Staveley Farm Severance

Scoped Hydrogeology Study

82 Eatonville Road

September 12, 2025
Project # 25-6112A

GREER GALLOWAY
a division of Jp2g Consultants Inc.

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1 Introduction

Greer Galloway, a division of Jp2g Consultants Inc. (Jp2g) was retained by Mr. Keith Watson to complete a Scoped Hydrogeology Study supporting the proposed single-lot severance on Eatonville Road, part of Lot 78, Concession 2, in the Township of Ameliasburgh, Ontario. Mr. Watson's home is located on the proposed severance.

The purpose of the work was to assess the soil and groundwater conditions at the site to determine if the dwelling on the proposed severance property is adequately supported by the existing well in accordance with Provincial standards, and if the reduced lot size of the severed property will allow for adequate nitrate dilution at the property boundary.

2 Investigation Methods

The assessment was carried out in general accordance with the Ministry of the Environment, Conservation, and Parks (MECP) procedures D-5-4 (Individual On-Site Sewage Systems) and D-5-5 (Private Well: Well Assessment).

The investigation included a review of water well records, a review of available geologic and hydrogeologic information for the area, a two-week monitoring period of the existing well located on the proposed severance property, and chemical and bacteriological analysis. The investigation methods are described further in the following subsections.

2.1 Well Records Review

Information about nearby wells was obtained from available MECP water well records on the MECP wells database using a search radius of 300 m from the subject property. MECP Water Well Record sheets for the searched area are provided in Appendix A.

2.2 Water Supply Assessment

The water supply assessment was based on a passive yield test of the existing dug well (Tag ID # A143975) located at the southwestern corner of the proposed severance, approximately 80 m south of the existing dwelling on the property.

The well is a 0.9 m diameter dug well with a measured depth of 6.86 m below ground surface (bgs), a measured stick-up height of 0.64 m, and a measured static water level of 3.24 m bgs on May 27, 2025. We note that the well record for this well indicates a driller-reported depth of 8.2 m, which is inconsistent with our measured 6.86 m, though the well tag matches the ID on the well record. One possible explanation for the inconsistency is that clearstone was added after excavation, though this is speculation.

A data-logging pressure transducer (Solinst Model 3001) was installed in the tested well. The datalogger was set to record at one-minute intervals, and recorded readings for two weeks. The hydrograph is provided in Appendix B.

2.3 Water Quality Assessment

A grab sample of the raw groundwater was collected immediately prior to installing the data-logger. The sample was placed into a variety of laboratory-prepared sample containers that were sealed, placed into a cooler with ice packs to maintain a temperature of approximately 4 °C, and transported to Caduceon Laboratories in Kingston, Ontario. Analytical parameters included E. coli and Total Coliform bacteria and a variety of additional

parameters including Alkalinity, pH, Conductivity, Colour, Turbidity, Fluoride, Chloride, Nitrite and Nitrate, Sulphate, TKN, Ammonia, Organic Nitrogen, DOC, Hardness, Calcium, Iron, Magnesium, Manganese, Potassium, Silica, Sodium, and Zinc (refer to the Laboratory Certificate of Analysis in Appendix C).

3 Summarized Findings

3.1 Site Description

The subject property covers an area of approximately 28.5 ha. The client wishes to sever a parcel of approximately 1.2 ha on the part of the land currently occupied by the client's home dwelling. The property is primarily active agricultural land, though the area corresponding to the proposed severance is covered by manicured grass and mature trees. Local land use is Agricultural. Maps of the property and its surroundings are provided in Drawings 1 and 2 (appended after text).

Topography within the proposed severance is slightly raised at the location of the existing dwelling, sloping downward away from the house in both northern and southern directions. The ground surface elevation near the house is approximately 86 metres above sea level (mASL); the elevation is approximately 82 mASL at the northern edge and approximately 80 mASL at the southern edge.

The only notable surface water body in the area is a creek running northeast to southwest that forms the northern boundary of the retained lands. This creek is located approximately 330 m from the proposed severance property. Municipal servicing is not available in the area, so drinking water and sewage servicing must be handled by individual water supply wells and septic systems.

3.2 Climate and Water Balance

The area is characterized by cool winters and relatively warm humid summers. Snow typically occurs during 5 months of the year from December to April. Annual precipitation is 948 mm at the Mountainview weather station (Environment Canada, 2020) with an average annual evapotranspiration (ET) of roughly 500 mm based on the site location (Statistics Canada, 2017).

Mapping shows primarily surficial soils classified as silty sand to sand-textured till on Precambrian terrain in the Surficial Geology of Southern Ontario (OGS, 2011). Infiltration factors for the area were calculated as per the Ontario Ministry of the Environment 1995 Hydrogeological Technical Information Requirements for Land Development Applications.

It is based on three sub-factors which are:

- Topography sub-factor
- Soil sub-factor
- Cover sub-factor

Table 1 presents infiltration factors based on the details of the ground cover factors for the subject property under current conditions.

Table 1: Estimated infiltration factors

Site Characteristics	Infiltration Factor
Topography	
Flat Land	0.3
Rolling Land	**0.2**
Hilly Land	0.1
Soils	
Tight Impervious Clay	0.1
Medium Combinations of Clay and Loam	**0.2**
Open Sandy Loam	0.4
Cover	
Cultivated Land	**0.1**
Woodland	0.2
Sum of Infiltration Factors	**0.5**

Given an average annual moisture surplus (P-ET) of approximately 448 mm, we estimate an average annual infiltration of 224 mm for the subject property.

3.3 Geology

The Ontario Soil Report No.10 classifies soils in this area as Elmbrook clay loam. This soil type is described as brown to grey silty clay loam with few stones. A horizon soils are stone-free, slightly acidic, and have a crumb or nuciform texture. B and C horizon soils have a blocky or massive texture, are somewhat alkaline, are calcareous, and have a grey-brown or mottled appearance. The MECP Water Well Record for A143975 describes the overburden as "clay".

The Ontario Geological Survey (2011) has described the bedrock as interbedded limestone and shale belonging to the Verulam Formation of the Simcoe Group.

3.4 Hydrogeology

A search of the Ministry of Environment, Conservation and Parks (MECP) Well Record Database returned 6 well records within a 500 m radius of the proposed severance (see Drawing 2, appended). Of these 6 records, one was a record of decommissioning; the remaining records are summarized in Table 2.

The records indicate that bedrock in the area is encountered between 6.9 m to 15.2 m bgs, with a median depth to bedrock of 9.1 m bgs. The median driller-reported well yield is 9.1 L/min. Subject lands are located outside any mapped WHPA.

