist
226-486-1788
Rebeca.Nascimento@rjburnside.com

A handwritten signature in black ink that reads 'Stephanie Charity'.

Stephanie Charity, P.Geo.
Hydrogeologist
226-486-1573
Stephanie.Charity@rjburnside.com

Enclosure(s): Private Water Well Information Survey

PRIVATE WATER WELL INFORMATION SURVEY

Contact Information

Well Owner(s): _____ Phone: _____ E-mail: _____

Tenant name(s): _____ Phone: _____ E-mail: _____

Mailing Address: _____

Preferred Contact Method ☐ Phone ☐ E-mail ☐ Other _____

Well Information (please provide as much information as possible)

Type of Water Supply: ☐ Communal/Municipal ☐ Private Well ☐ Surface Water Intake

Well Type: ☐ Drilled ☐ Dug ☐ Bored ☐ _____ Well Record / Tag #: _____

Well Construction Date: _____ Contractor: _____

Casing: ☐ Steel ☐ Concrete ☐ Plastic ☐ _____ Diameter: _____ Depth: _____

Wellhead: ☐ Steel cap ☐ Solid concrete lid ☐ Concrete with square access lid ☐ Plastic

☐ Well in pit ☐ _____

Aquifer Material: ☐ Bedrock ☐ Deep Overburden ☐ Shallow Overburden ☐ _____

Pump Type: ☐ Submersible ☐ Single line jet ☐ Double line jet ☐ _____

Pump Intake Depth: _____ Static Water Level (and date): _____

Water Quality / Quantity Information

Well Use: ☐ Drinking ☐ Washing/Toilets ☐ Bathing ☐ Irrigation ☐ Car Washing ☐ Other _____

Number of people using well water: _____ Full-time or Seasonal Occupancy: _____

Alternate sources of water: ☐ Municipal Supply ☐ Bottled ☐ Cistern ☐ _____

Has the well ever gone dry / shortage of water? ☐ No ☐ Yes (explain) _____

Water quality: ☐ Clear ☐ Sediment/turbidity ☐ Iron staining ☐ Sulfur odour ☐ Methane gas

Other comments: _____

How often do you sample your well: ☐ Monthly ☐ Quarterly ☐ Annually ☐ Never ☐ _____

Previous water quality results: _____

Treatment: ☐ Softener ☐ Filter ☐ Reverse Osmosis ☐ UV ☐ Chlorination ☐ _____

Have you ever had your well: ☐ Cleaned ☐ Deepened ☐ New well constructed

Septic System Information

Municipal Sewer Service Available: ☐ Yes ☐ No Year Installed: _____ Capacity/Size: _____

Septic System Type/Treatment: _____

Have you ever had septic problems? ☐ No ☐ Yes (explain) _____

Tank pumped every: ☐ <1 year ☐ 1-2 years ☐ 3-6 years ☐ 6-10 years ☐ Never ☐ _____

Private Well Water Sampling

Is the owner interested in having the well sampled for general chemistry and bacteria? ☐ Yes ☐ No

Site Plan (sketch)

Please include property layout, north arrow, well location(s) and septic system location(s).



Additional Notes / Comments: _____

Thank you for taking the time to complete this survey.

PRIVATE WATER WELL INFORMATION SURVEY

Contact Information

Well Owner(s): _____ Phone: _____ E-mail: _____
Tenant name(s): _____ Phone: _____ E-mail: _____
Mailing Address: 197 Sawlog Point Rd
Preferred Contact Method ☐ Phone ☐ E-mail ☐ Other _____

Well Information (please provide as much information as possible)

Type of Water Supply: ☐ Communal/Municipal ☒ Private Well ☐ Surface Water Intake
Well Type: ☐ Drilled ☒ Dug ☐ Bored ☐ _____ Well Record / Tag #: _____
Well Construction Date: not sure Contractor: more than 49 years ago
Casing: ☐ Steel ☐ Concrete ☐ Plastic ☐ _____ Diameter: _____ Depth: _____
Wellhead: ☐ Steel cap ☐ Solid concrete lid ☐ Concrete with square access lid ☐ Plastic
☐ Well in pit ☐ _____
Aquifer Material: ☐ Bedrock ☐ Deep Overburden ☐ Shallow Overburden ☐ _____
Pump Type: ☐ Submersible ☐ Single line jet ☐ Double line jet ☐ _____
Pump Intake Depth: _____ Static Water Level (and date): _____

Water Quality / Quantity Information

Well Use: ☐ Drinking ☐ Washing/Toilets ☒ Bathing ☐ Irrigation ☐ Car Washing ☐ Other cooking
Number of people using well water: 1 Full-time or Seasonal Occupancy: full-time
Alternate sources of water: ☐ Municipal Supply ☒ Bottled ☐ Cistern ☐ for drinking
Has the well ever gone dry / shortage of water? ☒ No ☐ Yes (explain) _____
Water quality: ☒ Clear ☐ Sediment/turbidity ☐ Iron staining ☐ Sulfur odour ☐ Methane gas
Other comments: _____
How often do you sample your well: ☐ Monthly ☐ Quarterly ☐ Annually ☐ Never ☐ _____
Previous water quality results: _____
Treatment: ☒ Softener ☒ Filter ☒ Reverse Osmosis ☐ UV ☐ Chlorination ☐ _____
Have you ever had your well: ☒ Cleaned ☐ Deepened ☐ New well constructed ~ 10 years ago

Septic System Information

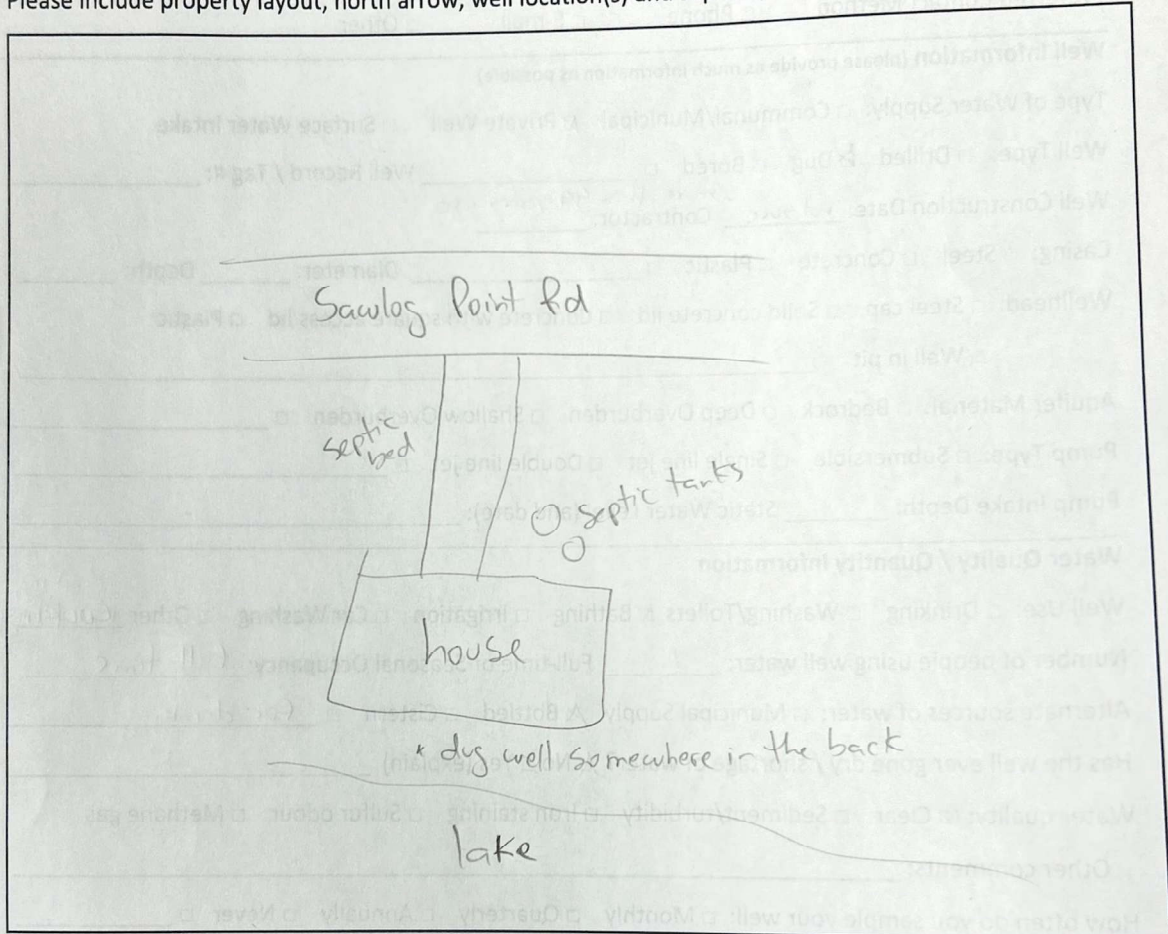
Municipal Sewer Service Available: ☐ Yes ☒ No Year Installed: _____ Capacity/Size: _____
Septic System Type/Treatment: _____
Have you ever had septic problems? ☒ No ☐ Yes (explain) _____
Tank pumped every: ☐ <1 year ☐ 1-2 years ☒ 3-6 years ☐ 6-10 years ☐ Never ☐ 5 years

Private Well Water Sampling

Is the owner interested in having the well sampled for general chemistry and bacteria? ☐ Yes ☒ No

Site Plan (sketch)

Please include property layout, north arrow, well location(s) and septic system location(s).



