August 4, 2025

PH4401-LET.01-REV.02

Cash for Trash Canada
7628 Flewellyn Road
Ottawa, Ontario
K2S 1B6

Attention: Charbel Bouroufail

Subject: **Hydrogeological Report and Terrain Analysis**
Proposed Commercial Development
7628 Flewellyn Road
Ottawa, Ontario

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INTRODUCTION

Further to your request, Paterson has conducted a Hydrogeological Report and Terrain Analysis in support of a Zoning By-Law Amendment to unify the dual-zoning of the development to Rural General Industrial Zone to formalize the development located at 7628 Flewellyn Road in Ottawa, Ontario.

The purpose of this work has been to determine the suitability of the water supply aquifer underlying the site to service the expansion of the proposed commercial development.

The subject site consists of a 20.22 ha lot and is currently occupied by a vehicle salvage yard which includes several structures, a gravel surfaced parking lot and stockpiles of scrap metals. The southern portion of the site is generally vacant. The ground surface across the site generally slopes downward toward the south while the local groundwater flow is likely towards the west, towards the adjacent quarry with regional shallow groundwater flow to the south.

The subject site is bordered by residential dwellings and Flewellyn Road to the north, vacant land to the east, and an existing quarry and associated access roads and fill storage areas to the south and west. The northwest portion of the subject site is currently zoned as RG1(21r) which corresponds to Rural General Industrial Zone with a minimum lot area of 8,000 m^2 and is located in Ward 21. The remainder of the subject site is identified as RU which refers to Rural Countryside Zone.

A Hydrogeological pre-consultation was completed with a City of Ottawa Hydrogeologist on July 17, 2023. The City Hydrogeologist suggested that additional sampling be completed during the 8-hour pumping test for Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons (PHCs) in addition to the standard Subdivision Package suite of parameters, trace metals and Volatile Organic Compounds (VOCs) required by the City of Ottawa Hydrogeological and Terrain Analysis Guidelines (HTAG).

It is understood that two Environmental Activity and Sector Registrations are active at the subject site in accordance with the site usage. Registration Number R-007-467538169, filed November 2, 2016 indicates that the site is registered for the use, operation, enlargement and extension of an end-of-life vehicle waste disposal site. As an active end-of-life vehicle waste disposal site, fluids defined in O. Reg. 85/16 and Reg. 347, such as anti-freeze and fuel, are to be removed over an impermeable surface which has a spill containment system as defined in O. Reg. 85/16.

Further, R-004-71121872151 indicates that the subject site is registered for the use, operation, alteration, engagement or extension or replacement of a waste management system serving the Province of Ontario.

The activities associated with the current site usage as an end-of-life vehicle waste disposal site are provincially regulated and managed by the province of Ontario. Expansion and modifications to the subject site will not result in additional activities detrimental to the underlying aquifer. It is recommended that the client adhere to the current best management practices.

In accordance with Ontario End-of-Life (ELV) Activity Requirements, a Spill Prevention and Management Plan should be developed in support of the Site Plan application and include at a minimum:

- ❑ Procedures and materials to be used for spill clean-up.
- ❑ The location of all floor drains.
- ❑ The location of materials to be used to seal drains in the event of a spill.
- ❑ Names of persons to be notified in the event of a spill.
- ❑ Schedule for inspecting storage areas, containers and spill containment systems.

DESCRIPTION OF SUBJECT SITE

The subject site is an approximately 20.22 ha lot and is currently occupied by a vehicle salvage yard which includes a one-storey office building, a gravel surfaced parking lot, a weigh scale, an automobile fluid drainage station with various sheds, temporary storage buildings and stockpiles of automobiles and scrap metal product.

The re-zoning application is for the proposed expansion of the commercial development. The subject site will be further developed with new buildings, access lanes, parking areas and designated stockpile areas. Please refer to Figure-1 Key Plan and McRobie - CFT Site Plan – Zoning Amendment Plan, attached, for the proposed site location and site layout.

The subject site is currently serviced by an onsite sewage system and a private drilled well. A new sewage system is proposed to be located within the northeast corner of the site to replace the existing sewage system. Paterson has completed a septic flow calculation and the calculation resulted in a total daily water demand calculation of less than 7,500 L/day. A total daily water demand of 10,000 L/day will be conservatively used to account for future expansions. The calculations are based on Part 8 of the Ontario Building Code (OBC) and are considered to be conservative.

A licensed well contractor (Air Rock Drilling) was retained to install a new drilled well on site on May 18, 2023. The new drilled well, hereby referred to as TW1, was tested in support of the proposed commercial development and was able to provide a sufficient volume of groundwater for the proposed development. Groundwater samples have been collected from the onsite well and submitted to an accredited laboratory for comprehensive testing of bacteriological, chemical and physical water quality parameters consistent with the standard “Subdivision Supply” suite of parameters as well as trace metals, PAHs, PHCs and VOCs.

The suitability of the aquifer to supply the subject site was assessed using the methodology provided in City of Ottawa HTAG.

MISSISSIPPI-RIDEAU SOURCE PROTECTION PLAN

The Mississippi-Rideau Source Protection Plan (MRSPP) provides guidance as to which policies apply to a given property, municipality or specific activity and if there are specific designations that apply to the area. The subject site and surrounding areas have been designated as a Highly Vulnerable Aquifer (HVA), and Wellhead Protection Area D (score of 2) within the MRSPP, and are identified as two of four groundwater related vulnerable areas identified within the Clean Water Act (2006). The four vulnerable areas consist of SGRA, HVA, IPZ and wellhead protection area (WHPA).

Based upon the designation of an HVA and WHPA, the MRSPP provides a list of activities that are prohibited, managed or encouraged to change dependent upon the vulnerable area type. The subject site is mapped to be in WHPA D (Source Protection Atlas), however has a score of 2 (MRSPP). There is no prohibition of land uses on the subject site based upon its existing usage.

Therefore, there are no related requirements for an HVA or WHPA D (score of 2) with a score of less than 8 at this location.

FIELDWORK PROGRAM

Well Installation

As a means to demonstrate the adequacy of the aquifer underlying the subject lands, with respect to water quality and quantity, a new drilled well (Tag # A378991) was constructed by Air Rock Drilling (Air Rock) on May 18, 2023. The MECP Water Well Record (WWR) indicates that the well extends to approximately 36.5 m below ground surface (bgs). The 152 mm steel casing is recorded to extend to 12.8 m bgs, with a 0.61 m stick up. Limestone bedrock was encountered at the ground surface. The onsite WWR demonstrates that the well was installed according to the City of Ottawa HTAG. A copy of the WWR can be found attached.

Well Testing

As a means to evaluate the water supply aquifer intercepted by the well, the well was subjected to an 8-hour constant rate pumping test. The pumping test was conducted on June 1, 2023 under the full-time supervision of Paterson personnel. Prior to the pumping test the well was disinfected as per the MECP Disinfection Instruction Sheet (attached), and a data-logger was installed to monitor the background groundwater levels.

A submersible pump was rented from Air Rock for the pumping test. A licensed water well technician (Air Rock) completed the necessary plumbing related activities. A discharge hose assembly with a gate valve was connected to the rented pump. The discharge line was placed at a sufficient distance to ensure that the discharge water was being directed away from the well and any septic systems in the area. Upon completion of the test, the pump was removed and the well was disinfected by Air Rock.

The pumping test was carried out at a pumping rate of 38 L/min for a duration of 8 hours. During the pumping test, the pumping rate was periodically measured using the timed volume correlation method. The pump rate was maintained within 5% of the selected pump rate. The static water level was recorded manually and an electric datalogger (VanEssen TD-Diver) was installed in the test well prior to the start of the pumping test. The selected rate of 38 L/min provides approximately 1.8 times the maximum total daily design volume for the septic system during the 8-hour pumping test. It should be noted that the actual daily water usage is typically much lower than the theoretical OBC values. The rate was determined to be representative of a flow rate which would be in excess of what the development would require.

The data logger recorded water levels at 30 second intervals. In addition, manual water level readings were taken at periodic intervals during the test.

Recovery data was collected from the well following the completion of the pumping. The well was noted to have achieved 95% recovery approximately 3 minutes after the completion of pumping.

Groundwater samples were collected 4 hours and 8 hours after the start of pumping. Prior to collection of the groundwater samples, the free chlorine residual was verified as non-detectable. The water samples were submitted for comprehensive testing of bacteriological, chemical, and physical water quality parameters consistent with the standard “Subdivision Supply” suite of parameters plus trace metals and VOCs. PHCs were measured at the 8-hour mark.

All samples were collected unfiltered and unchlorinated and were placed directly into clean bottles supplied by the analytical laboratory. Samples were placed immediately into a cooler with ice and were transported directly to Eurofins Environmental Testing Canada Inc. laboratory in Ottawa. All samples were received by the laboratory within 24 hours of collection.

A series of field tests of the pumped water were carried out at the well head during the 8-hour pumping test. The parameters tested at the well head included: pH, total dissolved solids, conductivity, turbidity, true colour, and temperature.

Aquifer Analysis

Water Quantity

Pumping test data from the pumping test performed at TW1 was analyzed using AQTESOLV Pro Version 4.5 aquifer analysis software package by HydroSOLVE Inc. Drawdown data was measured using an electronic water level tape and an electronic datalogger unit.

Table 1: SUMMARY OF WATER SUPPLY AQUIFER CHARACTERISTICS OF TW1

AQUIFER PARAMETER	RESULT OF ANALYSIS
Transmissivity (m^2/day)	914
Pumping Rate (L/min)	38
Pre-test Static Water Level (m TOC)	12.6
Post-test Water Level (m TOC)	12.7
Available Drawdown (m)	24.1
%Drawdown During Pump Test (%)	0.6
Specific Capacity (L/min/m drawdown)	253

The drawdown data was analyzed using the Theis and Cooper Jacob methods of analysis. Aquifer transmissivity is estimated to be 914 m^2/day. Refer to the Theis and Cooper Jacob methods of analysis data sheets attached to this report.

The pumping test results show that TW1 has a high yield to support the water demands that may be required. Overall maximum drawdown, at a constant pumping rate for a period of 8 hours, was approximately 0.15 m (0.6% of the available drawdown). 100% recovery was achieved approximately 3 minutes after the end of pumping.

The total volume of water pumped during the 8-hour pumping event was approximately 18,240 L. This is approximately 1.8 times the maximum total daily design volume of water required to support the proposed commercial development expansion (maximum 10,000 L/day). It should be noted that the actual daily water usage is typically much lower than the theoretical OBC values.

The suitability of the aquifer to supply the proposed site was assessed using the methodology provided in the City of Ottawa HTAG.

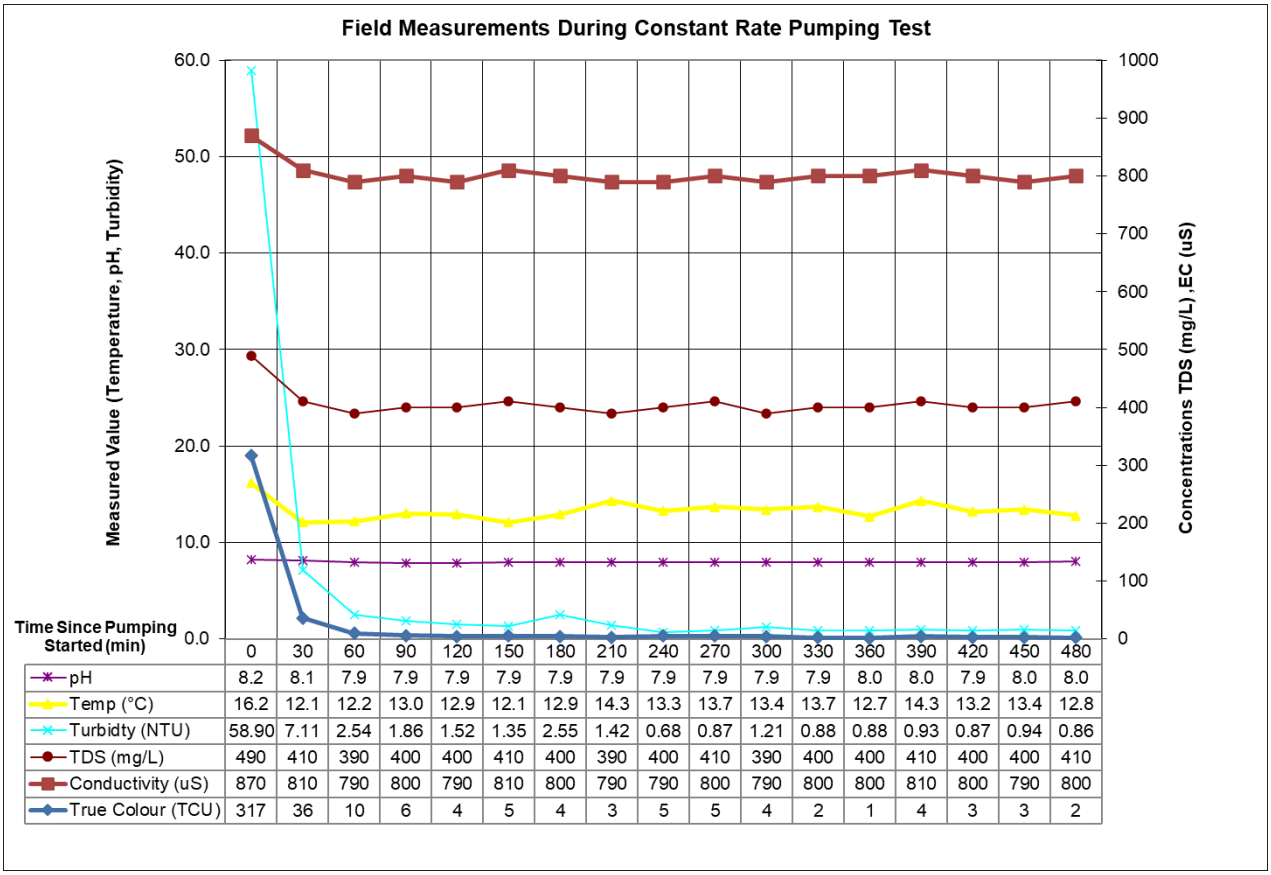
Based on the information summarized in Table 1, it is readily apparent that the water supply well has intercepted an adequately strong water supply aquifer which has sufficient quantity to service the proposed development.