Table 2: Summary of MECP well records

Well Number	Water Found (m)	Static Level (m)	Yield (L/min)	Overburden Depth (m)	Hole Depth (m)	Water Type	Aquifer
A143975 (TW)	3.5	2.1	90+	>8.2	8.2	Fresh	Overburden
5303961	13.7	1.8	9.1	13.7	23.8	Fresh	Bedrock
5303986	9.8	3.0	23.2	9.1	9.8	Fresh	Bedrock
5306439	25.9	2.5	9.1	15.2	33.2	Fresh	Bedrock
5306773	8.2, 25.0	2.4	Low	6.9	25.9	Untested	Bedrock

Based on the recorded static levels and the topographic setting, the dominant regional groundwater flow direction is towards the creek at the northern edge of the subject property.

3.5 Water Availability

Well A143975 was monitored for a period of two weeks (14 days) during normal in-home water usage. The static water level at the time of the installation of our logger was 3.24 m bgs. The hydrograph for this monitoring is included in Appendix B.

Over the course of the monitoring period, water was pumped from the well a total of four times to refill the reservoir and pressure tank inside the house. Pumping durations were all between 20-25 minutes, and the intervals between the takings indicate that enough water was taken to supply the house for over two days each time.

Each time the pump refilled the pressure tank, the well was drawn down by an average of 0.5 m and recovered fully after about 36 hours. The lowest recorded water level (when the pump turned off on day 6 of monitoring) was 3.70 m bgs, leaving an additional 3.16 m of available water column in the well.

Based on the well's depth and its observed response to typical in-home water usage, we conclude that the well can support the proposed severance. The well is expected to provide adequate water for normal residential use during the dryer summer months. We note that this monitoring was conducted during an unseasonally dry period that is considered representative of an unusually dry summer.

3.6 Water Quality

A groundwater sample was collected from well A143975 at the beginning of the monitoring period. The samples were analyzed for parameters outlined under MECP Guideline D-5-5 at Caduceon Laboratories in Kingston, Ontario. Key results are summarized in Table 3, with exceedances being formatted in bold. The full results of this testing are included with the Laboratory Certificates of Analysis in Appendix C.

Table 3: Summary of key analytical results

Parameter	Units	RL	A143975 (Aug 28, 2025)	MECP D-5-5
Bacteriological Parameters				
Total Coliform	cfu/100mL	1	1	0 (5)
E coli	cfu/100mL	1	0	0
Background	cfu/100mL	1	>200	N/A

Physical/Chemical parameters with Health-related Criteria				
Turbidity (Laboratory)	NTU	0.1	0.7	5
Nitrite (N)	mg/L	0.1	<0.05	1
Nitrate (N)	mg/L	0.1	<0.05	10
Fluoride	mg/L	0.1	0.1	2.4
Physical/Chemical parameters with Aesthetic Criteria/Operational Guidelines				
Alkalinity (as $CaCO_3$)	mg/L	5	295	500^{OG}
pH @25°C	pH Units	-	7.99	$6.5 - 8.5^{OG}$
Colour	TCU	2	<2	5^{OG}
Chloride	mg/L	0.5	23.4	250^{AO}
Sulphate	mg/L	1	83	500^{AO}
Dissolved Organic Carbon	mg/L	0.2	4.1	5^{AO}
Sulphide	mg/L	0.01	<0.01	0.05^{AO}
Hardness (as $CaCO_3$)	mg/L	1	**367**	100^{OG}
Iron	mg/L	0.005	0.008	0.3^{AO}
Magnesium	mg/L	0.02	42.6	-
Manganese	mg/L	0.001	0.002	0.05^{AO}
Sodium	mg/L	0.2	14.6	200^{AO}
Lead	mg/L	0.00002	0.00002	-

The sample taken from well A143975 was found to meet all D-5-5 criteria. The water is moderately hard as is typical for groundwater in the County.

3.7 Potential for Well Interference

The radius of influence (r, metres) between a pumped well and the neighbouring properties may be estimated using the estimated value for Q (i.e., the average amount pumped per day in litres) and the average recharge (R, mm per year) to the aquifer according to:

$$Q = \frac{R\pi r^2}{365}$$

For an annual infiltration value of 250 mm and a 4-bedroom house with an occupancy of 5 persons, this calculation yields a radius of influence of 32 m based on a shallow dug well pumping at a rate of 2,250 L/day (5 people x 450 L/day) over the course of a year for A143975.

Drawdown during regular use was found to be modest, with ample available water column remaining, and the nearest well is about 250 m away. Interference is not expected to be a problem for the proposed severance. As an existing water taking, well interference (if any) would not be governed by MECP Guideline D-5-5.

3.8 Onsite Sewage Treatment

The area of the proposed severance is greater than 1 ha, and as such, the risk of contamination of neighbouring properties via nitrate-rich sewage effluent is considered to be low under MECP Guideline D-5-4.

Despite not being required, the predicted concentration at the property boundary can be calculated using the following formula:

$$C_T = \frac{(Q_O \times C_O) + (Q_O \times C_{bk}) + (Q_R \times C_R)}{Q_R + Q_O}$$

Where:

C_T = Nitrate concentration at property boundary (mg/L as N)
Q_O = Sewage Effluent Volume (L/day)
C_O = Nitrate concentration of sewage effluent (mg/L as N)
C_{bk} = Nitrate concentration in background groundwater (mg/L as N)
Q_R = Groundwater recharge or precipitation infiltration (L/day)
C_R = Nitrate concentration of groundwater recharge (mg/L as N)

These parameters are discussed as follows:

Q_O – A daily flow of 1 m^3/day (1,000 L/day) has been assumed for a typical 3-4 bedroom residential dwelling.

C_O – For conventional sewage systems for residential developments, an effluent nitrate concentration of 40 mg/L per building lot is typically assumed for residential developments.

C_{bk} – No nitrate was detected in the water quality sample taken from the tested well, so a background concentration of 0.0 mg/L has been assumed.

Q_R – An annual groundwater recharge rate of 250 mm, recommended in Chapter 22 of the 2008 Design Guidelines for Sewage Works (MECP, 2008), and an area of 1.2 ha yields a groundwater recharge of 8,220 L/day.

C_R – Nitrate levels in groundwater recharge are ignored since precipitation does not typically contain detectable levels of nitrate.

C_T - The calculated groundwater nitrate at the property boundary.

These values yield the following predicted nitrate concentration:

$$C_T = \frac{(1{,}000\ L \times 40\ mg/L) + (1{,}000\ L \times 0.0\ mg/L) + (8{,}220\ L \times 0\ mg/L)}{8{,}220 + 1{,}000\ L} = 4.3\ mg/L$$

The predicted nitrate concentration is below the 10 mg/L limit outlined in MECP Guideline D-5-4.