Additional Notes / Comments: _____

Thank you for taking the time to complete this survey.



PRIVATE WATER WELL INFORMATION SURVEY

Contact Information

Well Owner(s): _____ Phone: _____ E-mail: _____
Tenant name(s): _____ Phone: _____ E-mail: _____
Mailing Address: 220 Sawlog Point Rd
Preferred Contact Method ☐ Phone ☐ E-mail ☐ Other _____

Well Information (please provide as much information as possible)

Type of Water Supply: ☐ Communal/Municipal ☒ Private Well ☐ Surface Water Intake
Well Type: ☒ Drilled ☐ Dug ☐ Bored ☐ _____ Well Record / Tag #: _____
Well Construction Date: 1993 Contractor: _____
Casing: ☒ Steel ☐ Concrete ☐ Plastic ☐ _____ Diameter: _____ Depth: 340 ft
Wellhead: ☒ Steel cap ☐ Solid concrete lid ☐ Concrete with square access lid ☐ Plastic
☐ Well in pit ☐ _____
Aquifer Material: ☒ Bedrock ☐ Deep Overburden ☐ Shallow Overburden ☐ granite
Pump Type: ☒ Submersible ☐ Single line jet ☐ Double line jet ☐ _____
Pump Intake Depth: _____ Static Water Level (and date): _____

Water Quality / Quantity Information

Well Use: ☐ Drinking ☐ Washing/Toilets ☐ Bathing ☐ Irrigation ☐ Car Washing ☐ Other everything
Number of people using well water: 2 Full-time or Seasonal Occupancy: 50/50
Alternate sources of water: ☐ Municipal Supply ☐ Bottled ☐ Cistern ☐ tank for storage
Has the well ever gone dry / shortage of water? ☒ No ☐ Yes (explain) _____
Water quality: ☒ Clear ☐ Sediment/turbidity ☐ Iron staining ☐ Sulfur odour ☐ Methane gas
Other comments: _____
How often do you sample your well: ☐ Monthly ☐ Quarterly ☐ Annually ☐ Never ☐ every 3 years
Previous water quality results: good
Treatment: ☒ Softener ☒ Filter ☒ Reverse Osmosis ☒ UV ☐ Chlorination ☐ _____
Have you ever had your well: ☐ Cleaned ☐ Deepened ☐ New well constructed

Septic System Information

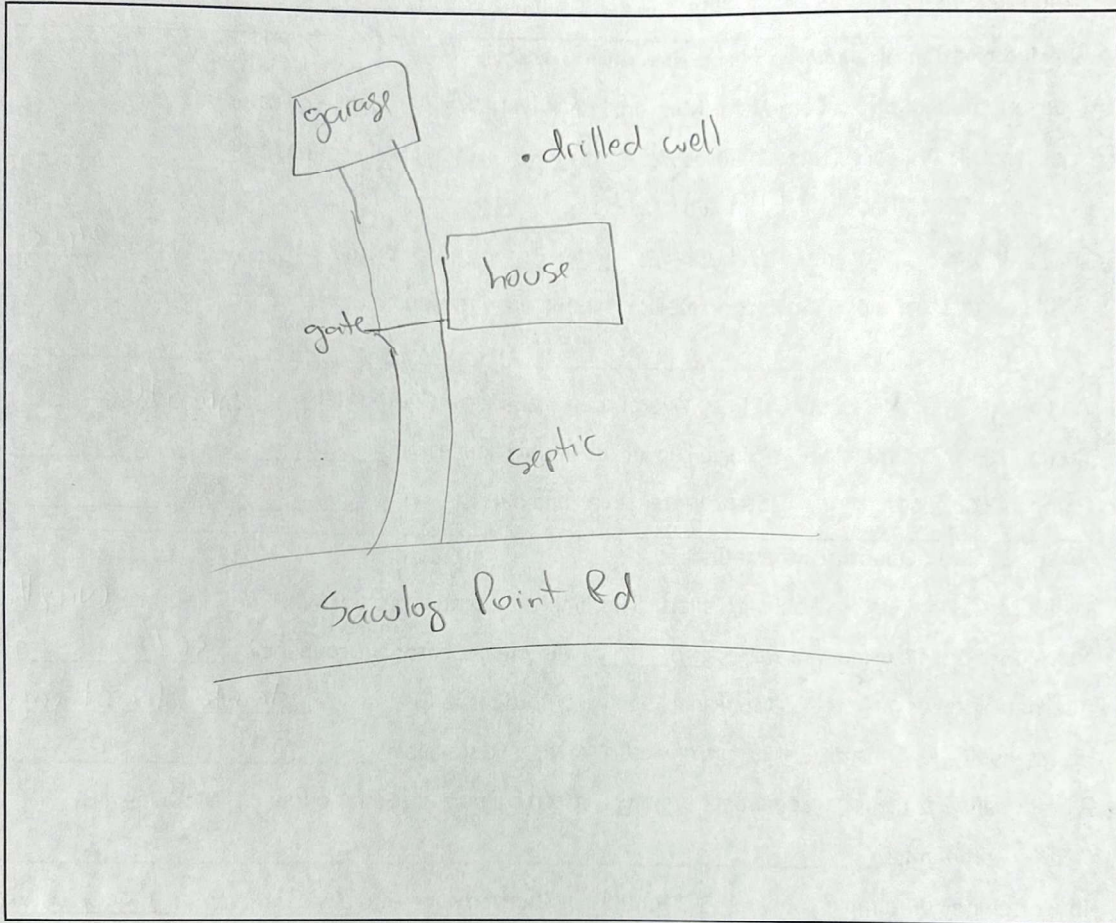
Municipal Sewer Service Available: ☐ Yes ☒ No Year Installed: _____ Capacity/Size: _____
Septic System Type/Treatment: _____
Have you ever had septic problems? ☒ No ☐ Yes (explain) _____
Tank pumped every: ☐ <1 year ☐ 1-2 years ☒ 3-6 years ☐ 6-10 years ☐ Never ☐ 5 years

Private Well Water Sampling

Is the owner interested in having the well sampled for general chemistry and bacteria? ☒ Yes ☐ No

Site Plan (sketch)

Please include property layout, north arrow, well location(s) and septic system location(s).



Additional Notes / Comments: _____

Thank you for taking the time to complete this survey.