Given the analyses presented and summarized above, it is our opinion that there is an adequate supply of water to support the proposed Re-Zoning Application. Available WWRs of the neighbouring properties on the MECP Well Record mapping website indicated that the wells were screened in limestone bedrock.

Water Quality

Field Data

Turbidity, electrical conductivity, total dissolved solids (TDS), pH, true colour, and temperature were measured at the wellhead during the pumping test performed on TW1. The measurements and time intervals for each of these parameters are summarized on the graphical representation below. In addition, a HACH Pocket Colorimeter II chlorine reader was used to measure the free chlorine residual level. No chlorine residual was detected in the discharge water prior to the collection of the water samples.



Time Since Pumping Started (min)	0	30	60	90	120	150	180	210	240	270	300	330	360	390	420	450	480
pH	8.2	8.1	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.0	8.0	7.9	8.0	8.0
Temp (°C)	16.2	12.1	12.2	13.0	12.9	12.1	12.9	14.3	13.3	13.7	13.4	13.7	12.7	14.3	13.2	13.4	12.8
Turbidty (NTU)	58.90	7.11	2.54	1.86	1.52	1.35	2.55	1.42	0.68	0.87	1.21	0.88	0.88	0.93	0.87	0.94	0.86
TDS (mg/L)	490	410	390	400	400	410	400	390	400	410	390	400	400	410	400	400	410
Conductivity (uS)	870	810	790	800	790	810	800	790	790	800	790	800	800	810	800	790	800
True Colour (TCU)	317	36	10	6	4	5	4	3	5	5	4	2	1	4	3	3	2

Laboratory Data

The Subdivision Package suite of parameters as well as trace metals, PAHs, VOCs, and PHCs laboratory water quality results obtained from the groundwater sample collected from the pumping test of TW1 are provided in Table 2a – 2d below. The laboratory analyses reports can be found attached.

TABLE 2a: GROUNDWATER MICROBIOLOGY & GENERAL GEOCHEMISTRY					
PARAMETER	UNITS	ODWS		TW1	
		LIMIT	TYPE	GW1 (4 hr) 6/1/2022	GW2 (8 hr) 6/1/2022
MICROBIOLOGICAL					
Escherichia Coli (E.Coli)	ct/100mL	0	MAC	0	0
Total Coliforms	ct/100mL	0	MAC	0	0
GENERAL CHEMICAL - HEALTH RELATED					
Fluoride (F)	mg/L	1.5	MAC	0.68	0.72
Ammonia (N-NH_3)	mg/L	-	-	0.21	0.21
Nitrite (N-NO_2)	mg/L	1	MAC	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	10	MAC	<0.10	<0.10
Total Kjeldahl Nitrogen	mg/L	-	-	0.31	0.29
Turbidity (Field)	NTU	1.0 (5.0)	MAC/AO	0.68	0.86
Turbidity (Laboratory)	NTU	1.0 (5.0)	MAC/AO	1.0	0.4
GENERAL CHEMICAL - AESTHETIC RELATED					
Alkalinity (as CaCO3)	mg/L	30-500	OG	278	276
Chloride (Cl)	mg/L	250	AO	69	72
Colour (Apparent)	TCU	5	AO	5	5
Colour (Field - True)	TCU	5	AO	5	2
Conductivity	uS/cm	-	-	777	769
Dissolved Organic Carbon	mg/L	5	AO	1.80	1.70
Hardness (as CaCO3)	mg/L	100	OG	254	261
Ion Balance	unitless	-	-	0.99	0.99
pH	unitless	6.5-8.5	AO	8.06	8.1
Phenols	mg/L	-	-	<0.001	<0.001
Sulphate (SO_4)	mg/L	500	AO	53	55
Sulphide (S_2^-)	mg/L	0.05	AO	<0.01	<0.01
Tannin & Lignin	mg/L	-	-	<0.5	<0.5
Total Dissolved Solids	mg/L	500	AO	505	500

1. ODWS identifies the following types of parameters
   MAC = Maximum Allowable Concentration
   AO = Aesthetic Objective
   OG = Operational Guideline
2. Shaded Concentration Indicates an Exceedance of the ODWS Objective

TABLE 2b: GROUNDWATER GEOCHEMISTRY - METALS					
PARAMETER	UNITS	ODWS		TW1	
		LIMIT	TYPE	GW1 (4 hr) 2022-06-01	GW2 (8 hr) 2022-06-01
Metals					
Aluminum (Al)	mg/L	0.1	OG	<0.01	<0.01
Antimony (Sb)	mg/L	0.006	IMAC	<0.0005	<0.0005
Arsenic (As)	mg/L	0.01	IMAC	<0.001	<0.001
Barium (Ba)	mg/L	1.0	MAC	0.05	0.06
Beryllium (Be)	mg/L	-	-	<0.0005	<0.0005
Boron (B)	mg/L	5.0	IMAC	0.46	0.44
Cadmium (Cd)	mg/L	0.005	MAC	<0.0001	<0.0001
Calcium (Ca)	mg/L	-	-	54	55
Chromium (Cr)	mg/L	0.05	MAC	<0.001	<0.001
Cobalt (Co)	mg/L	-	-	<0.0002	<0.0002
Copper (Cu)	mg/L	1.0	AO	<0.001	<0.001
Iron (Fe)	mg/L	0.3	AO	0.14	0.14
Lead (Pb)	mg/L	0.01	MAC	<0.001	<0.001
Magnesium (Mg)	mg/L	-	-	29	30
Manganese (Mn)	mg/L	0.05	AO	<0.01	<0.01
Mercury (Hg)	mg/L	0.001	MAC	<0.0001	<0.0001
Molybdenum (Mo)	mg/L	-	-	<0.005	<0.005
Nickel (Ni)	mg/L	-	-	<0.005	<0.005
Potassium (K)	mg/L	-	-	5	5
Selenium (Se)	mg/L	0.05	MAC	<0.001	<0.001
Silver (Ag)	mg/L	-	-	<0.0001	<0.0001
Sodium (Na)	mg/L	200	AO	77	75
Strontium (Sr)	mg/L	-	-	4.5	4.56
Thallium (Tl)	mg/L	-	-	<0.0001	<0.0001
Uranium (U)	mg/L	0.02	MAC	<0.001	<0.001
Vanadium (V)	mg/L	-	-	<0.001	<0.001
Zinc (Zn)	mg/L	5.0	AO	<0.01	<0.01

1. ODWS identifies the following types of parameters
   MAC = Maximum Acceptable Concentration
   IMAC = Interim Maximum Acceptable Concentration
   AO = Aesthetic Objective
   OG = Operational Guideline
2. Shaded Concentration Indicates an Exceedance of the ODWS Objective

TABLE 2c: GROUNDWATER GEOCHEMISTRY - VOLATILES					
PARAMETER	UNITS	ODWS		TW1	
		LIMIT	TYPE	GW1 (4 hr) 6/1/2022	GW2 (8 hr) 6/1/2022
VOCs Surrogates					
1,2-dichloroethane-d4	%	-	-	116	119
4-bromofluorobenzene	%	-	-	104	101
Toluene-d8	%	-	-	98	97
Volatiles					
1,1,1,2-tetrachloroethane	µg/L	-	-	<0.5	<0.5
1,1,1-trichloroethane	µg/L	-	-	<0.4	<0.4
1,1,2,2-tetrachloroethane	µg/L	-	-	<0.5	<0.5
1,1,2-trichloroethane	µg/L	-	-	<0.4	<0.4
1,1-dichloroethane	µg/L	-	-	<0.4	<0.4
1,1-dichloroethylene	µg/L	14.0	MAC	<0.5	<0.5
1,2-dichlorobenzene	µg/L	200.0	MAC	<0.4	<0.4
1,2-dichloroethane	µg/L	5.0	IMAC	<0.2	<0.2
1,2-dichloropropane	µg/L	-	-	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	-	-	<0.3	<0.3
1,3-dichlorobenzene	µg/L	-	-	<0.4	<0.4
1,3-Dichloropropylene (cis+trans)	µg/L	-	-	<0.3	<0.3
1,4-dichlorobenzene	µg/L	5.0	MAC	<0.4	<0.4
Acetone	µg/L	-	-	<5	<5
Benzene	µg/L	1.0	MAC	<0.5	<0.5
Bromodichloromethane	µg/L	-	-	<0.3	<0.3
Bromoform	µg/L	-	-	<0.4	<0.4
Bromomethane	µg/L	-	-	<0.5	<0.5
c-1,2-Dichloroethylene	µg/L	-	-	<0.4	<0.4
c-1,3-Dichloropropylene	µg/L	-	-	<0.2	<0.2
Carbon Tetrachloride	µg/L	2.0	MAC	<0.2	<0.2
Chloroethane	µg/L	-	-	<0.2	<0.2
Chloroform	µg/L	-	-	<0.5	<0.5
Dibromochloromethane	µg/L	-	-	<0.3	<0.3
Dichlorodifluoromethane	µg/L	-	-	<0.5	<0.5
Dichloromethane	µg/L	50	MAC	<4.0	<4.0
Ethylbenzene	µg/L	140	MAC	<0.5	<0.5
Ethylene Dibromide	µg/L	-	-	<0.2	<0.2
Hexane	µg/L	-	-	<5	<5
m/p-xylene	µg/L	-	-	<0.4	<0.4
Methyl Ethyl Ketone (MEK)	µg/L	-	-	<2	<2
Methyl Isobutyl Ketone (MIBK)	µg/L	-	-	<5	<5
Methyl Tert Butyl Ether (MTBE)	µg/L	15	AO	<2	<2
Monochlorobenzene	µg/L	80	MAC	<0.5	<0.5
o-xylene	µg/L	-	-	<0.4	<0.4
Styrene	µg/L	-	-	<0.5	<0.5
t-1,2-Dichloroethylene	µg/L	-	-	<0.4	<0.4
t-1,3-Dichloropropylene	µg/L	-	-	<0.2	<0.2
Tetrachloroethylene	µg/L	10	MAC	<0.3	<0.3
Toluene	µg/L	60	MAC	<0.4	<0.4
Trichloroethylene	µg/L	5	MAC	<0.3	<0.3
Trichlorofluoromethane	µg/L	-	-	<0.5	<0.5
Vinyl Chloride	µg/L	1	MAC	<0.2	<0.2
Xylene; total	µg/L	90	MAC	<0.5	<0.5

1. ODWS identifies the following types of parameters
   MAC = Maximum Acceptable Concentration
   IMAC = Interim Maximum Acceptable Concentration
   AO = Aesthetic Objective
   OG = Operational Guideline
2. Shaded Concentration Indicates an Exceedance of the ODWS Objective

TABLE 2d: GROUNDWATER GEOCHEMISTRY - HYDROCARBONS					
PARAMETER	UNITS	ODWS		TW1	
		LIMIT	TYPE	GW1 (4 hr) 6/1/2022	GW2 (8 hr) 6/1/2022
PHCs Surrogates					
Alpha-androstrane	%	-	-	106	105
Petroleum Hydrocarbons (PHCs)					
F1 (C6-C10)	µg/L	-	-	<20	<20
F1-BTEX (C6-C10)	µg/L	-	-	<20	<20
F2 (C10-C16)	µg/L	-	-	<20	<20
F3 (C16-C34)	µg/L	-	-	<20	<20
F4 (C34-C50)	µg/L	-	-	<20	<20
Polycyclic Aromatic Hydryocarbons (PAHs)					
1+2-methylnaphthalene	µg/L	-	-		<0.1
1-methylnaphthalene	µg/L	-	-		<0.1
2-methylnaphthalene	µg/L	-	-		<0.1
Acenaphthene	µg/L	-	-		<0.1
Acenaphthylene	µg/L	-	-		<0.1
Benzo(a)anthracene	µg/L	-	-		<0.1
Benzo(a)pyrene	µg/L	0.0	MAC		<0.01
Benzo(b)fluoranthene	µg/L	-	-		<0.05
Benzo(g,h,i)perylene	µg/L	-	-		<0.1
Chrysene	µg/L	-	-		<0.05
Dibenzo(a,h)anthracene	µg/L	-	-		<0.054
Fluoranthene	µg/L	-	-		<0.1
Fluorene	µg/L	-	-		<0.1
Indeno(1,2,3-c,d)pyrene	µg/L	-	-		<0.1
Naphthalene	µg/L	-	-		<0.1
Phenanthrene	µg/L	-	-		<0.1
Pyrene	µg/L	-	-		<0.1

1. ODWS identifies the following types of parameters
   MAC = Maximum Acceptable Concentration
   IMAC = Interim Maximum Acceptable Concentration
   AO = Aesthetic Objective
   OG = Operational Guideline
   N/A = not tested
2. Shaded Concentration Indicates an Exceedance of the ODWS Objective

The bacteriological test results (Certificate of Analysis – Report No. 1997742) indicated that all samples were non-detect (0 ct/100 mL) for E.Coli and Total Coliforms.