4 Summary

The purpose of the work was to assess the soil and groundwater conditions at the site to determine if the dwelling on the proposed severance property is adequately supported by the existing well in accordance with Provincial standards, and if the reduced lot size of the severed property will allow for adequate nitrate dilution at the new property boundary

Our assessment found the following:

1. Our monitoring of the existing well (A143975) during two weeks of regular usage showed that the well has sufficient yield and storage to support the proposed severance. The well is deep enough to ensure water availability for normal residential needs during dry summer months.
2. Based on our calculations and the proximity of the nearest wells, well interference is not anticipated for the proposed severance. Water usage is not expected to change as a result of the proposed severance.

3. Water quality results from the sample taken at the start of the monitoring period showed generally good water quality. Ultraviolet sterilization is still recommended as a minimum for in-home water treatment at the discretion of the homeowner.
4. The proposed severance has an area greater than 1 ha, so the risk of contaminating neighbouring water supplies with nitrate-rich sewage effluent is considered low under MECP Guideline D-5-4.

5 References

Environment and Climate Change Canada 2025: Historical Climate Data - Mountain View (Prince Edward), Ontario.

MECP (Ministry of Environment Conservation and Parks) 1996: D-5-5 Private Wells: Water Supply Assessment, updated March 15, 2016.

MECP (Ministry of Environment Conservation and Parks) 1996: D-5-4 Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment, updated April 14, 2016.

MECP (Ministry of Environment Conservation and Parks) 2008: Design Guidelines for Sewage Works, updated September 4, 2024.

Ontario Geological Survey 2011. Bedrock geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 126-REV

Ontario Geological Survey 2011. Surficial geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 128-REV

Ontario Agricultural College, 1962: Soil Survey of Prince Edward County. Report No. 10 of the Ontario Soil Survey, Scale 1:63 360.

End of report.

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KINGSTON
1620 WALLBRIDGE LOYALIST ROAD
BELLEVILLE, ONTARIO, K8N 4Z5
PHONE: 613-966-3068
FAX: 613-966-3087

NOTES:

1) Base drawing and information obtained from Google Earth.

LEGEND:

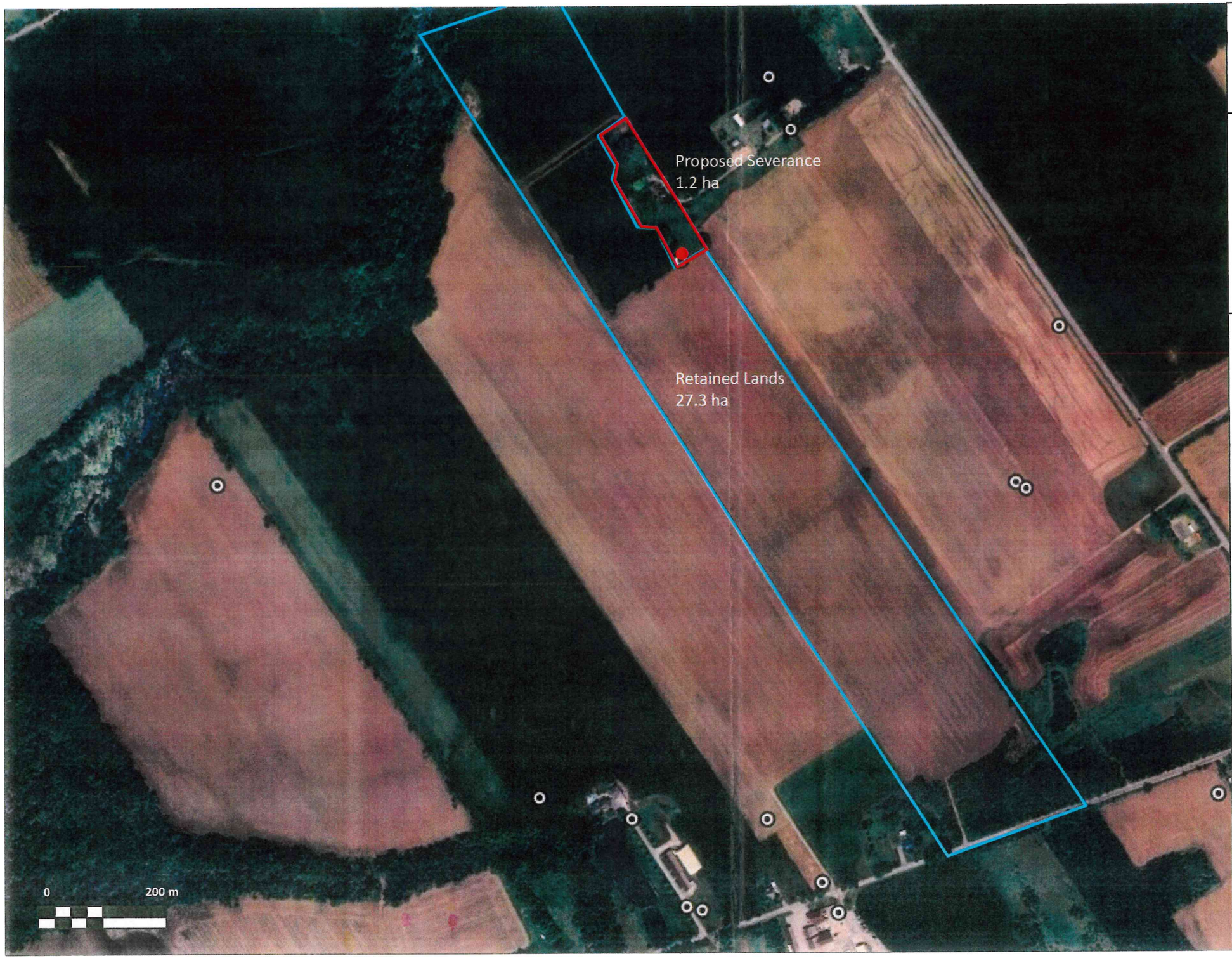
Property Location

PROJECT 25-6112A:

SCOPED HYDROGEOLOGY STUDY
82 EATONVILLE ROAD
AMELIASBURGH, ON

DRAWING 1:

SITE PLAN SHOWING PROPERTY LOCATION



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NOTES:

1) Base drawing and information obtained from Google Earth.
2) Locations and property boundaries are approximate.