PRIVATE WATER WELL INFORMATION SURVEY

Contact Information

Well Owner(s): _____ Phone: _____ E-mail: _____
Tenant name(s): _____ Phone: _____ E-mail: _____
Mailing Address: 234 Sawalog Point Rd
Preferred Contact Method ☐ Phone ☐ E-mail ☐ Other _____

Well Information (please provide as much information as possible)

Type of Water Supply: ☐ Communal/Municipal ☒ Private Well ☐ Surface Water Intake
Well Type: ☒ Drilled ☐ Dug ☐ Bored ☐ _____ Well Record / Tag #: _____
Well Construction Date: 2020 Contractor: _____
Casing: ☒ Steel ☐ Concrete ☐ Plastic ☐ _____ Diameter: _____ Depth: not sure
Wellhead: ☒ Steel cap ☐ Solid concrete lid ☐ Concrete with square access lid ☐ Plastic
☐ Well in pit ☐ _____
Aquifer Material: ☐ Bedrock ☐ Deep Overburden ☐ Shallow Overburden ☐ _____
Pump Type: ☐ Submersible ☐ Single line jet ☐ Double line jet ☐ _____
Pump Intake Depth: _____ Static Water Level (and date): _____

Water Quality / Quantity Information

Well Use: ☐ Drinking ☐ Washing/Toilets ☐ Bathing ☐ Irrigation ☐ Car Washing ☐ Other everything
Number of people using well water: 2 Full-time or Seasonal Occupancy: full-time
Alternate sources of water: ☐ Municipal Supply ☐ Bottled ☐ Cistern ☐ none
Has the well ever gone dry / shortage of water? ☒ No ☐ Yes (explain) _____
Water quality: ☒ Clear ☐ Sediment/turbidity ☐ Iron staining ☐ Sulfur odour ☐ Methane gas
Other comments: _____
How often do you sample your well: ☐ Monthly ☐ Quarterly ☐ Annually ☐ Never ☐ 2 year
Previous water quality results: good
Treatment: ☐ Softener ☐ Filter ☐ Reverse Osmosis ☐ UV ☐ Chlorination ☐ not sure-husband knows but he's sleeping
Have you ever had your well: ☐ Cleaned ☐ Deepened ☐ New well constructed

Septic System Information

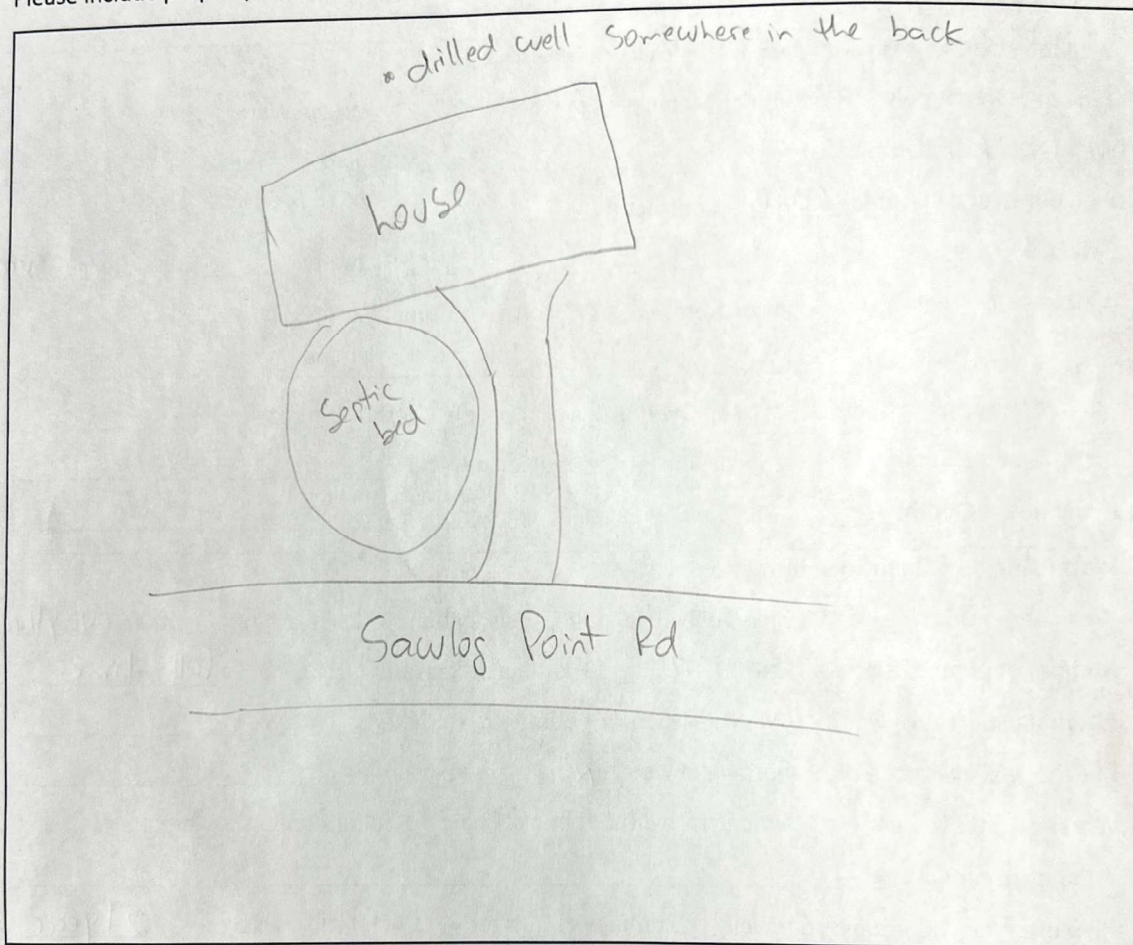
Municipal Sewer Service Available: ☐ Yes ☒ No Year Installed: _____ Capacity/Size: _____
Septic System Type/Treatment: _____
Have you ever had septic problems? ☒ No ☐ Yes (explain) _____
Tank pumped every: ☐ <1 year ☒ 1-2 years ☐ 3-6 years ☐ 6-10 years ☐ Never ☐ every 18 months

Private Well Water Sampling

Is the owner interested in having the well sampled for general chemistry and bacteria? ☐ Yes ☒ No

Site Plan (sketch)

Please include property layout, north arrow, well location(s) and septic system location(s).



Additional Notes / Comments: _____

Thank you for taking the time to complete this survey.

249 Sawlog Point Rd

PRIVATE WATER WELL INFORMATION SURVEY

Contact Information

Well Owner(s): _____ Phone: _____ E-mail: _____

Tenant name(s): _____ Phone: _____ E-mail: _____

Mailing Address: 25 Diploma Ave, Vaughan L4H1V1

Preferred Contact Method ☐ Phone ☒ E-mail ☐ Other _____

Well Information (please provide as much information as possible)

Type of Water Supply: ☐ Communal/Municipal ☒ Private Well ☐ Surface Water Intake

Well Type: ☒ Drilled ☐ Dug ☐ Bored ☐ _____ Well Record / Tag #: _____

Well Construction Date: _____ Contractor: _____

Casing: ☒ Steel ☐ Concrete ☐ Plastic ☐ _____ Diameter: 6" Depth: 150'

Wellhead: ☒ Steel cap ☐ Solid concrete lid ☐ Concrete with square access lid ☐ Plastic

☐ Well in pit ☐ _____

Aquifer Material: ☐ Bedrock ☐ Deep Overburden ☐ Shallow Overburden ☐ _____

Pump Type: ☐ Submersible ☐ Single line jet ☐ Double line jet ☐ _____

Pump Intake Depth: 150' Static Water Level (and date): _____

Water Quality / Quantity Information

Well Use: ☒ Drinking ☒ Washing/Toilets ☒ Bathing ☐ Irrigation ☐ Car Washing ☒ Other watering

Number of people using well water: 4 Full-time or Seasonal Occupancy: Full-time

Alternate sources of water: ☐ Municipal Supply ☒ Bottled ☐ Cistern ☐ _____

Has the well ever gone dry / shortage of water? ☒ No ☐ Yes (explain) Not since 2019 (bought property)

Water quality: ☐ Clear ☐ Sediment/turbidity ☐ Iron staining ☐ Sulfur odour ☐ Methane gas

Other comments: _____

How often do you sample your well: ☐ Monthly ☐ Quarterly ☒ Annually ☐ Never ☐ _____

Previous water quality results: E coli

Treatment: ☒ Softener ☒ Filter ☐ Reverse Osmosis ☒ UV ☐ Chlorination ☐ For drinking only

Have you ever had your well: ☐ Cleaned ☐ Deepened ☐ New well constructed not exterior bibs

Septic System Information

Municipal Sewer Service Available: ☐ Yes ☒ No Year Installed: ? Capacity/Size: 1000 GA.