The water quality of the subject water supply well meets all Ontario Drinking Water Standards maximum acceptable concentrations (MAC). Furthermore, the water meets all Aesthetic Objectives (AO) and Operational Guidelines (OG) with the exception of the following:

- ❑ Hardness (as $CaCO_3$)
- ❑ Total Dissolved Solids

Exceedances of the above parameters are not uncommon for the water supply in the subject aquifer. Each of these groundwater parameters are discussed in detail below.

Hardness as $CaCO_3$

Hardness, expressed as calcium carbonate, is an operational guideline and does not appear in the ODWS. Rather, it appears in the Technical Support Documents for Ontario Drinking Water Standards, Objectives and Guidelines as a parameter with an operational guideline at 100 mg/L. At the measured concentrations of 254 and 261 mg $CaCO_3$/L at the 4- and 8-hour marks, respectively, the water is considered to be hard, however, it is below the reasonable treatable limit of 500 mg $CaCO_3$/L specified in Table 3 of the MOECC guidance document Procedure D-5-5 (1996). The hardness concentration can be treated using conventional softening technologies.

Total Dissolved Solids (TDS)

Total dissolved solids (TDS) refers to the concentration of inorganic substances dissolved in water. The main constituents are typically chloride, sulphates, calcium, magnesium, and bicarbonates. Water with a TDS objective above 500 mg/L of TDS may not be palatable to some users, but taste is subjective. The TDS concentration was 505 and 500 mg/L at the 4- and 8-hour marks, which slightly exceeds the TDS Aesthetic Objective. A point-of-use reverse osmosis unit could be used as a drinking source, if desired. As such, no taste problems will occur when the system is used.

The Langelier Saturation Index (Langelier, 1936) is used to predict the calcium carbonate stability of water. It indicates whether the calcium carbonate will precipitate, dissolve, or be in equilibrium with water. The Langelier calculation provided an LSI of 0.7. Based on the evaluation of the result, the water is super saturated and tends to precipitate a scale layer of calcium carbonate (scale forming but non-corrosive). Based on the LSI of 0.7, a high amount of scaling is not anticipated, and, as the water is super-saturated corrosion is unlikely to occur. Based on the range of stability in the positive direction, there are no mitigative measures needed for corrosion or scaling. If taste concerns or scaling concerns arise, then a reverse osmosis unit can be installed. See Langelier Saturation Index Calculation attached for calculation details.

Sodium

Sodium (Na), an aesthetic parameter, was detected in the laboratory test samples at concentrations of 77 and 75 mg/L in TW1 which does not exceed the ODWS aesthetic objective of 200 mg/L. Although sodium is not toxic and no maximum acceptable concentration has been set, concentrations above 20 mg/L require that the Medical Officer of Health be notified of the water quality results, so that this information may be passed on to local physicians for use in treatment of those requiring a sodium-restricted diet.

Terrain Analysis

Surficial Geology

The field program for the investigation was carried out from May 21 to 25, 2021. At the time, a total of six (6) boreholes were advanced to a maximum depth of 10.1 m below existing ground surface (bgs) and were distributed in a manner to provide general coverage of the subject site. Refer to Paterson Drawing PG5783-1 Test Hole Location plan, attached, for test hole locations.

The borehole locations were recorded and the subsurface conditions, including the soil morphology and depth to the groundwater table (if encountered), were carefully observed and recorded. The soils encountered were classified texturally in the field, and later reviewed in the laboratory.

Generally, the subsurface profile at the test holes consisted of a thin layer of fill and/or topsoil underlain by glacial till or bedrock. The fill was generally observed to consist of brown silty sand with gravel and rock fragments. The topsoil and/or fill were observed to extend to depths ranging between 0.1 and 0.6 m bgs. Glacial till consisting of brown silty sand with gravel, cobbles, and boulders was observed in select boreholes, specifically BH4-21, BH5-21, and BH6-21. Refusal to augering was encountered in all boreholes at depths between 0.2 and 2.2 m bgs. Bedrock was cored in boreholes BH1-21, BH2-21, and BH3-21 starting at depths of 0.15 to 0.2 m bgs extending to maximum depths of 10.1 m bgs. Groundwater was measured to be 1 – 2 m bgs in BH1-21, BH2-21, and BH3-21,

It should be noted that groundwater levels can fluctuate both seasonally and in conjunction with precipitation events. Therefore, groundwater levels could vary at the time of construction. See attached Soil Profile and Data Logs (attached) for more information.

Reference should be made to the borehole logs appended to this report for the details of the soil profiles encountered at each test hole location. The client should be aware that any information pertaining to soils are furnished as a matter of general information only and borehole descriptions are not to be interpreted as descriptive of conditions at locations other than those described by the boreholes themselves.

Hydrogeological Sensitivity of the Site

The subject area currently consists of a vehicle salvage yard (Cash for Trash) and undeveloped land, with residential properties nearby that are supported by private services. The subject site is serviced by an existing private well and septic and the proposed development to be serviced by a new private well (TW1) and septic system. The ground surface slopes gently in the southern direction with an approximate elevation decline of 1.5 m. An additional 1.5 m slope is located along the southern limits of the salvage yard area.

Based upon our field investigation, overburden thickness was observed to be 0.1 to 2.2 m. The overburden generally consists of fill and/ or topsoil, underlain by bedrock or glacial till underlain by bedrock. Based on available geological mapping, the subject site is underlain by Paleozoic limestone with dolostone and shale of the Gull River formation in the Simcoe Group with a general overburden thickness of 0 to 3 m. General groundwater flow direction is anticipated to be towards the south.

Due to the shallow nature of the bedrock, the site is considered to be hydrogeologically sensitive and, therefore, mitigating measures are recommended. Surrounding well records were reviewed on the MECP website, and the shallowest aquifer intercept in the area is recorded to be 11.3 m bgs. Due to the hydrogeological sensitivity of the Site, any future wells should be installed with double the amount of standard casing, and separation distances between potable supply wells and septic system components should be increased to 30 m. It should be noted that double the amount of standard casing equates to 12 m of casing. Any future wells should be installed in accordance with O.Reg 903. Furthermore, it is recommended that, where possible, new wells to be installed are located upgradient of any proposed or existing septic systems.

Conceptual Lot Development Plan

Finalized building plans and design details were not available at the time of report preparation, however, based on discussions with the design team, the onsite well and septic system will service an office, warehouse, and a mechanic shop. An existing building (ie. Previously a house) is used as an automotive sales office.

Total Daily Design Sewage Flow

The re-zoning application only addresses the total capacity of the site area to attenuate septic effluent applied within the property boundaries. The total daily design sewage flow (TDDSF) volume used for this assessment is 10,000 L/day while the expected design flows, calculated under Part 8 – Ontario Building Code, will be less than 7,500 L/day. Further detail to be included with the site plan application.

Typical developments will have lower actual loading compared to the conservative design loads as per the OBC.

Sewage System Design

It is anticipated that a series of buildings and associated roadways, parking spaces, and storage spaced will be constructed on the subject site in the future (i.e upon approval).

The theoretical design for this review consists of using a TDDSF of 10,000 L/day. Specific information will be provided under the site plan application stage.

In order to minimize the risk of long-term contamination of services, a typical minimum separation distance of 15 m is required between any drilled potable supply well and the closest distribution pipe or septic tank of a sewage system. Due to the hydrogeological sensitivity of the site, it is recommended that the separation distance be increased to 30 m. In addition, **a minimum of 100 mm of imported or in-situ soil seal would be required to provide additional isolation due to the shallow overburden (<2 m).**

The proposed development has significant development area available to allow appropriate separation between onsite private services and offsite private services. Based on the available space, the minimum regulatory and recommended separation distances can be easily attained on the subject site.

As building plans and design details were not available at the time of report preparation, a representative sewage system has been assigned to the proposed lot for the purpose of completing the study. A Class 4 sewage system with a fully raised absorption trench style leaching bed may be installed to service the proposed expansion. Assuming the aforementioned buildings, water closets, and employee shifts, the design sewage flow according to the Ontario Building Code would be 7,500 L/day with a conservative TDDSF of 10,000 L/day being used for design.

A minimum length of distribution pipe required for the leaching bed is determined by the formula QT/200, as per the OBC, where “Q” is the design sewage flow and “T” is the percolation rate of the leaching bed fill. Based on the design sewage flow of 10,000 L/d, a minimum distribution pipe length of 400 m would be required, assuming a percolation rate of the leaching bed fill used is 8 min/cm. As there is not enough native soil over the bedrock underlying the proposed site to utilize as a dispersal layer, a 100 mm soil seal will be required under the leaching bed/mantle area where less than 2 m of overburden is encountered. The 100 mm soil seal would have an estimated percolation rate of greater than 50 min/cm, therefore an imported sand mantle will be required. The leaching bed area shall be designed such that the loading rate does not exceed 4 L/m^2/d. As such, for a daily sewage flow of 10,000 L, the leaching bed area required would be up to 2,500 m^2. The reader should be aware that numerous other types of Class 4 sewage systems could

potentially be used at the site. A sewage system using tertiary wastewater equipment would require a significantly reduced area, and potentially reduce the height.

A Class 4 sewage system with a conventional absorption trench style leaching bed can be easily accommodated for the proposed expansion due to the size of the subject site (approximately 20.22 ha). The potential leaching bed discussed to service the proposed development requires the greatest footprint of all of the OBC approved styles of beds. This type of bed has been selected for illustration purposes only and the reader should be aware that numerous other types of Class 4 sewage systems could potentially be used for the site.

Predictive Nitrate Impact Assessment

Nitrate is considered to be a critical parameter of concern when assessing impacts to groundwater quality downgradient of an onsite sewage system. MECP Procedure D-5-4 applies for the proposed development. For the purpose of this guideline, the Ontario Drinking Water Objective of 10 mg/L of nitrate is used as an indicator of groundwater impact potential.

Under this guideline, where the lot size is one hectare or larger, a detailed impact assessment may not be required. It has been the City of Ottawa's policy that where the lot size of 0.8 ha or larger, a detailed assessment is typically not required since it is considered to be a low-risk development. The subject site has an area of 20.22 ha. As such, a detailed nitrate impact assessment (NIA) would not typically be necessary.

An NIA was completed below to corroborate our opinion that the property can adequately support the proposed expansion without having adverse impacts on the underlying bedrock aquifer should the minimum separation distances, well construction, and septic system be completed as per the recommendations and the OBC. The values shown in the Predictive Nitrate Impact Assessment attached to this report are summarized below.

- ❑ Site area — 20.22 ha
- ❑ Impervious area (%) — 57 %
- ❑ Daily sewage flow — 10 m^3/d
  (Value based on 1m^3 per day flow volume per residential lot)
- ❑ Concentration of nitrate in effluent — 40 mg/L
  (Value based on typical effluent concentration)
- ❑ Surplus Water — 341 mm/yr
  (The surplus water value was estimated based on Environment Canada Climate Office values with a soil type comprised of silt loam (Urban Lawns/Shallow Rooted Crops) and anthropogenic sources.)

- ❑ Combined infiltration factor based on: 0.40
  - Topography infiltration factor 0.20
  - Soil texture infiltration factor 0.10
  - Cover infiltration factor 0.10

The topography infiltration factor of 0.20 is based upon a rolling topography with an average slope between 2.8 to 3.8 m/km, taking into account the different topographies of the area. The soil texture infiltration factor was based upon an “tight impervious clay” to represent the bedrock with a value of 0.1 which is a conservative generalization based upon the site investigations and available geological mapping as the bedrock outcroppings were counted as impervious area for the above NIA calculation. The “cover infiltration factor” was calculated at 0.10 based upon the large open areas on site.

The calculation for a conventional septic system results in a predicted nitrate concentration of 9.37 mg/L nitrate for the subject site, using a value of 40 mg /L nitrate concentration within the effluent. This value was based upon a daily sewage flow of 10 m^3 per day, as per the conservative assumption for future sewage discharge volumes.

Based on the results of the predicted nitrate impact assessment, it is our opinion that the property can adequately support the current and future proposed additions without having an adverse impact on the underlying bedrock aquifer.

CONCLUSIONS

Based on the information contained within the body of this report the following conclusions can be drawn:

- ❑ The water supply aquifer intercepted by TW1 is considered to be adequate to support the water quantity demands for the proposed commercial development.

- ❑ The preferred water supply intercepted by TW1 contains a water supply that is potable and contains only elevated concentrations of hardness and TDS. The noted parameters can be treated with current readily available water conditioning equipment.

- ❑ The sodium concentration was measured to be above the 20 mg/L reporting limit and, as such, the Medical Officer of Health for the City of Ottawa should be informed to assist area physicians in the treatment of local residents on sodium reduced diets.

- ❑ A residential grade water softener is recommended to facilitate the removal of the hardness concentration if desired. If a water softener is used for the proposed development, the owner should be made aware that additional sodium will be added to the water to reduce hardness. If desired, a point-of-use reverse osmosis system can be used to provide a drinking tap source.

- ❑ The results of the water supply assessment have provided satisfactory evidence that the water supply aquifer underlying the subject site can support the proposed development from both a quality and quantity perspective.

- ❑ The proposed development is sufficient in size to accommodate new sewage systems and meet all the regulatory separation criteria.