LEGEND:

- Proposed Severance
- Retained Lands
- Test Well Location
- MECP Well Record

PROJECT 25-6112A:

SCOPED HYDROGEOLOGY STUDY
82 EATONVILLE ROAD
AMELIASBURGH, ON

DRAWING 2:

SITE PLAN SHOWING WELL LOCATION

Appendix A: MECP Water Well Records

Ontario — Ministry of the Environment

Measurements recorded in: [x] Metric [ ] Imperial

Well Tag No. *(Place Sticker and/or Print Below)* A143 975

Well Record

Regulation 903 Ontario Water Resources Act

Page _____ of _____

[redacted]

Address of Well Location (Street Number/Name)	Township	Lot	Concession
82 Eatonville Road RR#1	Amelias burgh	78	2
County/District/Municipality	**City/Town/Village**	**Province**	**Postal Code**
Prince Edward County	Rednersville (south of)	Ontario	K8N4Z1
UTM Coordinates Zone / Easting / Northing	**Municipal Plan and Sublot Number**	**Other**	
NAD 83 18 307927 4848452			

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Brown	Clay	Stones		0	8.2

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
0	2.5	Clay	20

Method of Construction

[ ] Cable Tool [ ] Diamond
[ ] Rotary (Conventional) [ ] Jetting
[ ] Rotary (Reverse) [ ] Driving
[ ] Boring [x] Digging
[ ] Air percussion
[ ] Other, *specify*

Well Use

[ ] Public [ ] Commercial [ ] Not used
[x] Domestic [ ] Municipal [ ] Dewatering
[ ] Livestock [ ] Test Hole [ ] Monitoring
[ ] Irrigation [ ] Cooling & Air Conditioning
[ ] Industrial
[ ] Other, *specify*

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
90	Concrete	.3	0	8.2

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To

Status of Well

[x] Water Supply
[ ] Replacement Well
[ ] Test Hole
[ ] Recharge Well
[ ] Dewatering Well
[ ] Observation and/or Monitoring Hole
[ ] Alteration (Construction)
[ ] Abandoned, Insufficient Supply
[ ] Abandoned, Poor Water Quality
[ ] Abandoned, other, *specify*
[ ] Other, *specify*

Water Details

Water found at Depth	Kind of Water	Hole Diameter Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
3.5 (m/ft) [ ] Gas	[x] Fresh [ ] Untested [ ] Other, *specify*			
(m/ft) [ ] Gas	[ ] Fresh [ ] Untested [ ] Other, *specify*			
(m/ft) [ ] Gas	[ ] Fresh [ ] Untested [ ] Other, *specify*			

Results of Well Yield Testing

After test of well yield, water was:
[ ] Clear and sand free
[ ] Other, *specify*

If pumping discontinued, give reason:

Pump intake set at (m/ft): 8.2

Pumping rate (l/min / GPM): 585

Duration of pumping: ____ hrs + 30 min

Final water level end of pumping (m/ft): 4.2

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

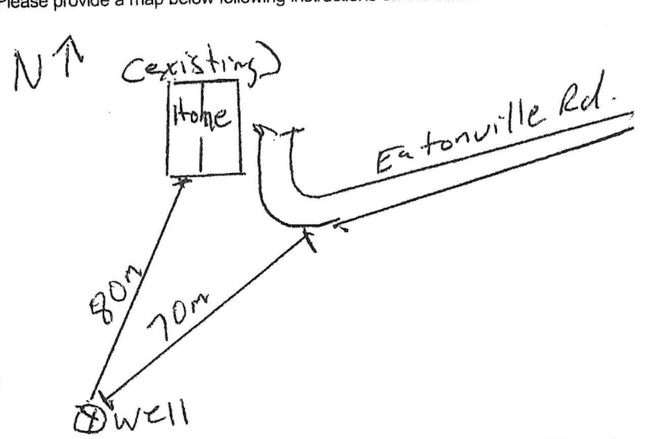
Well production (l/min / GPM): 90+

Disinfected? [x] Yes [ ] No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level	2.1		4.2	
1		1		
2	DUG	2	WELL	
3		3		
4	RESERVE			
5	8865	5	GALS	
10		10		
15	RECOVERY			
20	20+	20	GPM	
25		25		
30	4.2	30		
40		40		
50		50		
60		60	3.3	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor: Franks Drilling & Blasting Ltd.
Well Contractor's Licence No.: 07811

Business Address (Street Number/Name): Box 100
Municipality: Newburgh

Province: Ontario
Postal Code: K0K2S0
Business E-mail Address: info@fdbltd.com

Bus. Telephone No. *(inc. area code)*: 6137821718
Name of Well Technician (Last Name, First Name): Page, Ben

Well Technician's Licence No.: 2603
Signature of Technician and/or Contractor:
Date Submitted: 2015/01/12

Well owner's information package delivered: [x] Yes [ ] No
Date Package Delivered: 2014/12/09
Date Work Completed: 2014/12/09

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Ontario

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

(11) 5303961 MUNICIP. 53001 COR. CON 02

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON	BLOCK, TRACT, SURVEY, ETC	LOT
Prince Edward	Ameliasburgh	2		077

[redacted] R.R.1 Belleville

DATE COMPLETED DAY 09 MO 05 YR 80

UTM ZONE | RC | ELEVATION | RC | BASIN CODE
18 | 4845540 | 4 | 0300 | 4 | 24

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
	Clay			0	44
	Gravel			44	45
	Limestone			45	78

(31) 0044 05 | 0045 11 | 0078 15

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0045	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
44 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0045
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

(61) PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER ETC.)

(71) PUMPING TEST

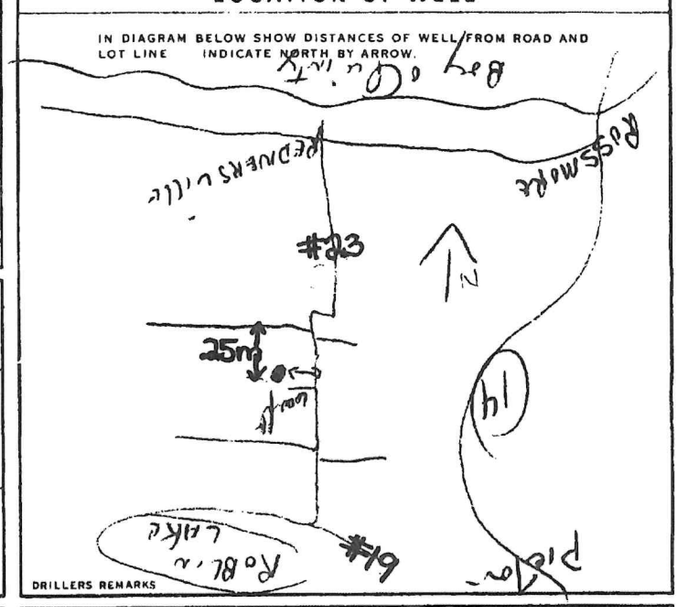
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER
PUMPING RATE: 0002 GPM
DURATION OF PUMPING: 01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☐ PUMPING 2 ☒ RECOVERY)	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
006 FEET	074 FEET		047 FEET	040 FEET	036 FEET	033 FEET

IF FLOWING, GIVE RATE: GPM
PUMP INTAKE SET AT: FEET
WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP
RECOMMENDED PUMP SETTING: 075 FEET
RECOMMENDED PUMPING RATE: 0002 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS

FINAL STATUS OF WELL (84): 1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED POOR QUALITY 7 ☐ UNFINISHED

WATER USE (59-66): 01 — 1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING ☐ OTHER 9 ☐ NOT USED