Septic System Type/Treatment: septic tank (plastic)

Have you ever had septic problems? ☒ No ☐ Yes (explain) _____

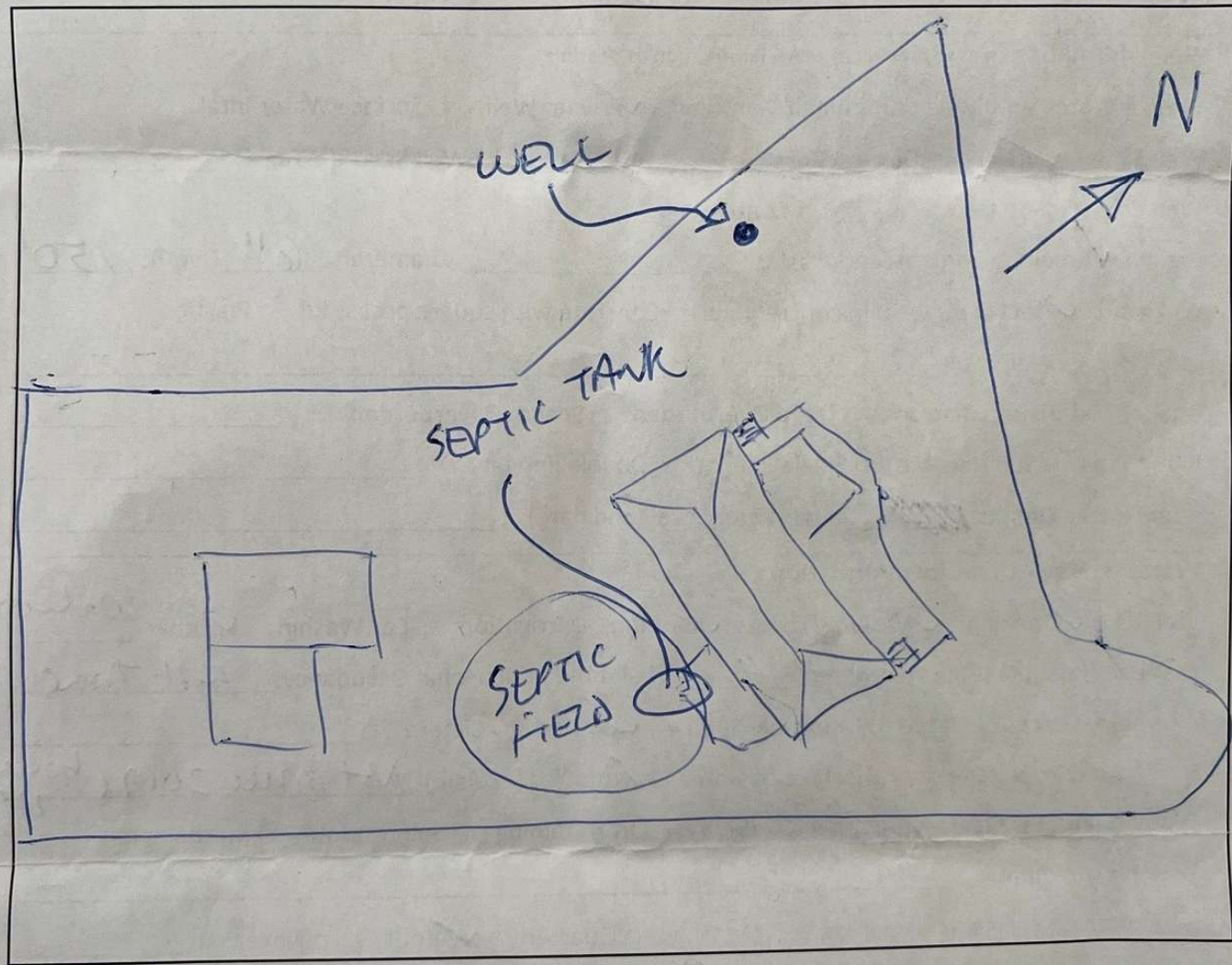
Tank pumped every: ☐ <1 year ☐ 1-2 years ☒ 3-6 years ☐ 6-10 years ☐ Never ☐ _____

Private Well Water Sampling

Is the owner interested in having the well sampled for general chemistry and bacteria? ☒ Yes ☐ No

Site Plan (sketch)

Please include property layout, north arrow, well location(s) and septic system location(s).



Additional Notes / Comments:

Thank you for taking the time to complete this survey.

PRIVATE WATER WELL INFORMATION SURVEY

Contact Information

Well Owner(s):

Tenant name(s): N/A Phone: _____ E-mail: _____

Mailing Address: 245 Sawlog Pt Rd Tiny ON L9M 0B1

Preferred Contact Method ☐ Phone ☒ E-mail ☐ Other _____

Well Information (please provide as much information as possible)

Type of Water Supply: ☐ Communal/Municipal ☒ Private Well ☐ Surface Water Intake

Well Type: ☒ Drilled ☐ Dug ☐ Bored ☐ _____ Well Record / Tag #: N/A

Well Construction Date: 1999 Contractor: Mike Hammers

Casing: ☒ Steel ☐ Concrete ☐ Plastic ☐ _____ Diameter: 6 1/4" Depth: 80'

Wellhead: ☒ Steel cap ☐ Solid concrete lid ☐ Concrete with square access lid ☐ Plastic

☐ Well in pit ☐ _____

Aquifer Material: ☒ Bedrock ☐ Deep Overburden ☐ Shallow Overburden ☐ _____

Pump Type: ☒ Submersible ☐ Single line jet ☐ Double line jet ☐ _____

Pump Intake Depth: 1" Static Water Level (and date): _____

Water Quality / Quantity Information

Well Use: ☒ Drinking ☒ Washing/Toilets ☒ Bathing ☐ Irrigation ☒ Car Washing ☐ Other _____

Number of people using well water: 2 Full-time or Seasonal Occupancy: EM

Alternate sources of water: ☐ Municipal Supply ☐ Bottled ☐ Cistern ☐ NONE

Has the well ever gone dry / shortage of water? ☒ No ☐ Yes (explain) _____

Water quality: ☒ Clear ☐ Sediment/turbidity ☐ Iron staining ☐ Sulfur odour ☐ Methane gas

Other comments: _____

How often do you sample your well: ☐ Monthly ☐ Quarterly ☒ Annually ☐ Never ☐ _____

Previous water quality results: Good

Treatment: ☒ Softener ☒ Filter ☒ Reverse Osmosis ☒ UV ☐ Chlorination ☐ _____

Have you ever had your well: ☒ Cleaned ☐ Deepened ☐ New well constructed

Septic System Information

Municipal Sewer Service Available: ☐ Yes ☒ No Year Installed Sept 23 2023 Capacity/Size: 1000 gal

Septic System Type/Treatment: TANK plus weeping tiles

Have you ever had septic problems? ☒ No ☐ Yes (explain) _____

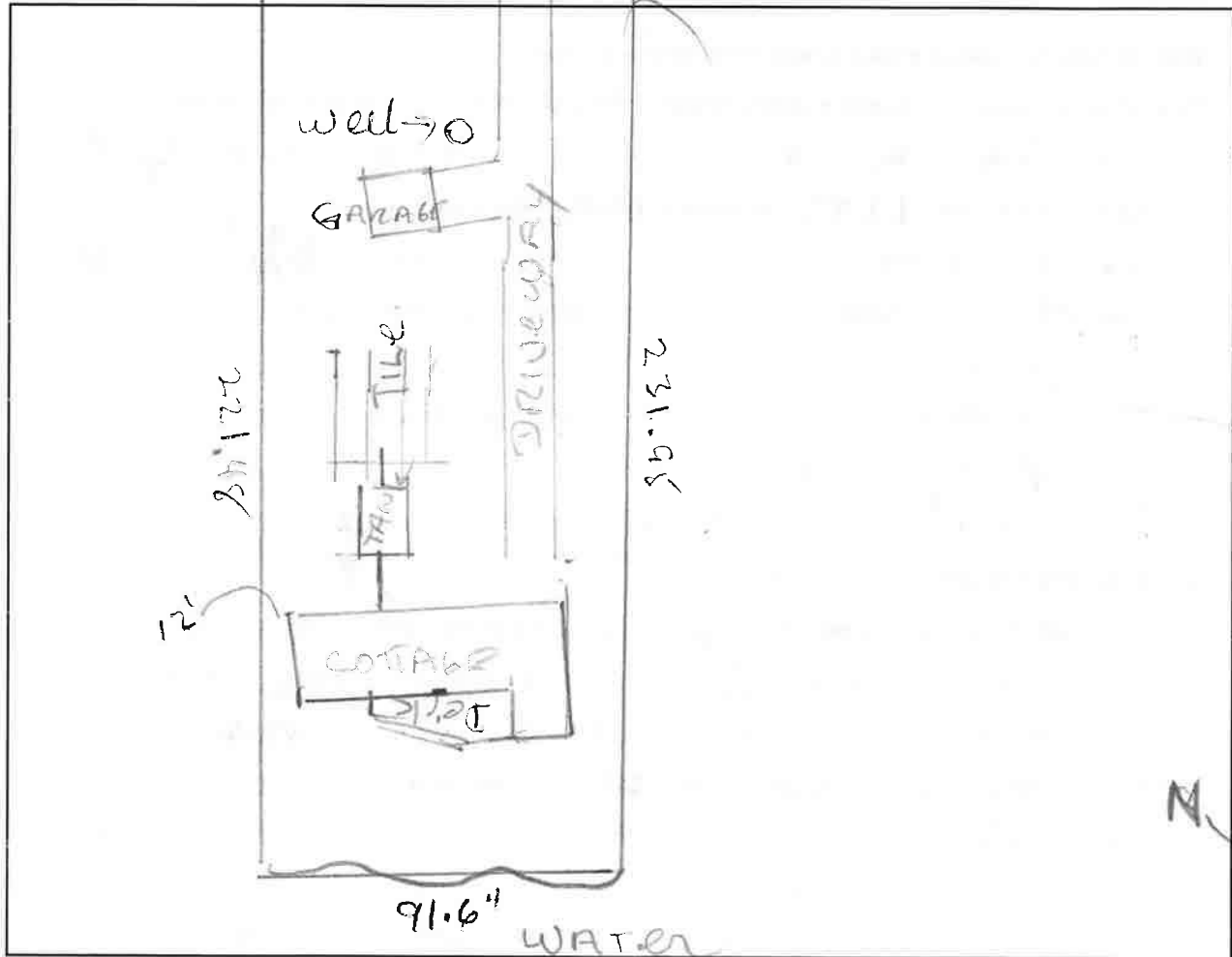
Tank pumped every: ☐ <1 year ☐ 1-2 years ☒ 3-6 years ☐ 6-10 years ☐ Never ☐ _____