- ❑ Future wells should be constructed in accordance with O.Reg. 903 and be installed similar to the well construction of TW1. Future wells should be installed with casing lengths of 12 m (double the standard length) and have a minimum of 30 m separation from all potential sources of contamination.

- ❑ It is recommended that new wells be constructed upgradient of any proposed or existing septic systems on site, where possible.

- ❑ The construction of an on-site sewage system should not affect the performance or water quality associated with a drilled well, contingent upon the on-site sewage system being designed in accordance with the Ontario Building Code (i.e properly sized sewage system and conforming to all separation distances) with a **minimum 100 mm soil seal provided beneath the leaching bed/mantle area**. A tertiary treatment system could be used to provide higher quality effluent and a reduced site footprint. A tertiary treatment system would require an annual maintenance contract.

- ❑ A Sewage System Permit and Building Permit needs to be issued for the site prior to the commencement of construction.

- ❑ The results of the Hydrogeological Report and Terrain Analysis have provided satisfactory evidence that the subject site can support the proposed expansion to the existing commercial with respect to water quality, quantity and sewage system placement.

We trust that the current submission satisfies your immediate requirements.

Best Regards,

Paterson Group Inc.

Kevin A Pickard, P.Eng.

Michael Killam, P.Eng.

Attachments:

- ❑ Figure 1 – Key Plan
- ❑ MECP Water Well Records
- ❑ Eurofins Certificate of Analysis
- ❑ AQTESOLV - Pumping Test Analysis Reports
- ❑ Nitrate Impact Assessment Calculations
- ❑ Langelier Saturation Index (LSI) Calculation
- ❑ Paterson Drawing PG5783-1 – Test Hole Location Plan
- ❑ Paterson Soil Profile and Data Sheets
- ❑ McRobie – CFT Site Plan Zoning Amendment – Drawing SP-A01

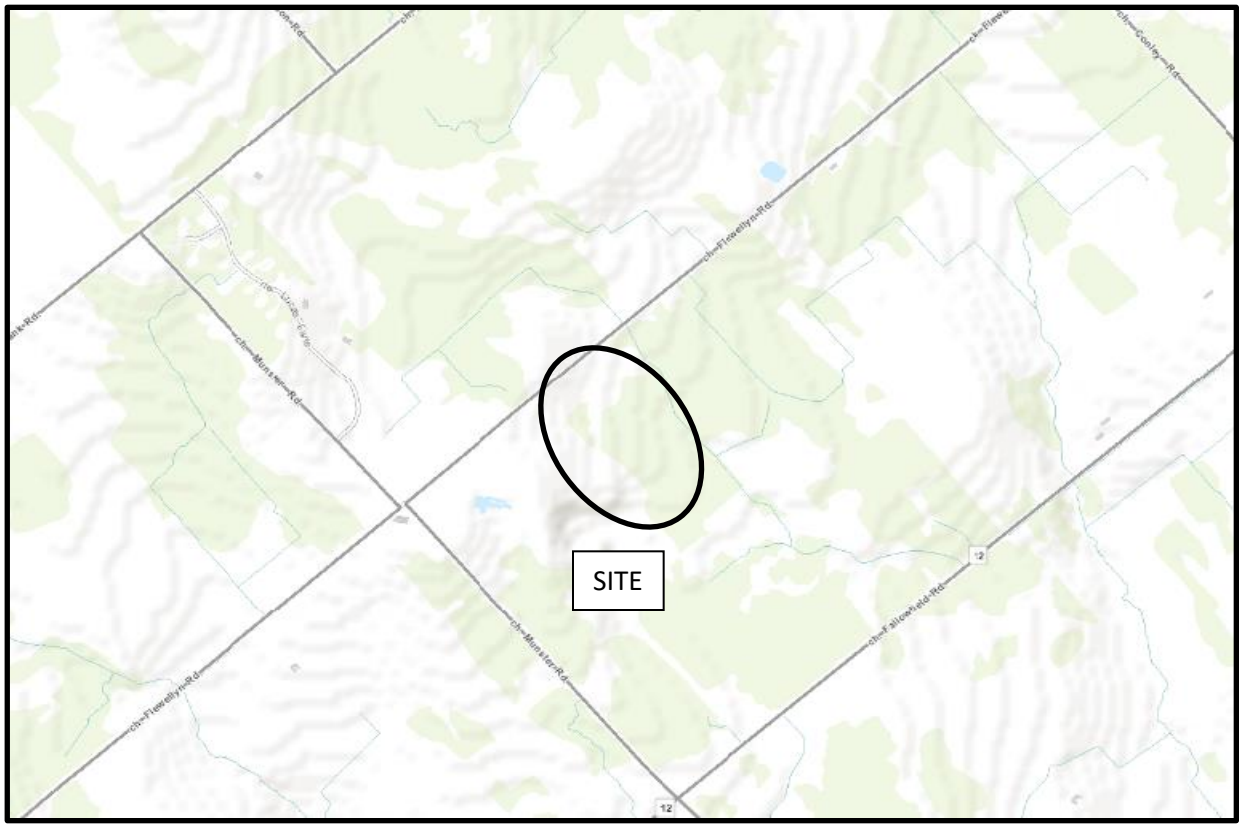


FIGURE 1

KEY PLAN

PATERSON GROUP

Ontario — Ministry of the Environment, Conservation and Parks

Tag#:A378991

A378991

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☒ Imperial

Page ___ of ___

Well Owner's Information

First Name	Last Name/Organization	E-mail Address	Well Constructed by Well Owner
	2852196 Ontario Inc		☐

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
7628 Flewellyn Road	Stittsville	ON	K2S 1B6	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
7628 Flewellyn Road	Goulbourn	12	8

County/District/Municipality	City/Town/Village	Province	Postal Code
Ottawa Carleton	Stittsville	Ontario	

UTM Coordinates Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3 — 18	424230	5006379		

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 (ft) From	To
Grey	Limestone			0'	65'
Grey	Limestone w/White	Quartzite	Mix	65'	100'
Grey	Limestone W/White	Quartzite	Mix	100'	110'
Grey	Limestone W/White	Quartzite	Mix	110'	120'

Annular Space

Depth Set at (ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (ft³)
42'	0'	Neat cement	10.92

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify — Not tested

If pumping discontinued, give reason: X

Pump intake set at (ft): 110

Pumping rate (GPM): 20

Duration of pumping: 1 hrs + 0 min

Final water level end of pumping (ft): 37.4

If flowing give rate (GPM): X

Recommended pump depth (ft): 100'

Recommended pump rate (GPM): 20

Well production (GPM): 20

Disinfected? ☒ Yes ☐ No

Draw Down Time (min)	Water Level (ft)	Recovery Time (min)	Water Level (ft)
Static Level	36'.0''		37.4''
1	37.1	1	38.3
2	37.1	2	38
3	37.1	3	38
4	37.2	4	38
5	37.2	5	38
10	37.3	10	38
15	37.3	15	38
20	37.4	20	38
25	37.4	25	38
30	37.4	30	38
40	37.4	40	38
50	37.4	50	38
60	37.4'	60	38'.0''

Method of Construction

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

Well Use

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

Construction Record - Casing

Inside Diameter (in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (in)	Depth (ft) From	To
6 1/4''	Steel	.188	+2'	42'
6''	Open Hole		42'	120'

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

Construction Record - Screen

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

Water Details

Water found at Depth 100 (ft) ☐ Gas — Kind of Water: ☐ Fresh ☒ Untested ☐ Other, specify

Water found at Depth 110 (ft) ☐ Gas — Kind of Water: ☐ Fresh ☒ Untested ☐ Other, specify

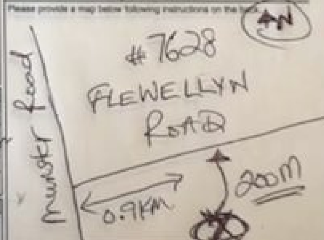
Water found at Depth ___ (ft) ☐ Gas — Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify

Hole Diameter

Depth (ft) From	To	Diameter (in)
0'	42'	9 3/4''
42'	120'	6''

Map of Well Location

Please provide a map below following instructions on the back.



Comments: HP-20GPM Set @ 100 FT

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Air Rock Drilling Co. Ltd.	C7681

Business Address (Street Number/Name)	Municipality
6659 Franktown Road	Richmond

Province	Postal Code	Business E-mail Address
ON	K0A 2Z0	air-rock@sympatico.ca

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
6138382170	Hanna, Jeremy

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
T3632	[signature]	2023 05 31

Well owner's information package delivered: ☒ Yes

Date Package Delivered: 2023 05 18

Date Work Completed: 2023 05 18

Ministry Use Only — Audit No. Z407849

Received

Ministry's Copy

Certificate of Analysis

Client: Paterson Group
9 Auriga Dr
Nepean, ON
K2E 7T9
Attention: Mr. Alex Schopf
PO#: 57632
Invoice to: Paterson Group

Report Number: 1997742
Date Submitted: 2023-06-02
Date Reported: 2023-06-14
Project: PH4401
COC #: 908261

Dear Alex Schopf:

Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).

Report Comments:

R Zafari

Raheleh Zafari 2023.06.14 14:16:42 -04'00'

APPROVAL: _____

Raheleh Zafari, Environmental Chemist

All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise indicated.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at: https://directory.cala.ca/.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is licensed by the Ontario Ministry of the Environment, Conservation, and Parks (MECP) for specific tests in drinking water (license #2318). A copy of the license is available upon request.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is accredited by the Ontario Ministry of Agriculture, Food, and Rural Affairs for specific tests in agricultural soils.

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline values listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official provincial or federal guideline as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

Certificate of Analysis

eurofins | Environment Testing

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Date Submitted: 2023-06-02
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Project: PH4401
COC #: 908261

Group	Analyte	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sampling Date / Sample I.D.	
					1689830 GW 2023-06-01 GW1	1689831 GW 2023-06-01 GW2
Anions	Cl	1	mg/L	AO 250	69	72
	F	0.10	mg/L	MAC 1.5	0.68	0.72
	N-NO2	0.10	mg/L	MAC 1.0	<0.10	<0.10
	N-NO3	0.10	mg/L	MAC 10.0	<0.10	<0.10
	SO4	1	mg/L	AO 500	53	55
General Chemistry	Alkalinity as CaCO3	5	mg/L	OG 30-500	278	276
	Colour (Apparent)	2	TCU	AO 5	5	5
	Conductivity	5	uS/cm		777	769
	DOC	0.5	mg/L	AO 5	1.8	1.7
	pH	1.00		6.5-8.5	8.06	8.10
	Phenols	0.001	mg/L		<0.001	<0.001
	S2-	0.01	mg/L	AO 0.05	<0.01	<0.01
	TDS (COND - CALC)	1	mg/L	AO 500	505*	500
	Turbidity	0.1	NTU	AO 5	1.0	0.4
Hardness	Hardness as CaCO3	1	mg/L	OG 80-100	254*	261*
Hydrocarbons	F1 (C6-C10)	20	ug/L		<20	<20
	F1-BTEX (C6-C10)	20	ug/L		<20	<20
	F2 (C10-C16)	20	ug/L		<20	<20
	F3 (C16-C34)	50	ug/L		<50	<50
	F4 (C34-C50)	50	ug/L		<50	<50
Indices/Calc	Ion Balance	0.01			0.99	0.99
Metals	Ag	0.0001	mg/L		<0.0001	<0.0001
	Al	0.01	mg/L	OG 0.1	<0.01	<0.01
	As	0.001	mg/L	IMAC 0.01	<0.001	<0.001
	B	0.01	mg/L	IMAC 5.0	0.46	0.44

Guideline = ODWSOG *** = Guideline Exceedence**

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Certificate of Analysis

eurofins | Environment Testing

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Project: PH4401
COC #: 908261

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1689830 GW 2023-06-01 GW1	1689831 GW 2023-06-01 GW2
Metals	Ba	0.01	mg/L	MAC 1.0		0.05	0.06
	Be	0.0005	mg/L			<0.0005	<0.0005
	Ca	1	mg/L			54	55
	Cd	0.0001	mg/L	MAC 0.005		<0.0001	<0.0001
	Co	0.0002	mg/L			<0.0002	<0.0002
	Cr	0.001	mg/L	MAC 0.05		<0.001	<0.001
	Cu	0.001	mg/L	AO 1		<0.001	<0.001
	Fe	0.03	mg/L	AO 0.3		0.14	0.14
	Hg	0.0001	mg/L	MAC 0.001		<0.0001	<0.0001
	K	1	mg/L			5	5
	Mg	1	mg/L			29	30
	Mn	0.01	mg/L	AO 0.05		<0.01	0.01
	Mo	0.005	mg/L			<0.005	<0.005
	Na	1	mg/L	AO 200		77	75
	Ni	0.005	mg/L			<0.005	<0.005
	Pb	0.001	mg/L	MAC 0.010		<0.001	<0.001
	Sb	0.0005	mg/L	IMAC 0.006		<0.0005	<0.0005
	Se	0.001	mg/L	MAC 0.05		<0.001	<0.001
	Sr	0.001	mg/L			4.50	4.56
	Tl	0.0001	mg/L			<0.0001	<0.0001
	U	0.001	mg/L	MAC 0.02		<0.001	<0.001
	V	0.001	mg/L			<0.001	<0.001
	Zn	0.01	mg/L	AO 5		<0.01	<0.01
Microbiology	Escherichia Coli	0	ct/100mL	MAC 0		0	0
	Total Coliforms	0	ct/100mL	MAC 0		0	0