METHOD OF DRILLING (57): 1 — 1 ☐ CABLE TOOL 2 ☒ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: Florn Donaldson — LICENCE NUMBER: 1831
ADDRESS: B.R. 5 Cloverleaf Dr. Belleville
NAME OF DRILLER OR BORER — LICENCE NUMBER
SIGNATURE OF CONTRACTOR: Florn Donaldson
SUBMISSION DATE: DAY 27 MO 5 YR 80

OFFICE USE ONLY

DATA SOURCE (58): 1 — CONTRACTOR (59-62): 1831 — DATE RECEIVED (63-68): 290580 — BD
DATE OF INSPECTION — INSPECTOR: P|P
REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506-4-77

31C 34

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WATER WELL RECORD

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2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

(11) 5303986 MUNICIP 53001 CON. CON 02

COUNTY OR DISTRICT: PRINCE EDWARD | TOWNSHIP, BOROUGH, CITY TOWN, VILLAGE: AMELIASBURG | CON., BLOCK, TRACT, SURVEY ETC: 2 | LOT: 07

[redacted] BELLEVILLE ONT.

DATE COMPLETED: DAY 24 MO 06 YR 80

UTM ZONE | EASTING 18 84740 | RC 4 | NORTHING 02 80 | RC 4 | BASIN CODE 24

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BROWN	TOP SOIL			0	3
GREY	CLAY			3	20
GREY	CLAY	GRAVEL		20	30
GREY	GRAVEL			30	32

(31) 0003602 | 0020295 | 0030205 | 0032241

32

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0032	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188 W	0	0032.
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

(61) PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
10-13	14-17	
18-21	22-25	
26-29	30-33	

(71) PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE GPM	DURATION OF PUMPING HOURS	MINS
1 ☐ PUMP 2 ☒ BAILER	0006	02	00

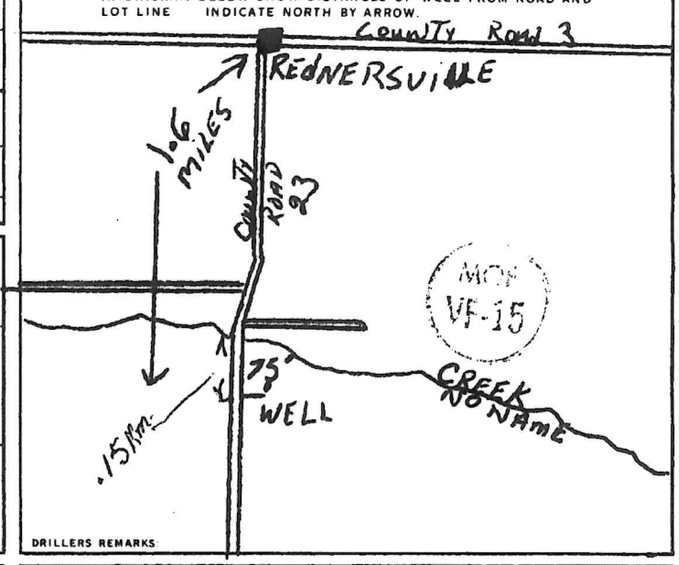
STATIC LEVEL FEET	WATER LEVEL END OF PUMPING FEET	WATER LEVELS DURING 1 ☐ PUMPING 2 ☐ RECOVERY	15 MINUTES FEET	30 MINUTES FEET	45 MINUTES FEET	60 MINUTES FEET
010	028					

IF FLOWING, GIVE RATE GPM	PUMP INTAKE SET AT FEET	WATER AT END OF TEST 1 ☒ CLEAR 2 ☐ CLOUDY
—	29'	

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING FEET	RECOMMENDED PUMPING RATE GPM
☐ SHALLOW ☒ DEEP		0005

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL (94)	1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED POOR QUALITY 7 ☐ UNFINISHED
WATER USE (55-56) 01	1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED
METHOD OF DRILLING (57) 1	1 ☒ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: MANSE DONALDSON WELL DRILLING | LICENCE NUMBER: 1805

ADDRESS: 274 MAIN ST FOXBORO ONT.

NAME OF DRILLER OR BORER: BRUCE DONALDSON | LICENCE NUMBER: 1846

SIGNATURE OF CONTRACTOR: Ken Donaldson | SUBMISSION DATE: DAY 24 NO. 6 YR 80

OFFICE USE ONLY

DATA SOURCE (58): 1 | CONTRACTOR (59-62): 1805 | DATE RECEIVED (63-68): 070780

DATE OF INSPECTION | INSPECTOR: K

REMARKS:

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ministry of Environment and Energy
Ontario

The Ontario Water Resources Act
WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 — 5306439

Municipality 53001 — Con. CON — 02

County or District [redacted]

Township/Borough/City/Town/Village: AMELIASBURG

Con block tract survey, etc.: 2

Lot: 11

Address: RR1 BELLEVILLE K8N 4Z1

Date completed: 24 day 02 month 98 year

Northing — RC — Elevation — RC — Basin Code — i — ii — iii — iv

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth – feet From	Depth – feet To
BRWN	TOP SOIL		SOFT	0	2
BROWN	CLAY	SAND STONES	SOFT	2	5
GREY	CLAY		EXTREMELY HARD	5	50
GREY	HARD LIMESTONE		HARD.	50	109

41 WATER RECORD

Water found at – feet	Kind of water
85	1 ☒ Fresh 2 ☐ Salty — 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty — 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty — 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty — 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty — 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth – feet From	Depth – feet To
8	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		0	21
6 1/4	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	188	0	28
6 1/8	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		28	109

SCREEN

Sizes of opening (Slot No.)	Diameter inches	Length feet

Material and type: — Depth at top of screen feet

61 PLUGGING & SEALING RECORD

☐ Annular space ☐ Abandonment

Depth set at – feet From	Depth set at – feet To	Material and type (Cement grout, bentonite, etc.)
21	0	GROUT CLAY SLURRY

71 PUMPING TEST

Pumping test method: 1 ☐ Pump 2 ☒ Bailer

Pumping rate: 2 GPM — Duration of pumping: 1 Hours 20 Mins

Static level: 8 feet — Water level end of pumping: 31 feet

Water levels during: 1 ☐ Pumping 2 ☒ Recovery

15 minutes	30 minutes	45 minutes	60 minutes
87 feet	62 feet	48 feet	31 feet

If flowing give rate: GPM — Pump intake set at: 100 feet — Water at end of test: ☐ Clear ☒ Cloudy

Recommended pump type: ☐ Shallow ☒ Deep — Recommended pump setting: 100 feet — Recommended pump rate: 2 GPM