Private Well Water Sampling

Is the owner interested in having the well sampled for general chemistry and bacteria? ☐ Yes ☒ No

Site Plan (sketch)

Please include property layout, north arrow, well location(s) and septic system location(s).



Additional Notes / Comments: _____

Thank you for taking the time to complete this survey.



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix C

Water Quality Results

Private Well Water Quality Sampling Results - 220 Sawlog Point Rd

Parameter	Unit	RDL	ODWQS Criteria		220 Sawlog Point Rd
			MAC	AO	September 25, 2025
Total Coliforms	CFU/100mL	NA	0		2
Escherichia coli	CFU/100mL	NA	0		0
Electrical Conductivity	umho/cm	2			3300
pH	pH Units	NA		6.5-8.5	7.79
Hardness (as CaCO ₃) (Calculated)	mg/L	1.0		80-100	1000
Dissolved Organic Carbon (DOC)	mg/L	0.40		5	ND
Calculated Total Dissolved Solids (TDS)	mg/L	1.0		500	2400
Alkalinity (as CaCO ₃)	mg/L	1.0		30-500	120
Bicarbonate (as CaCO ₃)	mg/L	1.0			120
Chloride	mg/L	2.0		250	200
Fluoride	mg/L	0.10	1.5		1.8
Colour	TCU	2		5	ND
Turbidity	NTU	0.1		5	1
Nitrate as N	mg/L	0.10	10		0.42
Nitrite as N	mg/L	0.010	1		ND
Sulphate	mg/L	5.0		500	1300
Ortho Phosphate as P	mg/L	0.010			ND
Ammonia as N	mg/L	0.050			0.73
Dissolved Aluminum (Al)	mg/L	0.0049		0.1	ND
Dissolved Antimony (Sb)	mg/L	0.00050	0.006		ND
Dissolved Arsenic (As)	mg/L	0.0010	0.010		ND
Dissolved Barium (Ba)	mg/L	0.0020	1		0.01
Dissolved Beryllium (Be)	mg/L	0.00040			ND
Dissolved Boron (B)	mg/L	0.010	5		3.6
Dissolved Cadmium (Cd)	mg/L	0.000090	0.005		ND
Dissolved Calcium (Ca)	mg/L	0.400			260
Dissolved Chromium (Cr)	mg/L	0.0050	0.050		ND
Dissolved Cobalt (Co)	mg/L	0.00050			ND
Dissolved Copper (Cu)	mg/L	0.00090		1	0.0085
Dissolved Iron (Fe)	mg/L	0.100		0.3	ND
Dissolved Lead (Pb)	mg/L	0.00050	0.010		ND
Dissolved Magnesium (Mg)	mg/L	0.050			89
Dissolved Manganese (Mn)	mg/L	0.0020		0.05	0.02
Dissolved Molybdenum (Mo)	mg/L	0.00050			0.0014
Dissolved Nickel (Ni)	mg/L	0.0010			0.003
Dissolved Phosphorus (P)	mg/L	0.100			ND
Dissolved Potassium (K)	mg/L	0.200			13
Dissolved Selenium (Se)	mg/L	0.0020	0.050		ND
Dissolved Silicon (Si)	mg/L	0.050			4
Dissolved Silver (Ag)	mg/L	0.000090			ND
Dissolved Sodium (Na)	mg/L	0.100	20	200	390
Dissolved Strontium (Sr)	mg/L	0.0010			5.800
Dissolved Thallium (Tl)	mg/L	0.000050			ND
Dissolved Titanium (Ti)	mg/L	0.0050			ND
Dissolved Uranium (U)	mg/L	0.00010	0.020		0.00047
Dissolved Vanadium (V)	mg/L	0.00050			ND
Dissolved Zinc (Zn)	mg/L	0.0050		5	0.081

RDL - Reported Detection Limit

ND - Not Detected (below the RDL)

ODWQS - Ontario Drinking Water Quality Standards and Guidelines, 2006

MAC - maximum acceptable concentration

AO - aesthetic/operational objectives

Bold indicates exceedance of ODWQS



Your Project #: 300060798
Site Location: TOWNSHIP OF TINY
Your C.O.C. #: 1061580-01-01

Attention: Rebeca Nascimento

R J Burnside Associates Ltd
292 Speedvale Ave W
Unit 20
Guelph, ON
CANADA N1H 1C4

Report Date: 2025/10/02
Report #: R8624603
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C5C0500

Received: 2025/09/26, 08:14

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	1	N/A	2025/09/29	CAM SOP-00448	SM 24 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2025/09/29	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2025/09/29	CAM SOP-00463	SM 24 4500-Cl E m
Colour	1	N/A	2025/09/29	CAM SOP-00412	SM 24 2120C m
Conductivity	1	N/A	2025/09/29	CAM SOP-00414	SM 24 2510 m
Dissolved Organic Carbon (DOC) (1)	1	N/A	2025/09/30	CAM SOP-00446	SM 24 5310 B m
Fluoride	1	2025/09/27	2025/09/29	CAM SOP-00449	SM 24 4500-F C m
Hardness (calculated as CaCO3)	1	N/A	2025/09/30	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Metals by ICPMS	1	N/A	2025/09/29	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	1	N/A	2025/09/30		
Anion and Cation Sum	1	N/A	2025/09/30	CAM SOP-00102	SM 24 1030E m
Total Coliforms/ E. coli, CFU/100mL	1	N/A	2025/09/26	CAM SOP-00551	MECP-E3407
Total Ammonia-N	1	N/A	2025/10/02	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (2)	1	N/A	2025/09/29	CAM SOP-00440	SM 24 4500-NO3I/NO2B
pH (3)	1	2025/09/27	2025/09/29	CAM SOP-00413	SM 24th - 4500H+ B
Orthophosphate	1	N/A	2025/09/29	CAM SOP-00461	SM 24 4500-P E
Sat. pH and Langelier Index (@ 20C)	1	N/A	2025/09/30		Auto Calc
Sat. pH and Langelier Index (@ 4C)	1	N/A	2025/09/30		Auto Calc
Sulphate by Automated Turbidimetry	1	N/A	2025/09/29	CAM SOP-00464	SM 24 4500-SO42- E m
Total Dissolved Solids (TDS calc)	1	N/A	2025/09/30		Auto Calc
Turbidity	1	N/A	2025/09/27	CAM SOP-00417	SM 24 2130 B

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement



Your Project #: 300060798
Site Location: TOWNSHIP OF TINY
Your C.O.C. #: 1061580-01-01

Attention: Rebeca Nascimento

R J Burnside Associates Ltd
292 Speedvale Ave W
Unit 20
Guelph, ON
CANADA N1H 1C4

Report Date: 2025/10/02
Report #: R8624603
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C5C0500

Received: 2025/09/26, 08:14

Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(2) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(3) "The CCME method and Analytical Protocol (O. Reg. 153/04, O. Reg. 406/19) requires pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME and Analytical Protocol (O. Reg. 153/04, O. Reg. 406/19) holding time. Bureau Veritas endeavors to analyze samples as soon as possible after receipt."