Guideline = ODWSOG *** = Guideline Exceedence**

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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COC #: 908261

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1689830 GW 2023-06-01 GW1	1689831 GW 2023-06-01 GW2
Nutrients	N-NH3	0.020	mg/L			0.210	0.209
	Total Kjeldahl Nitrogen	0.100	mg/L			0.309	0.286
PAH	1+2-methylnaphthalene	0.1	ug/L				<0.1
	1-methylnaphthalene	0.1	ug/L				<0.1
	2-methylnaphthalene	0.1	ug/L				<0.1
	Acenaphthene	0.1	ug/L				<0.1
	Acenaphthylene	0.1	ug/L				<0.1
	Anthracene	0.1	ug/L				<0.1
	Benzo(a)anthracene	0.1	ug/L				<0.1
	Benzo(a)pyrene	0.01	ug/L	MAC 0.01			<0.01
	Benzo(b)fluoranthene	0.05	ug/L				<0.05
	Benzo(g,h,i)perylene	0.1	ug/L				<0.1
	Benzo(k)fluoranthene	0.05	ug/L				<0.05
	Chrysene	0.05	ug/L				<0.05
	Dibenzo(a,h)anthracene	0.1	ug/L				<0.1
	Fluoranthene	0.1	ug/L				<0.1
	Fluorene	0.1	ug/L				<0.1
	Indeno(1,2,3-c,d)pyrene	0.1	ug/L				<0.1
	Naphthalene	0.1	ug/L				<0.1
	Phenanthrene	0.1	ug/L				<0.1
	Pyrene	0.1	ug/L				<0.1
PHC Surrogate	Alpha-androstrane	0	%			106	105
Subcontract-Inorg	Tannin & Lignin	0.5	mg/L			<0.5	<0.5
VOCs Surrogates	1,2-dichloroethane-d4	0	%			116	119
	4-bromofluorobenzene	0	%			104	101

Guideline = ODWSOG *** = Guideline Exceedence**

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Certificate of Analysis

Client: Paterson Group
9 Auriga Dr
Nepean, ON
K2E 7T9
Attention: Mr. Alex Schopf
PO#: 57632
Invoice to: Paterson Group

Report Number: 1997742
Date Submitted: 2023-06-02
Date Reported: 2023-06-14
Project: PH4401
COC #: 908261

Group	Analyte	MRL	Units	Guideline	Lab I.D. Sample Matrix Sample Type Sampling Date Sample I.D.	1689830 GW 2023-06-01 GW1	1689831 GW 2023-06-01 GW2
VOCs Surrogates	Toluene-d8	0	%			98	97
Volatiles	1,1,1,2-tetrachloroethane	0.5	ug/L			<0.5	<0.5
	1,1,1-trichloroethane	0.4	ug/L			<0.4	<0.4
	1,1,2,2-tetrachloroethane	0.5	ug/L			<0.5	<0.5
	1,1,2-trichloroethane	0.4	ug/L			<0.4	<0.4
	1,1-dichloroethane	0.4	ug/L			<0.4	<0.4
	1,1-dichloroethylene	0.5	ug/L	MAC 14		<0.5	<0.5
	1,2-dichlorobenzene	0.4	ug/L	MAC 200		<0.4	<0.4
	1,2-dichloroethane	0.5	ug/L	IMAC 5		<0.5	<0.5
	1,2-dichloropropane	0.5	ug/L			<0.5	<0.5
	1,3,5-trimethylbenzene	0.3	ug/L			<0.3	<0.3
	1,3-dichlorobenzene	0.4	ug/L			<0.4	<0.4
	1,3-Dichloropropylene (cis+trans)	0.5	ug/L			<0.5	<0.5
	1,4-dichlorobenzene	0.4	ug/L	MAC 5		<0.4	<0.4
	Acetone	5	ug/L			<5	<5
	Benzene	0.5	ug/L	MAC 1		<0.5	<0.5
	Bromodichloromethane	0.3	ug/L			<0.3	<0.3
	Bromoform	0.4	ug/L			<0.4	<0.4
	Bromomethane	0.5	ug/L			<0.5	<0.5
	c-1,2-Dichloroethylene	0.4	ug/L			<0.4	<0.4
	c-1,3-Dichloropropylene	0.5	ug/L			<0.5	<0.5
	Carbon Tetrachloride	0.2	ug/L	MAC 2		<0.2	<0.2
	Chloroethane	0.5	ug/L			<0.5	<0.5
	Chloroform	0.5	ug/L			<0.5	<0.5
	Dibromochloromethane	0.3	ug/L			<0.3	<0.3

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Report Number: 1997742
Date Submitted: 2023-06-02
Date Reported: 2023-06-14
Project: PH4401
COC #: 908261

Group	Analyte	MRL	Units	Guideline	1689830 GW 2023-06-01 GW1	1689831 GW 2023-06-01 GW2
	Lab I.D.				1689830	1689831
	Sample Matrix				GW	GW
	Sample Type					
	Sampling Date				2023-06-01	2023-06-01
	Sample I.D.				GW1	GW2
Volatiles	Dichlorodifluoromethane	0.5	ug/L		<0.5	<0.5
	Dichloromethane	4.0	ug/L	MAC 50	<4.0	<4.0
	Ethylbenzene	0.5	ug/L	MAC 140	<0.5	<0.5
	Ethylene Dibromide	0.2	ug/L		<0.2	<0.2
	Hexane	5	ug/L		<5	<5
	m/p-xylene	0.4	ug/L		<0.4	<0.4
	Methyl Ethyl Ketone (MEK)	2	ug/L		<2	<2
	Methyl Isobutyl Ketone (MIBK)	5	ug/L		<5	<5
	Methyl Tert Butyl Ether (MTBE)	2	ug/L	AO 15	<2	<2
	Monochlorobenzene	0.5	ug/L	MAC 80	<0.5	<0.5
	o-xylene	0.4	ug/L		<0.4	<0.4
	Styrene	0.5	ug/L		<0.5	<0.5
	t-1,2-Dichloroethylene	0.4	ug/L		<0.4	<0.4
	t-1,3-Dichloropropylene	0.5	ug/L		<0.5	<0.5
	Tetrachloroethylene	0.3	ug/L	MAC 10	<0.3	<0.3
	Toluene	0.4	ug/L	MAC 60	<0.4	<0.4
	Trichloroethylene	0.3	ug/L	MAC 5	<0.3	<0.3
	Trichlorofluoromethane	0.5	ug/L		<0.5	<0.5
	Vinyl Chloride	0.2	ug/L	MAC 1	<0.2	<0.2
	Xylene; total	0.5	ug/L	MAC 90	<0.5	<0.5

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Report Number: 1997742
Date Submitted: 2023-06-02
Date Reported: 2023-06-14
Project: PH4401
COC #: 908261

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Run No 442075 **Analysis/Extraction Date** 2023-06-07 **Analyst** C M **Method** P 8270			
Methlynaphthalene, 1-	<0.1 ug/L	56	50-140
Methlynaphthalene, 2-	<0.1 ug/L	56	50-140
Acenaphthene	<0.1 ug/L	58	50-140
Acenaphthylene	<0.1 ug/L	58	50-140
Anthracene	<0.1 ug/L	54	50-140
Benz[a]anthracene	<0.1 ug/L	54	50-140
Benzo[a]pyrene	<0.01 ug/L	50	50-140
Benzo[b]fluoranthene	<0.05 ug/L	72	50-140
Benzo[ghi]perylene	<0.1 ug/L	62	50-140
Benzo[k]fluoranthene	<0.05 ug/L	58	50-140
Chrysene	<0.05 ug/L	56	50-140
Dibenz[a h]anthracene	<0.1 ug/L	58	50-140
Fluoranthene	<0.1 ug/L	58	50-140
Fluorene	<0.1 ug/L	56	50-140
Indeno[1 2 3-cd]pyrene	<0.1 ug/L	60	50-140
Naphthalene	<0.1 ug/L	58	50-140

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K2E 7T9
Attention: Mr. Alex Schopf
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Report Number: 1997742
Date Submitted: 2023-06-02
Date Reported: 2023-06-14
Project: PH4401
COC #: 908261

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Phenanthrene	<0.1 ug/L	52	50-140
Pyrene	<0.1 ug/L	58	50-140
Run No 442783 **Analysis/Extraction Date** 2023-06-03 **Analyst** DRA **Method** AMBCOLM1			
Escherichia Coli			
Total Coliforms			
Run No 442785 **Analysis/Extraction Date** 2023-06-02 **Analyst** M E **Method** C SM2130B			
Turbidity	<0.1 NTU	100	70-130
Run No 442824 **Analysis/Extraction Date** 2023-06-05 **Analyst** AaN **Method** C SM2120C			
Colour (Apparent)	<2 TCU	105	90-110
Run No 442864 **Analysis/Extraction Date** 2023-06-04 **Analyst** PJ **Method** EPA 8260			
Tetrachloroethane, 1,1,1,2-	<0.5 ug/L	88	60-130
Trichloroethane, 1,1,1-	<0.4 ug/L	81	60-130
Tetrachloroethane, 1,1,2,2-	<0.5 ug/L	109	60-130
Trichloroethane, 1,1,2-	<0.4 ug/L	87	60-130
Dichloroethane, 1,1-	<0.4 ug/L	102	60-130

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Report Number: 1997742
Date Submitted: 2023-06-02
Date Reported: 2023-06-14
Project: PH4401
COC #: 908261

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Dichloroethylene, 1,1-	<0.5 ug/L	91	60-130
Dichlorobenzene, 1,2-	<0.4 ug/L	104	60-130
Dichloroethane, 1,2-	<0.5 ug/L	82	60-130
Dichloropropane, 1,2-	<0.5 ug/L	82	60-130
1,3,5-trimethylbenzene	<0.3 ug/L	109	60-130
Dichlorobenzene, 1,3-	<0.4 ug/L	100	60-130
Dichloropropene,1,3-			
Dichlorobenzene, 1,4-	<0.4 ug/L	100	60-130
Acetone	<5 ug/L	80	60-130
Benzene	<0.5 ug/L	84	60-130
Bromodichloromethane	<0.3 ug/L	102	60-130
Bromoform	<0.4 ug/L	84	60-130
Bromomethane	<0.5 ug/L	101	60-130
Dichloroethylene, 1,2-cis-	<0.4 ug/L	110	60-130
Dichloropropene,1,3-cis-	<0.5 ug/L	102	60-130
Carbon Tetrachloride	<0.2 ug/L	83	60-130
Chloroethane	<0.5 ug/L	103	60-130
Chloroform	<0.5 ug/L	103	60-130

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Report Number: 1997742
Date Submitted: 2023-06-02
Date Reported: 2023-06-14
Project: PH4401
COC #: 908261

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Dibromochloromethane	<0.3 ug/L	83	60-130
Dichlorodifluoromethane	<0.5 ug/L	92	60-130
Methylene Chloride	<4.0 ug/L	107	60-130
Ethylbenzene	<0.5 ug/L	80	60-130
Ethylene dibromide	<0.2 ug/L	89	60-130
Petroleum Hydrocarbons F1	<20 ug/L	92	60-140
Hexane (n)	<5 ug/L	100	60-130
m/p-xylene	<0.4 ug/L	102	60-130
Methyl Ethyl Ketone	<2 ug/L	120	60-130
Methyl Isobutyl Ketone	<5 ug/L	110	60-130
Methyl tert-Butyl Ether (MTBE)	<2 ug/L	100	60-130
Chlorobenzene	<0.5 ug/L	83	60-130
o-xylene	<0.4 ug/L	102	60-130
Styrene	<0.5 ug/L	99	60-130
Dichloroethylene, 1,2-trans-	<0.4 ug/L	103	60-130
Dichloropropene,1,3-trans-	<0.5 ug/L	96	60-130
Tetrachloroethylene	<0.3 ug/L	110	60-130
Toluene	<0.4 ug/L	108	60-130

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Date Submitted: 2023-06-02
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QC Summary

Analyte	Blank	QC % Rec	QC Limits
Trichloroethylene	<0.3 ug/L	99	60-130
Trichlorofluoromethane	<0.5 ug/L	110	60-130
Vinyl Chloride	<0.2 ug/L	99	60-130
Run No 442872 **Analysis/Extraction Date** 2023-06-05 **Analyst** PJ **Method** EPA 8260			
Xylene Mixture			
Run No 442894 **Analysis/Extraction Date** 2023-06-05 **Analyst** PJ **Method** CCME O.Reg 153/04			
Petroleum Hydrocarbons F1-BTEX			
Run No 442898 **Analysis/Extraction Date** 2023-06-05 **Analyst** AsA **Method** SM2320,2510,4500H/F			
Alkalinity (CaCO3)	<5 mg/L	97	90-110
Conductivity	<5 uS/cm	99	90-110
F	<0.10 mg/L	99	90-110
pH		99	90-110
Run No 442900 **Analysis/Extraction Date** 2023-06-05 **Analyst** AsA **Method** SM 5310B			
DOC	<0.5 mg/L	104	80-120