FINAL STATUS OF WELL

1 ☒ Water supply; 2 ☐ Observation well; 3 ☐ Test hole; 4 ☐ Recharge well; 5 ☐ Abandoned, insufficient supply; 6 ☐ Abandoned, poor quality; 7 ☐ Abandoned (Other); 8 ☐ Dewatering; 9 ☐ Unfinished; 10 ☐ Replacement well

WATER USE

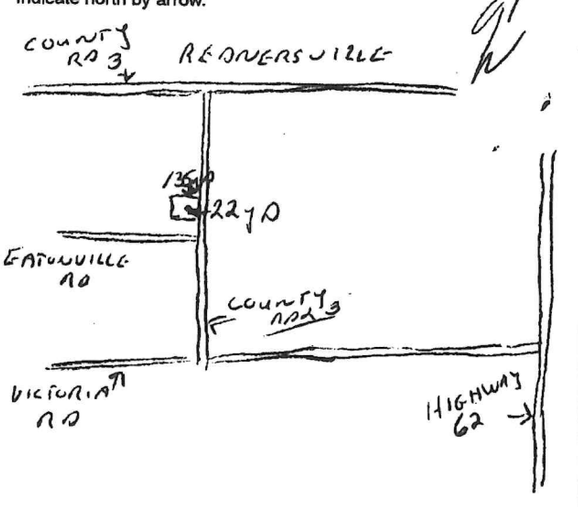
1 ☒ Domestic; 2 ☐ Stock; 3 ☐ Irrigation; 4 ☐ Industrial; 5 ☐ Commercial; 6 ☐ Municipal; 7 ☐ Public supply; 8 ☐ Cooling & air conditioning; 9 ☐ Not used; 10 ☐ Other

METHOD OF CONSTRUCTION

1 ☒ Cable tool; 2 ☐ Rotary (conventional); 3 ☐ Rotary (reverse); 4 ☐ Rotary (air); 5 ☐ Air percussion; 6 ☐ Boring; 7 ☐ Diamond; 8 ☐ Jetting; 9 ☐ Driving; 10 ☐ Digging; 11 ☐ Other

LOCATION OF WELL

In diagram below show distances of well from road and lot line. Indicate north by arrow.



167550

Name of Well Contractor: PRINCE EDWARD WELL DRILLERS — Well Contractor's Licence No.: 6005

Address: RR3 PICTON K0K 2T0

Name of Well Technician: ROSS BRONSON — Well Technician's Licence No.: 621

Signature of Technician/Contractor: Ross Bronson — Submission date: day 24 mo 02 yr 98

MINISTRY USE ONLY

Data source — Contractor: 6005 — Date received: APR 17 1998

Date of inspection — Inspector

Remarks

2 - MINISTRY OF ENVIRONMENT & ENERGY COPY

Ontario **Ministry of the Environment**

The Ontario Water Resources Act
WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 **5306773** Municipality 53.001 Con CON 02

County or District: Prince Edward
[redacted]
Township/Borough/City/Town/Village: City of Belleville Prince Edward
Con / block / tract / survey, etc.: 2
Lot: PLT 1
Address: RR#7 Belleville
Date completed: 26 day 02 month 01 year

21 Northing RC Elevation RC Basin Code

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet From	Depth - feet To
Black	Topsoil			0	1'
Brown	Clay & Stones			1'	15'
Grey	Clay & Stones			15'	22'6"
Grey	Limestone			22'6"	85'
		- WELL WATER IS NOT SEDIMENT FREE			

31

32

41 WATER RECORD

Water found at - feet	Kind of water
27	1 ☐ Fresh 3 ☒ Sulphur 14 ☐ Minerals ☐ Gas
82	1 ☐ Fresh 3 ☒ Sulphur 19 ☐ Minerals ☐ Gas
	1 ☐ Fresh 3 ☐ Sulphur 24 2 ☐ Salty 6 ☐ Gas
	1 ☐ Fresh 3 ☐ Sulphur 29 2 ☐ Salty 6 ☐ Gas
	1 ☐ Fresh 3 ☐ Sulphur 34 2 ☐ Salty 6 ☐ Gas

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth - feet From	Depth - feet To
6¼"	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	.188	30" above ground	22'6"
6"	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		22'6"	85'
	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			

SCREEN

Sizes of opening (Slot No.)	Diameter inches	Length feet
Material and type	Depth at top of screen feet	

61 PLUGGING & SEALING RECORD

☒ Annular space ☐ Abandonment

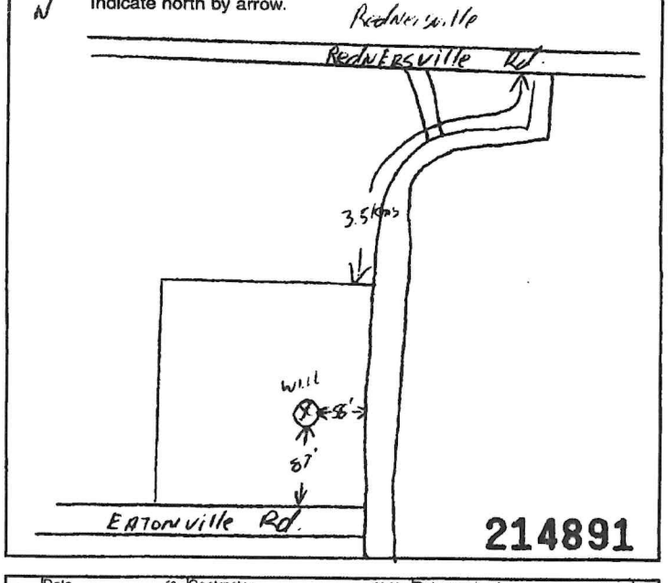
Depth set at - feet From	Depth set at - feet To	Material and type (Cement grout, bentonite, etc.)
0	10	CONCRETE

71 PUMPING TEST

Pumping test method: 1 ☐ Pump 2 ☒ Bailer
Pumping rate: .75 GPM
Duration of pumping: 1 Hours ..... Mins
Static level: 7.7' feet
Water level end of pumping: 84.1 feet
Water levels during: 1 ☐ Pumping 2 ☒ Recovery
15 minutes: 74.6 feet
30 minutes: 67.8 feet
45 minutes: 62.1 feet
60 minutes: 56.8 feet
If flowing give rate: GPM
Pump intake set at: feet
Water at end of test: ☐ Clear ☒ Cloudy
Recommended pump type: ☐ Shallow ☒ Deep
Recommended pump setting: 82' feet
Recommended pump rate: Est. — GPM

LOCATION OF WELL

In diagram below show distances of well from road and lot line. Indicate north by arrow.



214891

FINAL STATUS OF WELL

1 ☒ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well 5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering 9 ☐ Unfinished 10 ☐ Replacement well

WATER USE

1 ☒ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial 5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning 9 ☐ Not use 10 ☐ Other .....