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Ankita Bhalla, Project Manager

Email: Ankita.Bhalla@bureauveritas.com

Phone# (905) 817-5700

=====

This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2

Page 2 of 15

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Chemistry testing is conducted at 6740 Campobello Rd.



BUREAU
VERITAS

Bureau Veritas Job #: C5C0500

Report Date: 2025/10/02

R J Burnside Associates Ltd

Client Project #: 300060798

Site Location: TOWNSHIP OF TINY

Sampler Initials: RN

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID					AVOW78		
Sampling Date					2025/09/25 14:00		
COC Number					1061580-01-01		
		UNITS	MAC	A/O	220 SAWLOG POINT RD	RDL	QC Batch
Calculated Parameters							
Anion Sum		me/L	-	-	35.5	N/A	A019670
Bicarb. Alkalinity (calc. as CaCO3)		mg/L	-	-	120	1.0	A019347
Calculated TDS		mg/L	-	500	2400	1.0	A019674
Carb. Alkalinity (calc. as CaCO3)		mg/L	-	-	ND	1.0	A019347
Cation Sum		me/L	-	-	37.9	N/A	A019670
Hardness (CaCO3)		mg/L	-	80:100	1000	1.0	A019325
Ion Balance (% Difference)		%	-	-	3.25	N/A	A019669
Langelier Index (@ 20C)		N/A	-	-	0.598		A019671
Langelier Index (@ 4C)		N/A	-	-	0.355		A019672
Saturation pH (@ 20C)		N/A	-	-	7.19		A019671
Saturation pH (@ 4C)		N/A	-	-	7.44		A019672
Inorganics							
Total Ammonia-N		mg/L	-	-	0.73	0.050	A023921
Colour		TCU	-	5	ND	2	A020808
Conductivity		umho/cm	-	-	3300	2.0	A020585
Fluoride (F-)		mg/L	1.5	-	1.8	0.10	A020586
Dissolved Organic Carbon		mg/L	-	5	ND	0.40	A022112
Orthophosphate (P)		mg/L	-	-	ND	0.010	A020577
pH		pH	-	6.5:8.5	7.79		A020587
Dissolved Sulphate (SO4)		mg/L	-	500	1300	5.0	A020578
Turbidity		NTU	-	5	1.0	0.1	A020489
Alkalinity (Total as CaCO3)		mg/L	-	30:500	120	1.0	A020584
Dissolved Chloride (Cl-)		mg/L	-	250	200	2.0	A020574
Nitrite (N)		mg/L	1	-	ND	0.010	A020966
No Fill		No Exceedance					
Grey		Exceeds 1 criteria policy/level					
Black		Exceeds both criteria/levels					
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
MAC,A/O: Ontario Drinking Water Standards - Maximum Acceptable Concentration [MAC] & Table 4- Chemical/Physical Objectives [A/O] - Not Health Related, respectively							
(Made under the Ontario Safe Drinking Water Act, 2002)							
N/A = Not Applicable							
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.							



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID				AVOW78		
Sampling Date				2025/09/25 14:00		
COC Number				1061580-01-01		
	UNITS	MAC	A/O	220 SAWLOG POINT RD	RDL	QC Batch
Nitrate (N)	mg/L	10	-	0.42	0.10	A020966
Nitrate + Nitrite (N)	mg/L	10	-	0.42	0.10	A020966
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
MAC,A/O: Ontario Drinking Water Standards - Maximum Acceptable Concentration [MAC] & Table 4- Chemical/Physical Objectives [A/O] - Not Health Related, respectively (Made under the Ontario Safe Drinking Water Act, 2002)						



BUREAU
VERITAS

Bureau Veritas Job #: C5C0500

Report Date: 2025/10/02

R J Burnside Associates Ltd

Client Project #: 300060798

Site Location: TOWNSHIP OF TINY

Sampler Initials: RN

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID				AVOW78		
Sampling Date				2025/09/25 14:00		
COC Number				1061580-01-01		
	UNITS	MAC	A/O	220 SAWLOG POINT RD	RDL	QC Batch
Metals						
Dissolved Aluminum (Al)	ug/L	-	100	ND	4.9	A020791
Dissolved Antimony (Sb)	ug/L	6	-	ND	0.50	A020791
Dissolved Arsenic (As)	ug/L	10	-	ND	1.0	A020791
Dissolved Barium (Ba)	ug/L	1000	-	10	2.0	A020791
Dissolved Beryllium (Be)	ug/L	-	-	ND	0.40	A020791
Dissolved Boron (B)	ug/L	5000	-	3600	10	A020791
Dissolved Cadmium (Cd)	ug/L	5	-	ND	0.090	A020791
Dissolved Calcium (Ca)	ug/L	-	-	260000	400	A020791
Dissolved Chromium (Cr)	ug/L	50	-	ND	5.0	A020791
Dissolved Cobalt (Co)	ug/L	-	-	ND	0.50	A020791
Dissolved Copper (Cu)	ug/L	-	1000	8.5	0.90	A020791
Dissolved Iron (Fe)	ug/L	-	300	ND	100	A020791
Dissolved Lead (Pb)	ug/L	10	-	ND	0.50	A020791
Dissolved Magnesium (Mg)	ug/L	-	-	89000	50	A020791
Dissolved Manganese (Mn)	ug/L	-	50	20	2.0	A020791
Dissolved Molybdenum (Mo)	ug/L	-	-	1.4	0.50	A020791
Dissolved Nickel (Ni)	ug/L	-	-	3.0	1.0	A020791
Dissolved Phosphorus (P)	ug/L	-	-	ND	100	A020791
Dissolved Potassium (K)	ug/L	-	-	13000	200	A020791
Dissolved Selenium (Se)	ug/L	50	-	ND	2.0	A020791
Dissolved Silicon (Si)	ug/L	-	-	4000	50	A020791
Dissolved Silver (Ag)	ug/L	-	-	ND	0.090	A020791
Dissolved Sodium (Na)	ug/L	-	200000	390000	100	A020791
Dissolved Strontium (Sr)	ug/L	-	-	5800	1.0	A020791
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
MAC,A/O: Ontario Drinking Water Standards - Maximum Acceptable Concentration [MAC] & Table 4-Chemical/Physical Objectives [A/O] - Not Health Related, respectively						
(Made under the Ontario Safe Drinking Water Act, 2002)						
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.						



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID				AVOW78		
Sampling Date				2025/09/25 14:00		
COC Number				1061580-01-01		
	UNITS	MAC	A/O	220 SAWLOG POINT RD	RDL	QC Batch
Dissolved Thallium (Tl)	ug/L	-	-	ND	0.050	A020791
Dissolved Titanium (Ti)	ug/L	-	-	ND	5.0	A020791
Dissolved Uranium (U)	ug/L	20	-	0.47	0.10	A020791
Dissolved Vanadium (V)	ug/L	-	-	ND	0.50	A020791
Dissolved Zinc (Zn)	ug/L	-	5000	81	5.0	A020791
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
MAC,A/O: Ontario Drinking Water Standards - Maximum Acceptable Concentration [MAC] & Table 4-Chemical/Physical Objectives [A/O] - Not Health Related, respectively (Made under the Ontario Safe Drinking Water Act, 2002)						
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.						