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COC #: 908261

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Run No 442945 **Analysis/Extraction Date** 2023-06-06 **Analyst** IP **Method** SM5530D/EPA420.2			
Phenols	<0.001 mg/L	103	50-120
Run No 442969 **Analysis/Extraction Date** 2023-06-06 **Analyst** SKH **Method** EPA 351.2			
Total Kjeldahl Nitrogen	<0.100 mg/L	110	70-130
Run No 442981 **Analysis/Extraction Date** 2023-06-06 **Analyst** AaN **Method** SM 4110			
Chloride	<1 mg/L	120	90-110
N-NO2	<0.10 mg/L	104	90-110
N-NO3	<0.10 mg/L	99	90-110
SO4	<1 mg/L	100	90-110
Run No 442983 **Analysis/Extraction Date** 2023-06-07 **Analyst** R T **Method** EPA 350.1			
N-NH3	<0.020 mg/L	110	80-120
Run No 442988 **Analysis/Extraction Date** 2023-06-06 **Analyst** SD **Method** EPA 200.8			
Silver	<0.0001 mg/L	85	80-120
Aluminum	<0.01 mg/L	94	80-120

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COC #: 908261

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Arsenic	<0.001 mg/L	89	80-120
Boron (total)	<0.01 mg/L	101	80-120
Barium	<0.01 mg/L	87	80-120
Beryllium	<0.0005 mg/L	104	80-120
Cadmium	<0.0001 mg/L	99	80-120
Cobalt	<0.0002 mg/L	96	80-120
Chromium Total	<0.001 mg/L	95	80-120
Copper	<0.001 mg/L	96	80-120
Iron	<0.03 mg/L	89	80-120
Mercury	<0.0001 mg/L	95	80-120
Manganese	<0.01 mg/L	96	80-120
Molybdenum	<0.005 mg/L	87	80-120
Nickel	<0.005 mg/L	98	80-120
Lead	<0.001 mg/L	96	80-120
Antimony	<0.0005 mg/L	106	80-120
Selenium	<0.001 mg/L	97	80-120
Strontium	<0.001 mg/L	88	80-120
Thallium	<0.0001 mg/L	93	80-120

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COC #: 908261

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Uranium	<0.001 mg/L	88	80-120
Vanadium	<0.001 mg/L	93	80-120
Zinc	<0.01 mg/L	102	80-120
Run No 443014 **Analysis/Extraction Date** 2023-06-07 **Analyst** SS **Method** CCME O.Reg 153/04			
Petroleum Hydrocarbons F2	<20 ug/L	80	60-140
Petroleum Hydrocarbons F3	<50 ug/L	80	60-140
Petroleum Hydrocarbons F4	<50 ug/L	80	60-140
Run No 443022 **Analysis/Extraction Date** 2023-06-07 **Analyst** Z S **Method** M SM3120B-3500C			
Calcium	<1 mg/L	100	90-110
Potassium	<1 mg/L	105	87-113
Magnesium	<1 mg/L	100	76-124
Sodium	<1 mg/L	103	82-118
Run No 443045 **Analysis/Extraction Date** 2023-06-07 **Analyst** AaN **Method** C SM4500-S2-D			
S2-	<0.01 mg/L	82	80-120
Run No 443049 **Analysis/Extraction Date** 2023-06-07 **Analyst** SKH **Method** C SM2340B			

Guideline = ODWSOG *** = Guideline Exceedence**

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Certificate of Analysis

eurofins | Environment Testing

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Attention: Mr. Alex Schopf
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Report Number: 1997742
Date Submitted: 2023-06-02
Date Reported: 2023-06-14
Project: PH4401
COC #: 908261

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Hardness as CaCO3			
Ion Balance			
TDS (COND - CALC)			
Run No 443125 **Analysis/Extraction Date** 2023-06-08 **Analyst** R G **Method** P 8270			
1+2-methylnaphthalene			
Run No 443384 **Analysis/Extraction Date** 2023-06-13 **Analyst** AET **Method** SUBCONTRACT-CA-INORG			
Tannin & Lignin			

Guideline = ODWSOG *** = Guideline Exceedence**

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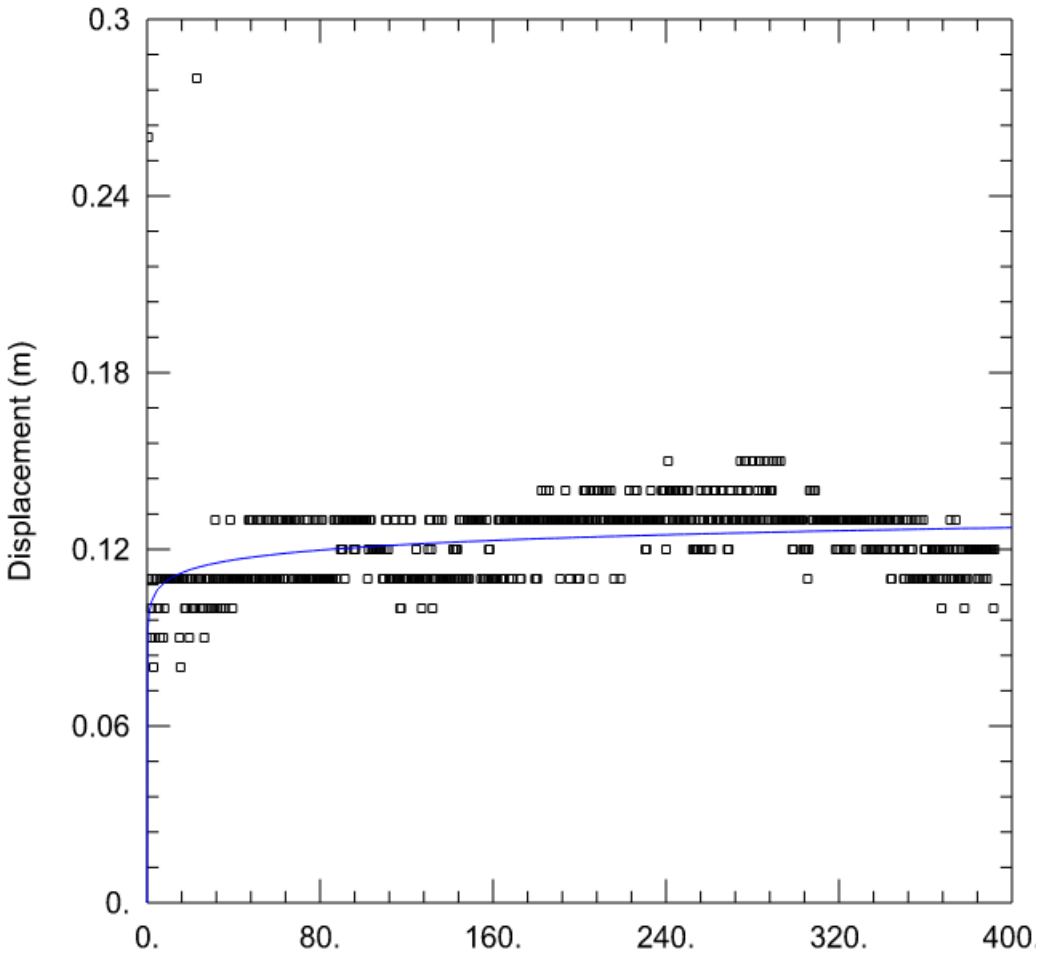
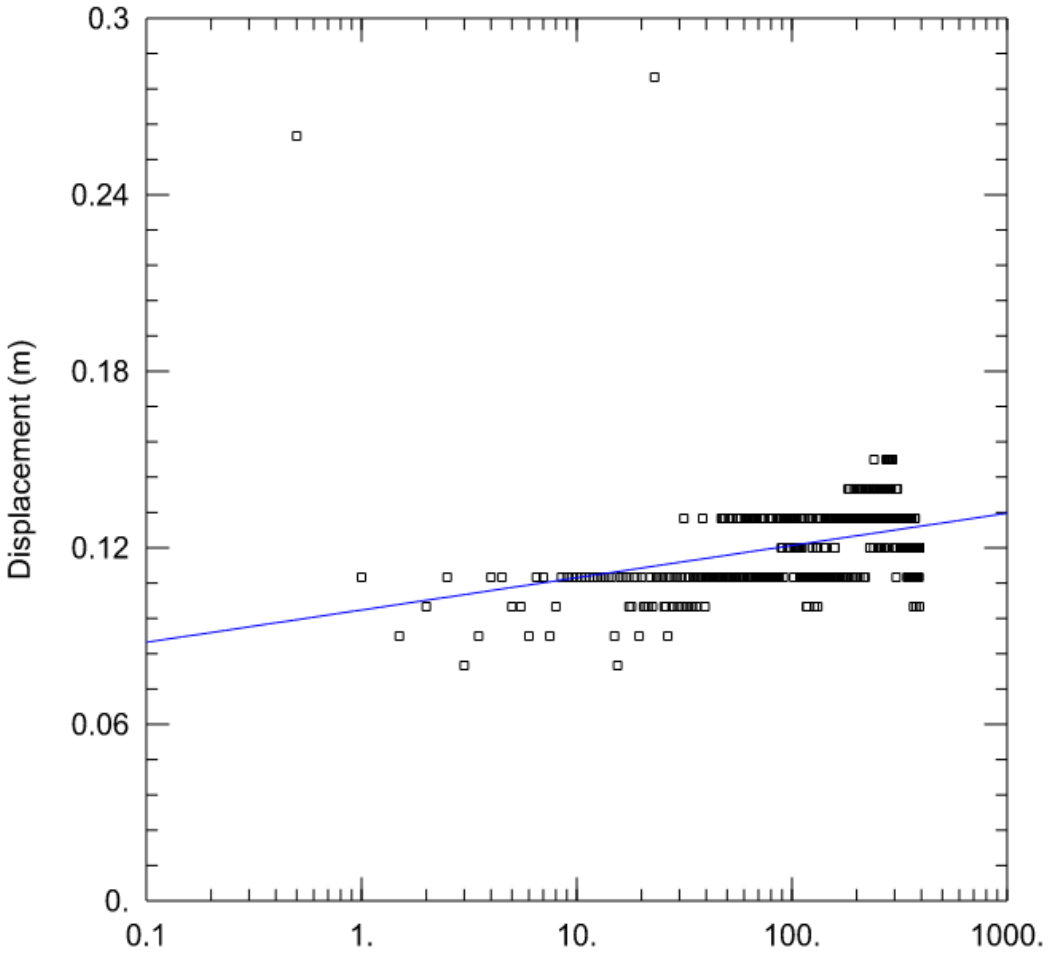
Pumping Test Analysis Report

File No.	PH4401	Well ID:	TW1
Date:	Thursday, June 1, 2023	Solution Method:	**Theis**
Client:	Cash for Trash	Transmissitivity (m2/day):	914.3
Site Address:	7628 Flewellyn Road	Discharge Rate (L/min)	38
Project:	Proposed Commercial Development	Analysis performed by:	AS



Pumping Test Analysis Report

File No.	PH4401	Well ID:	TW1
Date:	Thursday, June 1, 2023	Solution Method:	**Cooper-Jacob**
Client:	Cash for Trash	Transmissitivity (m2/day):	914.3
Site Address:	7628 Flewellyn Road	Discharge Rate (L/min)	18.75
Project:	Proposed Commercial Development	Analysis performed by:	AS



Pumping Test Analysis Report

File No.	PH4401
Date:	Thursday, June 1, 2023
Client:	Cash for Trash
Site Address:	7628 Flewellyn Road
Project:	Proposed Commercial Development

Summary Table:

Solution Method:	Well ID:	Transmissitivity (m2/day):
Theis	TW1	914.3
Cooper-Jacob	TW1	914.3
Average:		**914.30**

patersongroup PH4401

7628 Flewellyn Road, Stittsville, ON

PREDICTIVE NITRATE IMPACT ASSESSEMENT

Infiltration Factors		
Topography	0.20	
Soil	0.10	
Cover	0.10	
Total	**0.40**	
Site Characteristics		
Area of Site :	202234.4	m^2
Assumed Impervious Bedrock Outcropping	18204	m^2
Cash for Trash buildings, park lot PLUS Outdoor Metal Storage	96606	m^2
Bedrock Outcropping plus Cash for Trash site	114810	m^2
Impervious Area	114810	m^2
Percent Impervious Area =	57	%
Infiltration Area =	87424	m^2
Septic Effluent		
Concentration of Effluent (Cs) =	40	mg/L
Daily Sewage Flow (Qs)=	10	m^3
See Notes below.		
Infiltration Calculation		
Nitrate concentration in precipitation (C_i) =	0	mg/L
Surplus Water (Environment Canada)	341	mm/yr
Factored Water Surplus =	136	mm/yr
Infiltration % due to stormwater management measures	-	%
Infiltration rate from stormwater management measures =	0	mm/yr
Infiltration Flow Entering the System (Q_i) =	33	m^3/day
Mass Balance Model (MOEE, 1995)		
$C_T = (Q_bC_b+Q_eC_e+Q_iC_i)/(Q_b+Q_e+Q_i)$ = Cumulative Nitrate Concentration		
Q_b = flow entering the system across the upgradient area	0	m^3/day
C_b = background nitrate concentration	0	mg/L
Q_e = flow entering the system from the septic drainfield	10	m^3/day
C_e = concentration of nitrates in the septic effluent	40	mg/L
Q_i = flow entering the system from infiltration	33	m^3/day
C_i = Concentration of nitrates in the infiltrate	0	mg/L
C_T =	**9.37**	**mg/L**

Notes: Site characteristic values were measured as approximate values from the available site plan. Daily Sewage Flow volume was calculted by Paterson Group.

patersongroup

7826 Flewellyn Road

PH4401

TW1 inputs

pH	8	A	0.17
TDS	500	B	2.32
Hardness	254	C	2.00
Alkalinity	276	D	2.44
Temp.	13		
		pHs =	7.346631847

Langelier Saturation Index (LSI) Calculation

(Langelier, 1936)