METHOD OF CONSTRUCTION

1 ☒ Cable tool 2 ☐ Rotary (conventional) 3 ☐ Rotary (reverse) 4 ☐ Rotary (air) 5 ☐ Air percussion 6 ☐ Boring 7 ☐ Diamond 8 ☐ Jetting 9 ☐ Driving 10 ☐ Digging 11 ☐ Other .....

Name of Well Contractor	Well Contractor's Licence No.
ALEXANDER WELL DRILLING	6663
Address: RR#2 Carrying Place	
Name of Well Technician: DAVE ALEXANDER	Well Technician's Licence No.: T-0532
Signature of Technician/Contractor	Submission date: day 27 mo 02 yr 01

MINISTRY USE ONLY

Data source 58 | Contractor 6663 59-62 | Date received MAR 28 2001 63-68 69
Date of inspection | Inspector
Remarks

CSS.ES1

2 - MINISTRY OF THE ENVIRONMENT COPY

0506 (11/98) Front Form 9

Ontario

Ministry of the Environment and Climate Change

Measurements recorded in: ☐ Metric ☒ Imperial

Well Tag No. *(Place Sticker and/or Print Below)*

NO TAG.

Well Record

Regulation 903 Ontario Water Resources Act

Page _____ of _____

[redacted]

Address of Well Location (Street Number/Name)	Township	Lot	Concession
40 Eatonville Road	Ameliasburgh	7	Front Half 2.

County/District/Municipality	City/Town/Village	Province	Postal Code
Prince Edward.		Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	18	30 5 10 1	4858 4682		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
	Well	Decommission			

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
15	9	Pea Stone.	2 yds.
9	8	Bentonite	½ yd
8	0	Existing Clay.	3 yds.

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☒ Digging
☐ Air percussion
☐ Other, *specify* _____

Well Use

☐ Public ☐ Commercial ☐ Not used
☒ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, *specify* _____

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
36	Concrete	4	0	15'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☒ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify* _____
☐ Other, *specify* _____

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, *specify*
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, *specify*
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, *specify*

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, *specify* _____

If pumping discontinued, give reason: _____

Pump intake set at *(m/ft)* _____

Pumping rate *(l/min / GPM)* _____

Duration of pumping _____ hrs + _____ min

Final water level end of pumping *(m/ft)* _____

If flowing give rate *(l/min / GPM)* _____

Recommended pump depth *(m/ft)* _____

Recommended pump rate *(l/min / GPM)* _____

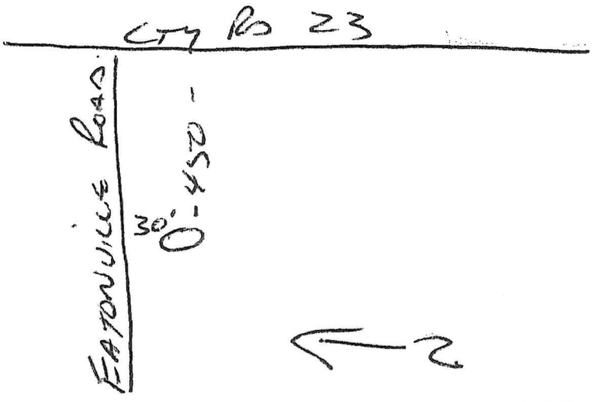
Well production *(l/min / GPM)* _____

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments: _____

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
QLogic Water Solutions	6524

Business Address (Street Number/Name)	Municipality
352 Marsh Rd RR#7	Belleville

Province	Postal Code	Business E-mail Address
Ont	K8N4Z7	

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)
6139227474	Quigley, Kim

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
1850		2015 06 18

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No		2015 06 13

Ministry Use Only

Audit No: Z 209149

JUN 23 2015

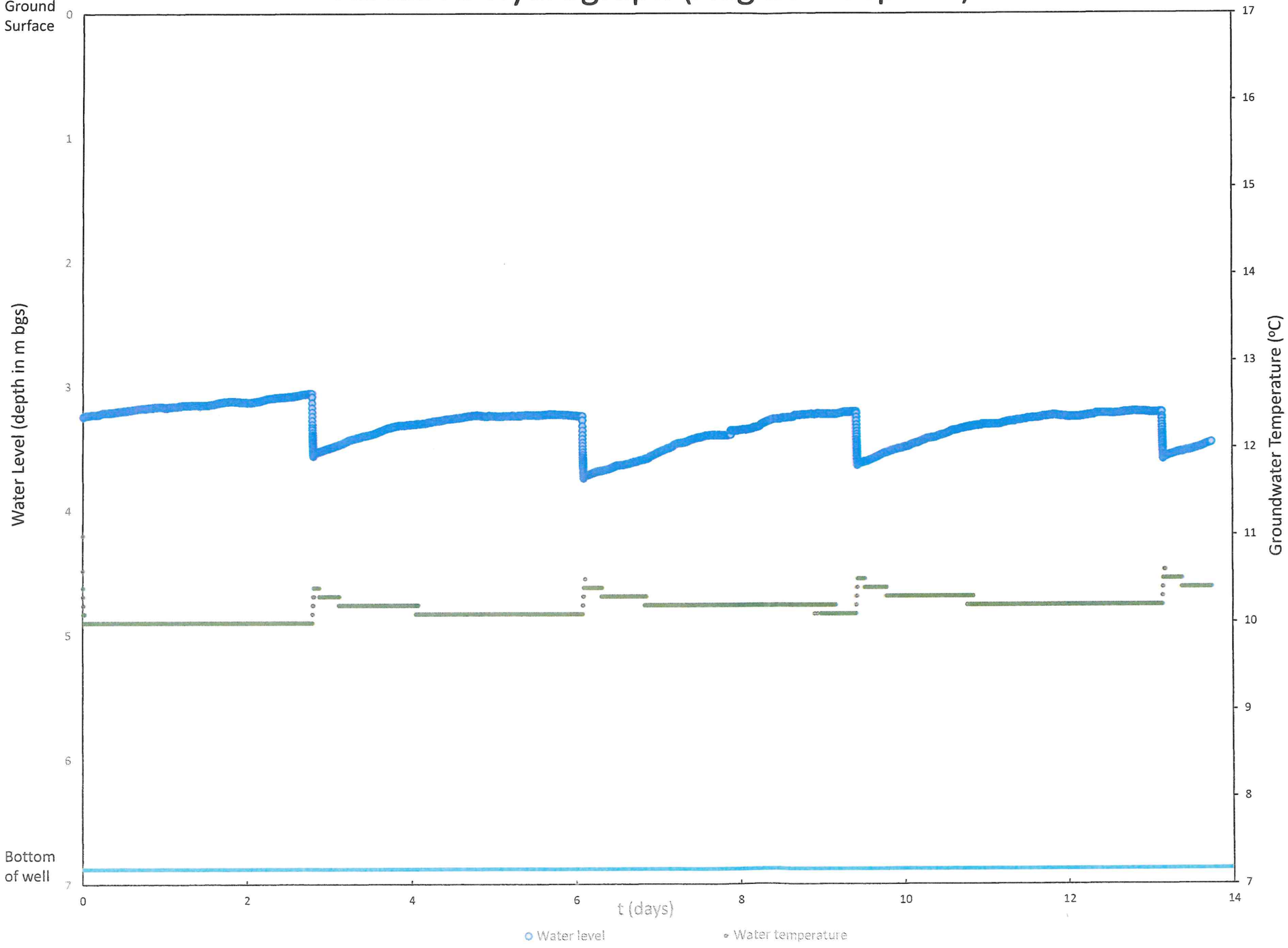
Received

506E (2014/11)