MICROBIOLOGY (WATER)

Bureau Veritas ID			AVOW78	
Sampling Date			2025/09/25 14:00	
COC Number			1061580-01-01	
	UNITS	MAC	220 SAWLOG POINT RD	QC Batch
Microbiological				
Background	CFU/100mL	-	150	A020293
Total Coliforms	CFU/100mL	0	2	A020293
Escherichia coli	CFU/100mL	0	0	A020293
No Fill	No Exceedance			
Grey	Exceeds 1 criteria policy/level			
Black	Exceeds both criteria/levels			
QC Batch = Quality Control Batch				
MAC: Ontario Drinking Water Standards - Maximum Acceptable Concentration [MAC] & Table 4-Chemical/Physical Objectives [A/O] - Not Health Related, respectively (Made under the Ontario Safe Drinking Water Act, 2002)				



BUREAU
VERITAS

Bureau Veritas Job #: C5C0500

Report Date: 2025/10/02

R J Burnside Associates Ltd

Client Project #: 300060798

Site Location: TOWNSHIP OF TINY

Sampler Initials: RN

TEST SUMMARY

Bureau Veritas ID: AVOW78
Sample ID: 220 SAWLOG POINT RD
Matrix: Water

Collected: 2025/09/25
Shipped:
Received: 2025/09/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	A020584	N/A	2025/09/29	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	A019347	N/A	2025/09/29	Automated Statchk
Chloride by Automated Colourimetry	SKAL	A020574	N/A	2025/09/29	Alina Dobreanu
Colour	SPEC	A020808	N/A	2025/09/29	Kruti Jitesh Patel
Conductivity	AT	A020585	N/A	2025/09/29	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	A022112	N/A	2025/09/30	Gyulshen Idriz
Fluoride	ISE	A020586	2025/09/27	2025/09/29	Surinder Rai
Hardness (calculated as CaCO ₃)		A019325	N/A	2025/09/30	Automated Statchk
Dissolved Metals by ICPMS	ICP/MS	A020791	N/A	2025/09/29	Indira HarryPaul
Ion Balance (% Difference)	CALC	A019669	N/A	2025/09/30	Automated Statchk
Anion and Cation Sum	CALC	A019670	N/A	2025/09/30	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	A020293	N/A	2025/09/26	Amlin Antony
Total Ammonia-N	SKAL/NH ₄	A023921	N/A	2025/10/02	Rishi Modi
Nitrate & Nitrite as Nitrogen in Water	LACH	A020966	N/A	2025/09/29	Chandra Nandlal
pH	AT	A020587	2025/09/27	2025/09/29	Surinder Rai
Orthophosphate	SKAL	A020577	N/A	2025/09/29	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	A019671	N/A	2025/09/30	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	A019672	N/A	2025/09/30	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	A020578	N/A	2025/09/29	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	A019674	N/A	2025/09/30	Automated Statchk
Turbidity	AT	A020489	N/A	2025/09/27	Pinky joy JANABAN



Bureau Veritas Job #: C5C0500
Report Date: 2025/10/02

R J Burnside Associates Ltd
Client Project #: 300060798
Site Location: TOWNSHIP OF TINY
Sampler Initials: RN

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	-2.0°C
-----------	--------

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C5C0500

Report Date: 2025/10/02

R J Burnside Associates Ltd

Client Project #: 300060798

Site Location: TOWNSHIP OF TINY

Sampler Initials: RN

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A020489	JOY	Spiked Blank	Turbidity	2025/09/27		97	%	80 - 120
A020489	JOY	Method Blank	Turbidity	2025/09/27	ND, RDL=0.1		NTU	
A020489	JOY	RPD	Turbidity	2025/09/27	NC		%	20
A020574	ADB	Matrix Spike	Dissolved Chloride (Cl-)	2025/09/29		90	%	80 - 120
A020574	ADB	Spiked Blank	Dissolved Chloride (Cl-)	2025/09/29		98	%	80 - 120
A020574	ADB	Method Blank	Dissolved Chloride (Cl-)	2025/09/29	ND, RDL=1.0		mg/L	
A020574	ADB	RPD	Dissolved Chloride (Cl-)	2025/09/29	2.2		%	20
A020577	MJ1	Matrix Spike	Orthophosphate (P)	2025/09/29		97	%	75 - 125
A020577	MJ1	Spiked Blank	Orthophosphate (P)	2025/09/29		100	%	80 - 120
A020577	MJ1	Method Blank	Orthophosphate (P)	2025/09/29	ND, RDL=0.010		mg/L	
A020577	MJ1	RPD	Orthophosphate (P)	2025/09/29	NC		%	20
A020578	MJ1	Matrix Spike	Dissolved Sulphate (SO4)	2025/09/29		89	%	75 - 125
A020578	MJ1	Spiked Blank	Dissolved Sulphate (SO4)	2025/09/29		98	%	80 - 120
A020578	MJ1	Method Blank	Dissolved Sulphate (SO4)	2025/09/29	ND, RDL=1.0		mg/L	
A020578	MJ1	RPD	Dissolved Sulphate (SO4)	2025/09/29	0.59		%	20
A020584	SAU	Spiked Blank	Alkalinity (Total as CaCO3)	2025/09/29		96	%	85 - 115
A020584	SAU	Method Blank	Alkalinity (Total as CaCO3)	2025/09/29	ND, RDL=1.0		mg/L	
A020584	SAU	RPD	Alkalinity (Total as CaCO3)	2025/09/29	2.7		%	20
A020585	SAU	Spiked Blank	Conductivity	2025/09/29		101	%	85 - 115
A020585	SAU	Method Blank	Conductivity	2025/09/29	ND, RDL=2.0		umho/cm	
A020585	SAU	RPD	Conductivity	2025/09/29	0.27		%	10
A020586	SAU	Matrix Spike	Fluoride (F-)	2025/09/29		106	%	80 - 120
A020586	SAU	Spiked Blank	Fluoride (F-)	2025/09/29		104	%	80 - 120
A020586	SAU	Method Blank	Fluoride (F-)	2025/09/29	ND, RDL=0.10		mg/L	
A020586	SAU	RPD	Fluoride (F-)	2025/09/29	6.6		%	20
A020587	SAU	Spiked Blank	pH	2025/09/29		102	%	98 - 103
A020587	SAU	RPD	pH	2025/09/29	1.0		%	N/A
A020791	IHP	Matrix Spike	Dissolved Antimony (Sb)	2025/09/29		106	%	80 - 120
			Dissolved Arsenic (As)	2025/09/29		101	%	80 - 120
			Dissolved Barium (Ba)	2025/09/29		100	%	80 - 120
			Dissolved Beryllium (Be)	2025/09/29		105	%	80 - 120
			Dissolved Boron (B)	2025/09/29		NC	%	80 - 120
			Dissolved Cadmium (Cd)	2025/09/29		98	%	80 - 120
			Dissolved Calcium (Ca)	2025/09/29		NC	%	80 - 120
			Dissolved Chromium (Cr)	2025/09/29		92	%	80 - 120
			Dissolved Cobalt (Co)	2025/09/29		99	%	80 - 120
			Dissolved Copper (Cu)	2025/09/29		102	%	80 - 120
			Dissolved Iron (Fe)	2025/09/29		96	%	80 - 120
			Dissolved Lead (Pb)	2025/09/29		89	%	80 - 120
			Dissolved Magnesium (Mg)	2025/09/29		NC	%	80 - 120
			Dissolved Manganese (Mn)	2025/09/29		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/09/29		101	%	80 - 120
			Dissolved Nickel (Ni)	2025/09/29		93	%	80 - 120
			Dissolved Phosphorus (P)	2025/09/29		108	%	80 - 120