LSI = pH - pHs

pHs = (9.3 + A + B) - (C + D)

Where:

A = (Log10 [TDS] - 1) / 10

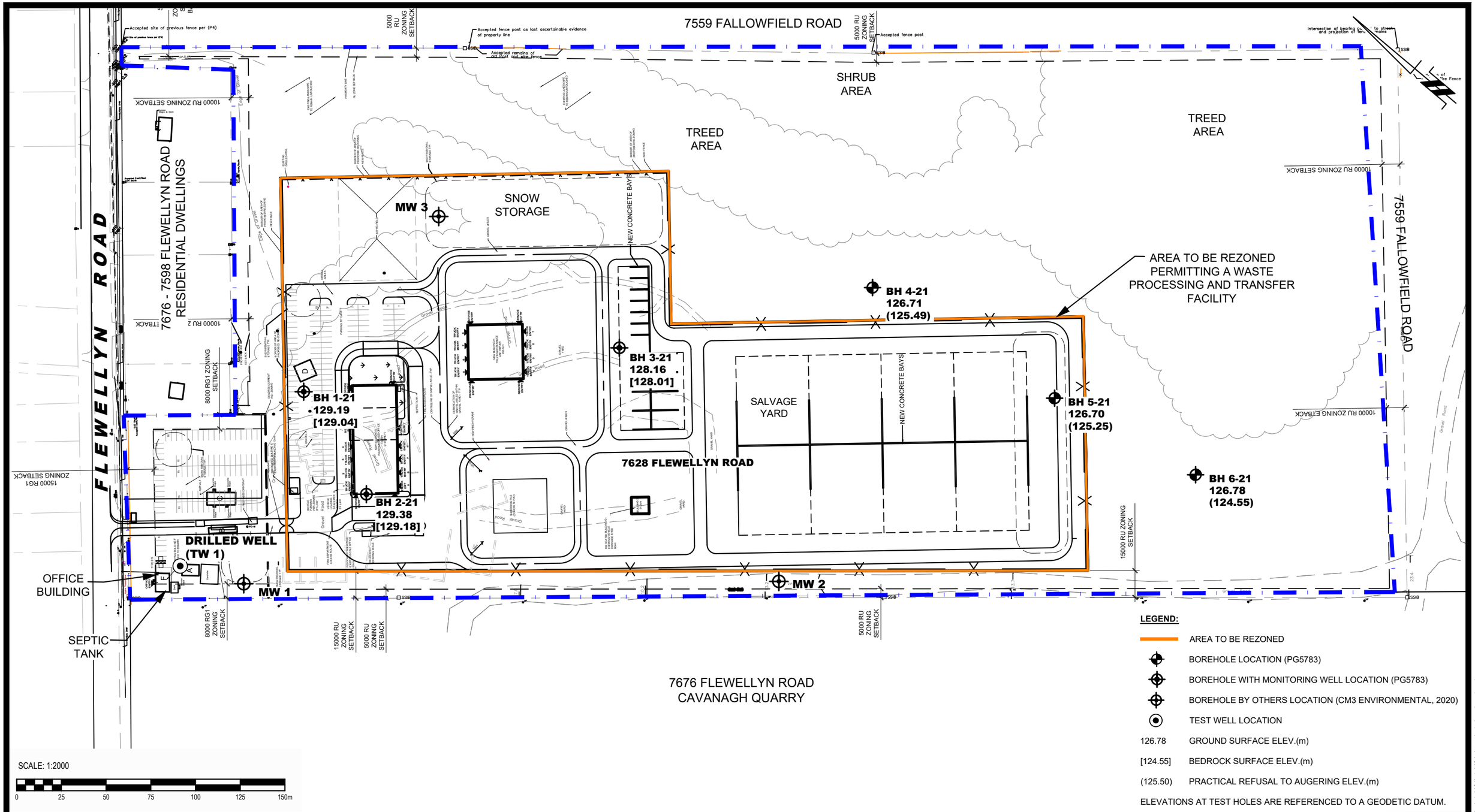
B = -13.12 x Log10 (oC + 273) + 34.55

C = Log10 [Ca2+ as CaCO3] - 0.4

D = Log10 [alkalinity as CaCO3]

LSI = 0.7

LSI	Effect
0.5 to 2	**Water is super saturated and tends to precipitate a scale layer of calcium carbonate (scale forming but non-corrosive)**
0 to 0.5	**Water is super saturated and tends to precipitate a scale layer of calcium carbonate (slightly scale forming and corrosive).**
0	Water is saturated (in equilibrium) with calcium carbonate. A scale layer of calcium carbonate is neither precipitated nor dissolved.
0 to -0.5	Water is under saturated and tends to dissolve solid calcium carbonate (slightly corrosivebut non-scale forming).
-0.5 to -2	Water is under saturated and tends to dissolve solid calcium carbonate (seriously corrosive).



7676 FLEWELLYN ROAD
CAVANAGH QUARRY

SCALE: 1:2000

0 25 50 75 100 125 150m

LEGEND:

- AREA TO BE REZONED
- BOREHOLE LOCATION (PG5783)
- BOREHOLE WITH MONITORING WELL LOCATION (PG5783)
- BOREHOLE BY OTHERS LOCATION (CM3 ENVIRONMENTAL, 2020)
- TEST WELL LOCATION
- 126.78 GROUND SURFACE ELEV.(m)
- [124.55] BEDROCK SURFACE ELEV.(m)
- (125.50) PRACTICAL REFUSAL TO AUGERING ELEV.(m)

ELEVATIONS AT TEST HOLES ARE REFERENCED TO A GEODETIC DATUM.

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

CASH FOR TRASH CANADA

HYDROGEOLOGICAL INVESTIGATION
7628 FLEWELLYN ROAD

OTTAWA, ONTARIO

Title:

TEST HOLE LOCATION PLAN

Scale: 1:2000	Date: 07/2025
Drawn by: GK	Report No.: PH4401-1
Checked by: AS	Dwg. No.: PH4401-1
Approved by: EA	Revision No.:

p:\autocad drawings\hydrogeology\ph4xx\ph4401\ph4401-1 test hole location plan.dwg

31G/4e

UTM 17 Z 412411 E
5 R 5101516 N
Elev. 4 R 01410
Basin 215 11

ONTARIO

The Well Drillers Act
Department of Mines, Province of Ontario

15 No 258

RECEIVED
JAN - 4 1952
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

Water Well Record

County or Territorial District Carleton Township, ~~Village, Town or City~~ Gaulbourn
[redacted] own or City) Stittsville Ont.
Stittsville Ont.
Date Completed 2 (day) January (month) 1951 Cost of Well (excluding pump) $ 212.50

Pipe and Casing Record

Casing diameter(s) 4"
Length(s) of casing(s) 8 feet
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type? Loam

Pumping Test

Date
Static level 8
Pumping level
Pumping rate
Duration of test
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? house
How far is well from possible source of contamination? 75 yd
What is the source of contamination? Barn
Enclose a copy of any mineral analysis that has been made of water

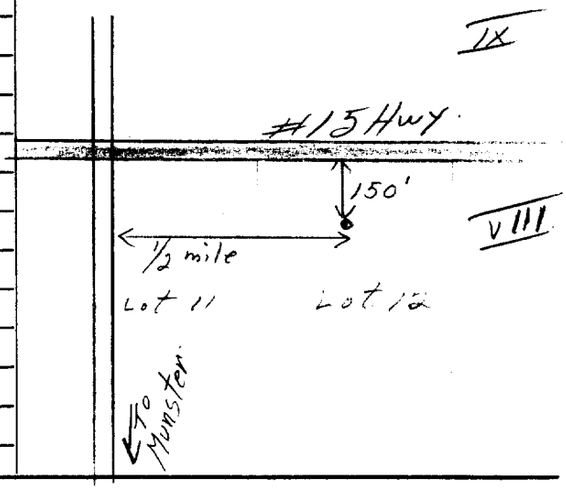
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
8'	fresh	47'

Well Log

Overburden and Bedrock Record	From	To
8 loam and 47 of rock	0 ft.	....ft.
loam	0	8
rock	8	55

Location of Well

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



Situation: Is well on upland, in valley, or on hillside? hillside
Drilling Firm R. P. Sparks & Son
Address Stittsville Ont.
Name of Driller same Address same
Date Licence Number 396
R. P. Sparks
Signature of Licensee

FORM 5

31G/4e

UTM 18 Z 412410 E
15 R 5010512 10 N

Elev. 4 R 0430
Con VIII
Basin 25

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

GROUND WATER BRANCH
15 No 2519
AUG 20 1957
ONTARIO WATER RESOURCES COMMISSION

Water-Well Record

County or Territorial District Carleton Township, Village, Town or City Goulbourne

[redacted] Village, Town or City)

[redacted] Address Stittsville

[redacted] (day) [redacted] (month) [redacted] (year)

Pipe and Casing Record

Casing diameter(s) 4 in.
Length(s) 15 ft.
Type of screen NONE
Length of screen

Pumping Test

Static level 12
Pumping rate 20 gpm
Pumping level 50 ft.
Duration of test 10 minutes

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
shale	0	5			
limestone GREY	5	57	55	43	sulphur

Water Record

For what purpose(s) is the water to be used?
household
Is water clear or cloudy? cloudy
Is well on upland, in valley, or on hillside?
upland
Drilling firm
Address

Name of Driller K. Sparks
Address Smith Mark

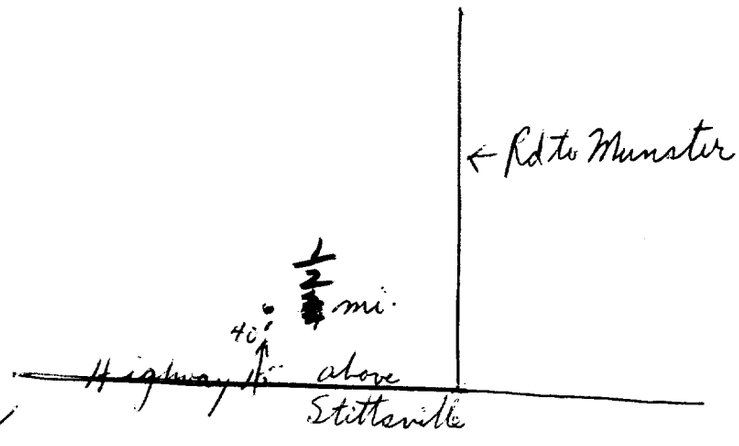
Licence Number 440

I certify that the foregoing statements of fact are true.

Date Aug 17/57 K Sparks
Signature of Licensee

Location of Well

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



Form 5

CSS.88

69 541 31G/4e C

UTM 18 Z 412410410 E

5 R 5010511110 N

Elev. 4 R 01435

Basin 25

15 No 2521

The Ontario Water Resources Commission Act

WATER WELL RECORD

County or District CHARLETON Township, Village, Town or City GOULBOURN

Con. 8 Lot 12 Date completed 25 (day) JULY (month) 66 (year)

[redacted] dress ASHTON ONT

Casing and Screen Record

Inside diameter of casing 4

Total length of casing 12

Type of screen

Length of screen

Depth to top of screen

Diameter of finished hole 4

Pumping Test

Static level 12

Test-pumping rate 2 G.P.M.

Pumping level 30

Duration of test pumping 1HR

Water clear or cloudy at end of test CLEAR

Recommended pumping rate 2 G.P.M.

with pump setting of 30 feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
SPACE	0	12		
LIMESTONE	12	34	32	FRESH

For what purpose(s) is the water to be used? HOUSE

Is well on upland, in valley, or on hillside?