Ministry's Copy

Appendix B: Hydrograph

A143975 Hydrograph (Aug 28 – Sept 11)

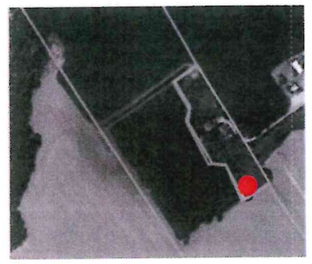


GREER GALLOWAY
CONSULTING ENGINEERS
PETERBOROUGH
BELLEVILLE
KINGSTON
1620 WALLBRIDGE LOYALIST ROAD
BELLEVILLE, ONTARIO, K8N 4Z5
PHONE: 613-966-3068
FAX: 613-966-3087

NOTES:

1) Testing carried out between August 28, 2025 and September 11, 2025.
2) On-site pressure and temperature data collected using a Solinst Model 3001 datalogger transducer.
3) Water level data is not corrected for fluctuations in barometric pressure.

Key Plan:



PROJECT 25-6112A:

SCOPED HYDROGEOLOGY STUDY
82 EATONVILLE ROAD
AMELIASBURGH, ON

HYDROGRAPH (A143975)
AUG 18, 2025 – SEPT 11, 2025

Appendix C: Laboratory Certificate of Analysis

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured. Proudly Canadian.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: Wilson

REPORT No: 25-026326 - Rev. 0

Report To:
Greer Galloway, a division of Jp2g Consultants Inc.
1620 Wallbridge-Loyalist Road, RR #5
Belleville, ON K8N 4Z5

CADUCEON Environmental Laboratories
285 Dalton Ave
Kingston, ON K7K 6Z1

Attention: Kirby Magee-Dittburner

DATE RECEIVED: 2025-Aug-29
DATE REPORTED: 2025-Sep-08
SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: Wilson
P.O. NUMBER: PO#25-6112A

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	1	OTTAWA	PCURIEL	2025-Sep-03	A-IC-01	SM 4110B
Colour (Liquid)	1	OTTAWA	AGRAF	2025-Sep-02	A-COL-01	SM 2120C
Cond/pH/Alk Auto (Liquid)	1	OTTAWA	SBOUDREAU	2025-Sep-03	COND-02/PH-02/ALK-02	SM 2510B/4500H/2320B
Coliforms - DC Media (Liquid)	1	KINGSTON	BBURTCH	2025-Aug-29	ECTC-001	MECP E3407
DOC (Liquid)	1	OTTAWA	LMACGREGOR	2025-Sep-03	C-OC-01	EPA 415.2
ICP/MS (Liquid)	1	OTTAWA	GFENTON	2025-Sep-03	D-ICPMS-01	EPA 200.8
ICP/OES (Liquid)	1	OTTAWA	SGORMAN	2025-Sep-03	D-ICP-01	SM 3120B
Sulphide (Liquid)	1	KINGSTON	MWILSON	2025-Sep-04	H2S-001	SM 4500-S2
TP & TKN (Liquid)	1	KINGSTON	YLIEN	2025-Sep-04	TPTKN-001	MECP E3516.2
Turbidity (Liquid)	1	OTTAWA	LMACGREGOR	2025-Sep-03	A-TURB-01	SM 2130B

R.L. = Reporting Limit
NC = Not Calculated
Test methods may be modified from specified reference method unless indicated by an *

Michelle Dubien
Data Specialist

Parameter	Units	R.L.	Limits	Client I.D. / Sample I.D. / Date Collected / DWG	TW / 25-026326-1 / 2025-Aug-28 / -
Total Coliform (DC Media)	CFU/100mL	1	0	MAC	1
E coli (DC Media)	CFU/100mL	1	0	MAC	0
Background (DC Media)	CFU/100mL	1			>200
Alkalinity(CaCO3) to pH4.5	mg/L	5	500	OG	295
Conductivity @25°C	uS/cm	1			761
pH @25°C	pH units	-	8.5	OG	7.99
Colour	TCU	2	5	AO	<2
Turbidity	NTU	0.1	5	AO	0.7
Fluoride	mg/L	0.1	1.5	MAC	0.1
Chloride	mg/L	0.5	250	AO	23.4
Nitrate (N)	mg/L	0.05	10.0	MAC	<0.05
Nitrite (N)	mg/L	0.05	1.0	MAC	<0.05
Sulphate	mg/L	1	500	AO	83
Phosphorus (Total)	mg/L	0.01			0.02
Total Kjeldahl Nitrogen	mg/L	0.1			0.2
Dissolved Organic Carbon	mg/L	0.8	5	AO	4.1
Sulphide	mg/L	0.01	0.05	AO	<0.01
Hardness (as CaCO3)	mg/L as CaCO3	0.02	100	OG	367
Calcium	mg/L	0.02			77.0
Iron	mg/L	0.005	0.3	AO	0.008
Magnesium	mg/L	0.02			42.6

M. Dubien

Michelle Dubien
Data Specialist

Parameter	Units	R.L.	Limits	Client I.D. / DWG	TW
				Sample I.D.	25-026326-1
				Date Collected	2025-Aug-28
Manganese	mg/L	0.001	0.05	AO	0.002
Sodium	mg/L	0.2	200, 20, 20	AO, WL, MAC	14.6
Lead	mg/L	0.00002	0.010	MAC	0.00002

DWG - Drinking Water Guidelines
ODWS - Ontario Drinking Water Standards
AO - Aesthetic Objectives
IMAC - Interim Maximum Acceptable Concentration
MAC - Maximum Acceptable Concentration
ODWO - D-5-5 Objective
OG - Operational Guidelines
WL - Warning Level - Sodium Restricted Diets

Summary of Exceedances		
Maximum Acceptable Concentration		
TW	**Found Value**	**Limit**
Total Coliform (DC Media)	1	0
Operational Guidelines		
TW	**Found Value**	**Limit**
Hardness (as CaCO3)	367	100

M. Dubien

Michelle Dubien
Data Specialist