BUREAU
VERITAS

Bureau Veritas Job #: C5C0500

Report Date: 2025/10/02

R J Burnside Associates Ltd

Client Project #: 300060798

Site Location: TOWNSHIP OF TINY

Sampler Initials: RN

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A020791	IHP	Spiked Blank	Dissolved Potassium (K)	2025/09/29		100	%	80 - 120	
			Dissolved Selenium (Se)	2025/09/29		95	%	80 - 120	
			Dissolved Silicon (Si)	2025/09/29		101	%	80 - 120	
			Dissolved Silver (Ag)	2025/09/29		75 (1)	%	80 - 120	
			Dissolved Sodium (Na)	2025/09/29		NC	%	80 - 120	
			Dissolved Strontium (Sr)	2025/09/29		NC	%	80 - 120	
			Dissolved Thallium (Tl)	2025/09/29		89	%	80 - 120	
			Dissolved Titanium (Ti)	2025/09/29		104	%	80 - 120	
			Dissolved Uranium (U)	2025/09/29		99	%	80 - 120	
			Dissolved Vanadium (V)	2025/09/29		103	%	80 - 120	
			Dissolved Zinc (Zn)	2025/09/29		91	%	80 - 120	
			Dissolved Aluminum (Al)	2025/09/29		101	%	80 - 120	
			Dissolved Antimony (Sb)	2025/09/29		98	%	80 - 120	
			Dissolved Arsenic (As)	2025/09/29		99	%	80 - 120	
			Dissolved Barium (Ba)	2025/09/29		98	%	80 - 120	
			Dissolved Beryllium (Be)	2025/09/29		99	%	80 - 120	
			Dissolved Boron (B)	2025/09/29		93	%	80 - 120	
			Dissolved Cadmium (Cd)	2025/09/29		97	%	80 - 120	
			Dissolved Calcium (Ca)	2025/09/29		101	%	80 - 120	
			Dissolved Chromium (Cr)	2025/09/29		91	%	80 - 120	
			Dissolved Cobalt (Co)	2025/09/29		101	%	80 - 120	
			Dissolved Copper (Cu)	2025/09/29		97	%	80 - 120	
			Dissolved Iron (Fe)	2025/09/29		96	%	80 - 120	
			Dissolved Lead (Pb)	2025/09/29		96	%	80 - 120	
			Dissolved Magnesium (Mg)	2025/09/29		97	%	80 - 120	
			Dissolved Manganese (Mn)	2025/09/29		96	%	80 - 120	
			Dissolved Molybdenum (Mo)	2025/09/29		92	%	80 - 120	
			Dissolved Nickel (Ni)	2025/09/29		97	%	80 - 120	
			Dissolved Phosphorus (P)	2025/09/29		98	%	80 - 120	
			Dissolved Potassium (K)	2025/09/29		98	%	80 - 120	
			Dissolved Selenium (Se)	2025/09/29		100	%	80 - 120	
			Dissolved Silicon (Si)	2025/09/29		96	%	80 - 120	
			Dissolved Silver (Ag)	2025/09/29		90	%	80 - 120	
			Dissolved Sodium (Na)	2025/09/29		95	%	80 - 120	
			Dissolved Strontium (Sr)	2025/09/29		94	%	80 - 120	
			Dissolved Thallium (Tl)	2025/09/29		98	%	80 - 120	
			Dissolved Titanium (Ti)	2025/09/29		99	%	80 - 120	
			Dissolved Uranium (U)	2025/09/29		97	%	80 - 120	
			Dissolved Vanadium (V)	2025/09/29		98	%	80 - 120	
			Dissolved Zinc (Zn)	2025/09/29		96	%	80 - 120	
A020791	IHP	Method Blank	Dissolved Aluminum (Al)	2025/09/29	ND, RDL=4.9		ug/L		
			Dissolved Antimony (Sb)	2025/09/29	ND, RDL=0.50		ug/L		
			Dissolved Arsenic (As)	2025/09/29	ND, RDL=1.0		ug/L		
			Dissolved Barium (Ba)	2025/09/29	ND, RDL=2.0		ug/L		
			Dissolved Beryllium (Be)	2025/09/29	ND, RDL=0.40		ug/L		



BUREAU
VERITAS

Bureau Veritas Job #: C5C0500
Report Date: 2025/10/02

R J Burnside Associates Ltd
Client Project #: 300060798
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Sampler Initials: RN

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Boron (B)	2025/09/29	ND, RDL=10		ug/L	
			Dissolved Cadmium (Cd)	2025/09/29	ND, RDL=0.090		ug/L	
			Dissolved Calcium (Ca)	2025/09/29	ND, RDL=200		ug/L	
			Dissolved Chromium (Cr)	2025/09/29	ND, RDL=5.0		ug/L	
			Dissolved Cobalt (Co)	2025/09/29	ND, RDL=0.50		ug/L	
			Dissolved Copper (Cu)	2025/09/29	ND, RDL=0.90		ug/L	
			Dissolved Iron (Fe)	2025/09/29	ND, RDL=100		ug/L	
			Dissolved Lead (Pb)	2025/09/29	ND, RDL=0.50		ug/L	
			Dissolved Magnesium (Mg)	2025/09/29	ND, RDL=50		ug/L	
			Dissolved Manganese (Mn)	2025/09/29	ND, RDL=2.0		ug/L	
			Dissolved Molybdenum (Mo)	2025/09/29	ND, RDL=0.50		ug/L	
			Dissolved Nickel (Ni)	2025/09/29	ND, RDL=1.0		ug/L	
			Dissolved Phosphorus (P)	2025/09/29	ND, RDL=100		ug/L	
			Dissolved Potassium (K)	2025/09/29	ND, RDL=200		ug/L	
			Dissolved Selenium (Se)	2025/09/29	ND, RDL=2.0		ug/L	
			Dissolved Silicon (Si)	2025/09/29	ND, RDL=50		ug/L	
			Dissolved Silver (Ag)	2025/09/29	ND, RDL=0.090		ug/L	
			Dissolved Sodium (Na)	2025/09/29	ND, RDL=100		ug/L	
			Dissolved Strontium (Sr)	2025/09/29	ND, RDL=1.0		ug/L	
			Dissolved Thallium (Tl)	2025/09/29	ND, RDL=0.050		ug/L	
			Dissolved Titanium (Ti)	2025/09/29	ND, RDL=5.0		ug/L	
			Dissolved Uranium (U)	2025/09/29	ND, RDL=0.10		ug/L	
			Dissolved Vanadium (V)	2025/09/29	ND, RDL=0.50		ug/L	
			Dissolved Zinc (Zn)	2025/09/29	ND, RDL=5.0		ug/L	
A020791	IHP	RPD	Dissolved Antimony (Sb)	2025/09/30	0.20		%	20
			Dissolved Arsenic (As)	2025/09/30	4.2		%	20
			Dissolved Barium (Ba)	2025/09/30	0.21		%	20
			Dissolved Beryllium (Be)	2025/09/30	NC		%	20



QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Boron (B)	2025/09/30	0.93		%	20
			Dissolved Cadmium (Cd)	2025/09/30	NC		%	20
			Dissolved Chromium (Cr)	2025/09/30	NC		%	20
			Dissolved Cobalt (Co)	2025/09/30	0.99		%	20
			Dissolved Copper (Cu)	2025/09/30	NC		%	20
			Dissolved Lead (Pb)	2025/09/30	3.4		%	20
			Dissolved Molybdenum (Mo)	2025/09/30	16		%	20
			Dissolved Nickel (Ni)	2025/09/30	3.4		%	20
			Dissolved Selenium (Se)	2025/09/30	NC		%	20
			Dissolved Silver (Ag)	2025/09/30	NC		%	20
			Dissolved Sodium (Na)	2025/09/30	2.3		%	20
			Dissolved Thallium (Tl)	2025/09/30	NC		%	20
			Dissolved Uranium (U)	2025/09/30	1.8		%	20
			Dissolved Vanadium (V)	2025/09/30	2.1		%	20
			Dissolved Zinc (Zn)	2025/09/30	0.62		%	20
A020808	KJP	Spiked Blank	Colour	2025/09/29		99	%	80 - 120
A020808	KJP	Method Blank	Colour	2025/09/29	ND,RDL=2		TCU	
A020808	KJP	RPD	Colour	2025/09/29	NC		%	25
A020966	C_N	Matrix Spike	Nitrite (N)	2025/09/29		103	%	80 - 120
			Nitrate (N)	2025/09/29		94	%	80 - 120
A020966	C_N	Spiked Blank	Nitrite (N)	2025/09/29		102	%	80 - 120
			Nitrate (N)	2025/09/29		92	%	80 - 120
A020966	C_N	Method Blank	Nitrite (N)	2025/09/29	ND, RDL=0.010		mg/L	
			Nitrate (N)	2025/09/29	ND, RDL=0.10		mg/L	
A020966	C_N	RPD	Nitrite (N)	2025/09/29	NC		%	20
			Nitrate (N)	2025/09/29	0.54		%	20
A022112	GID	Matrix Spike	Dissolved Organic Carbon	2025/09/30		93	%	80 - 120
A022112	GID	Spiked Blank	Dissolved Organic Carbon	2025/09/30		95	%	80 - 120
A022112	GID	Method Blank	Dissolved Organic Carbon	2025/09/30	ND, RDL=0.40		mg/L	
A022112	GID	RPD	Dissolved Organic Carbon	2025/09/30	1.2		%	20
A023921	RM3	Matrix Spike	Total Ammonia-N	2025/10/02		102	%	75 - 125
A023921	RM3	Spiked Blank	Total Ammonia-N	2025/10/02		102	%	80 - 120
A023921	RM3	Method Blank	Total Ammonia-N	2025/10/02	ND, RDL=0.050		mg/L	
A023921	RM3	RPD	Total Ammonia-N	2025/10/02	1.9		%	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times$ RDL).

(1) Matrix Spike exceeds acceptance limits, probable matrix interference



BUREAU
VERITAS

Bureau Veritas Job #: C5C0500
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Client Project #: 300060798
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Sampler Initials: RN

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Amlin Antony, Analyst 1

Louise Harding, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



BUREAU
VERITAS

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Exceedance Summary Table – ODWS (2002)
Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
220 SAWLOG POINT RD	AVOW78-02	Fluoride (F-)	1.5	1.8	0.10	mg/L
220 SAWLOG POINT RD	AVOW78-03	Total Coliforms	0	2	N/A	CFU/100mL

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.