Drilling or Boring Firm F P SPARKS

Address STITTSVILLE

Licence Number —

Name of Driller or Borer C H SPARKS

Address

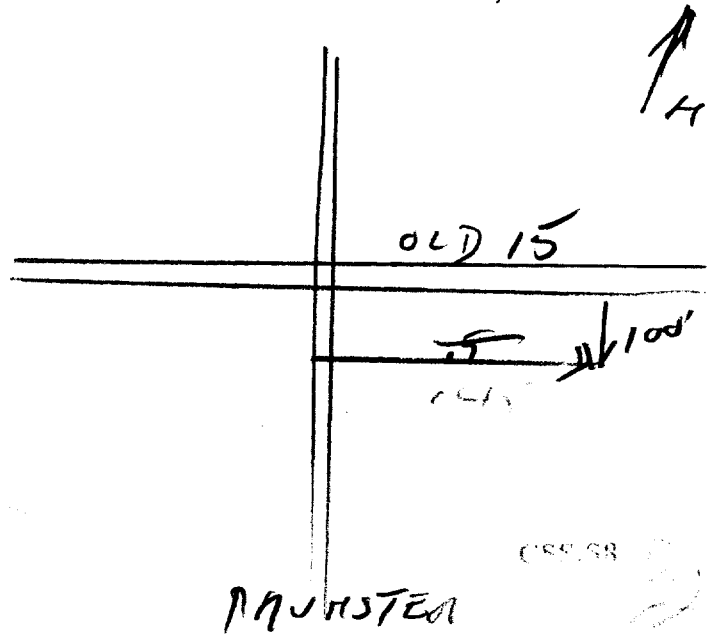
Date DEC 8/66

F. P. Sparks

(Signature of Licensed Drilling or Boring Contractor)

Location of Well

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



Form 7 15M-60-4138

OWRC COPY

Fy 56' 310/4e C

UTM | 18 Z | 4 2 3 6 0 0 E
| 5 R | 5 0 0 4 8 3 0 N

Elev. | 4 R | 0 4 5 0 | The Ontario Water Resources Commission Act, 1957

Basin | 2 1 5 X | | |

15 No. 2558

WATER WELL RECORD

County or District Carleton Township, Village, Town or City Gaulbourn

[redacted] Lot 11 Date completed 30 (day) Dec. (month) 1960 (year)

[redacted] ss Stittsville Ont

Casing and Screen Record

Inside diameter of casing 4"
Total length of casing 12'
Type of screen —
Length of screen —
Depth to top of screen —
Diameter of finished hole 4"

Pumping Test

Static level 12'
Test-pumping rate 5' G.P.M.
Pumping level 15'
Duration of test pumping ½ hrs
Water clear or cloudy at end of test clear
Recommended pumping rate 5' G.P.M.
with pumping level of 15'

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, sulphur)
Red Sand	0	12'			
Gray lime Stone	12'	43'	43'	30	Fresh

Water Record

For what purpose(s) is the water to be used?
House

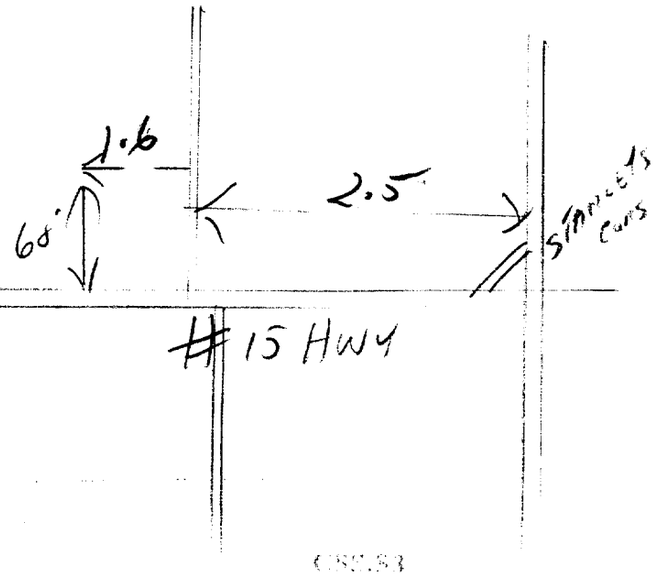
Is well on upland, in valley, or on hillside?
hillside

Drilling Firm F P Sparks
Address Stittsville Ont

Licence Number
Name of Driller Clayton H Sparks
Address Stittsville Ont
Date Dec. 30 1960
F. P. Sparks
(Signature of Licensed Drilling Contractor)

Location of Well

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



31G/4e

UTM 18 Z 412 3 9 4 10 E

CON 5 R 15 10 10 5 1 1 1 10 N

Elev. 404 R 12 10 4 3 3

Basin 25 County or District Carleton

The Ontario Water Resources Commission Act

WATER WELL RECORD

GROUND WATER BRANCH
15 No 2559
AUG 27 1963
ONTARIO WATER RESOURCES COMMISSION

Township, Village, Town or City GOULBOURN

Lot #12 Date completed 14 (day) August (month) 1963 (year)

[redacted] ess RR#1 Stittsville Ontario

Casing and Screen Record

Inside diameter of casing	4"
Total length of casing	11'
Type of screen	—
Length of screen	—
Depth to top of screen	—
Diameter of finished hole	4"

Pumping Test

Static level	4' fill up over night
Test-pumping rate	20 G.P.M.
Pumping level	74' ↓
Duration of test pumping	20 min
Water clear or cloudy at end of test	CLEAR
Recommended pumping rate	10 G.P.M.
with pump setting of	74' feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
Dug well from	0	52		
Black Limestone	52'	80'		
			70'	Fresh

For what purpose(s) is the water to be used? HOUSE

Is well on upland, in valley, or on hillside? UPLAND

Drilling or Boring Firm Delmar S. Hueston

Address RR#2 Stittsville Ont.

Licence Number #1017

Name of Driller or Borer same

Address "

Date Aug 14/1963

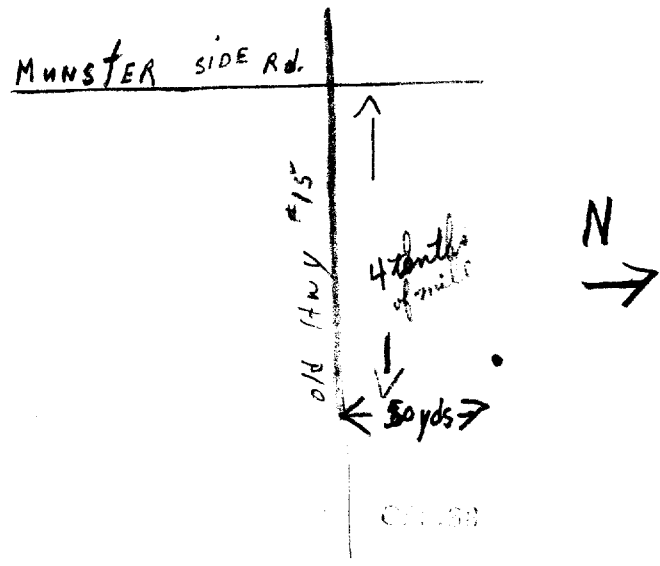
Delmar S. Hueston
(Signature of Licensed Drilling or Boring Contractor)

Form 7 10M-62-1152

OWRC COPY

Location of Well

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



314/4e

UTM | 18 | Z | 412410 E | 5010512 N

Elev. | 4 | R | 01410

Basin | 25 |

ONTARIO

The Well Drillers Act

Department of Mines, Province of Ontario

15 No 2560

RECEIVED
JAN - 4 1952
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

Water Well Record

[redacted] Township, ~~Village, Town or City~~ Gowganda

[redacted] Town or City) Stratton Ont.

Stratton Ont.

Date Completed Nov 19 1951 (day) (month) (year) Cost of Well (excluding pump) $18.2.00

Pipe and Casing Record

Casing diameter(s) 4"

Length(s) of casing(s) 15'

Type of screen

Length of screen

Distance from top of screen to ground level

Is well a gravel-wall type? Gravel

Pumping Test

Date

Static level 15'

Pumping level 15'

Pumping rate 2 1/2 g.p.m.

Duration of test 1/2 hr.

Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) fresh

Quality (hard, soft, contains iron, sulphur, etc.) hard

Appearance (clear, cloudy, coloured) clear

For what purpose(s) is the water to be used? house

How far is well from possible source of contamination? 100 yd.

What is the source of contamination? Outside closet

Enclose a copy of any mineral analysis that has been made of water

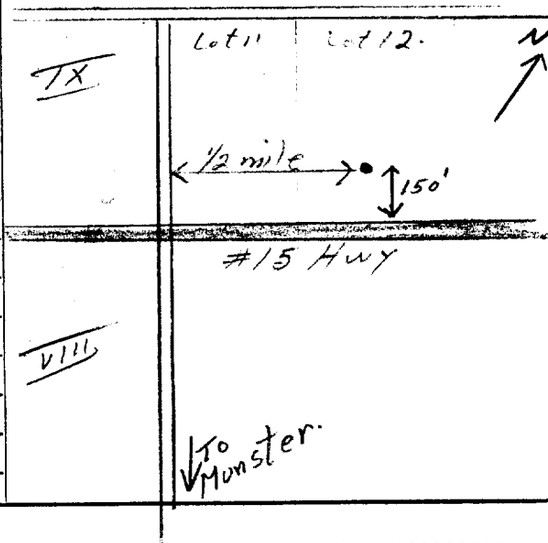
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
15' 32	fresh	32'

Well Log

Overburden and Bedrock Record	From	To
15 feet gravel and 37 feet rock formation	0 ft.	....ft.
Gravel	0	15
Limestone rock	15	52

Location of Well

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



Situation: Is well on upland, in valley, or on hillside? upland

Drilling Firm. G. R. Sparks & Son

Address. Stratton Ont

Name of Driller. Same Address. same

Date Licence Number 396

G. R. Sparks
Signature of Licensee

FORM 5

CSS.58

31G/4e

UTM | 18 | Z | 412411 | 6 10 | E
| 5 | R | 5010 | 5130 | 10 | N
Elev. | 40 | R | 01 | 4X3 | 10 |
Basin | 20S | | 12 |

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

15 No 2561

GROUND WATER BRANCH
DEC 6 1960
ONTARIO WATER RESOURCES COMMISSION

Water-Well Record

[redacted] Township, Village, Town or City Gore Bay
Village, Town or City)
Address
Date completed (day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 4"
Length(s) 12'
Type of screen
Length of screen

Pumping Test

Static level 6
Pumping rate 6
Pumping level 10
Duration of test 1 HR

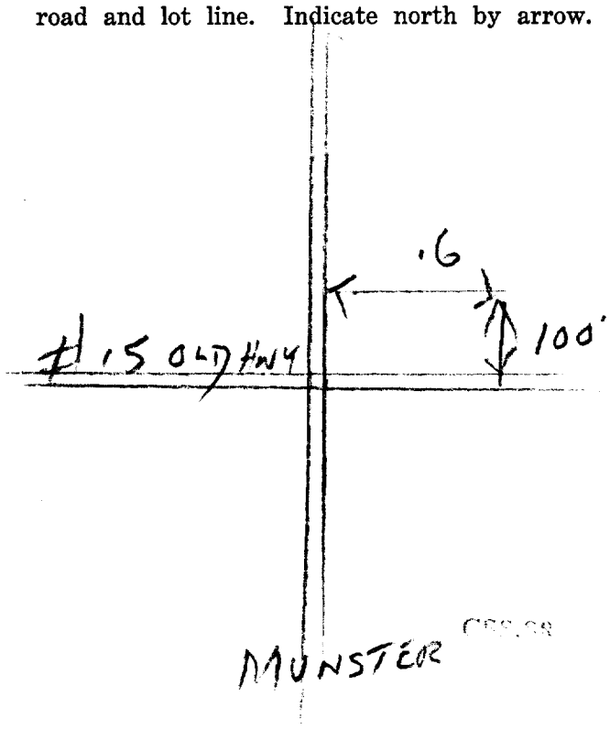
Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
SHALEY ROCK	0	12			
GREY LIMESTONE	12	44	35-44	38	FRESH

For what purpose(s) is the water to be used?
NEW HOME
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside?
Drilling firm F P SPARKS
Address ST. [illegible]
Name of Driller CLAYTON H SPARKS
Address
Licence Number
I certify that the foregoing statements of fact are true.
Date Nov 29 C. P. Sparks
Signature of Licensee

Location of Well

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



Form 5

31G/4E

UTM 1 8 Z 4 2 3 9 8 0 E
05 R 5 0 0 5 1 4 0 N
Elev. 04 R 0 4 3 8
Basin 2 5

The Ontario Water Resources Commission Act

WATER WELL RECORD

GROUND WATER BRANCH 15 No 2562
AUG 30 1961
ONTARIO WATER RESOURCES COMMISSION

County or District: CARLETON — Township, Village, Town or City: Goulbourn

Con. #9 — Lot PART 12 — Date completed 4 (day) Aug. (month) 61 (year)

[redacted]ress RR#1 Stittsville Ont.

Casing and Screen Record

Inside diameter of casing	4"
Total length of casing	13 ft. 7."
Type of screen	—
Length of screen	—
Depth to top of screen	—
Diameter of finished hole	4"

Pumping Test

Static level	20'
Test-pumping rate	5 G.P.M.
Pumping level	30'
Duration of test pumping	1 HR.
Water clear or cloudy at end of test	CLEAR
Recommended pumping rate	5 G.P.M.
with pump setting of	50' feet below ground surface

Well Log / Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
CLAY	0	3'		
SHALE	3'	5'		
FINE GRAVEL	5'	7½'		
BLACK LIMESTONE	7½"	52'	48'	FRESH

For what purpose(s) is the water to be used? HOUSE

Is well on upland, in valley, or on hillside? UPLAND

Drilling or Boring Firm: Delmar S. Hueston

Address: RR#1 Stittsville

Licence Number: #355

Name of Driller or Borer: SAME

Address: SAME

Date: Aug 4, 1961

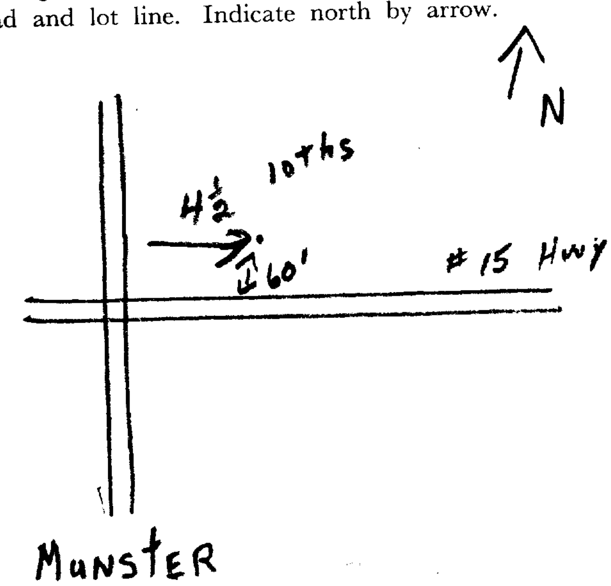
Delmar S. Hueston
(Signature of Licensed Drilling or Boring Contractor)

Form 7 15M Sets 60-5930

OWRC COPY

Location of Well

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



MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

31/G4

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

11 | 1515762 | MUNICIP. 15003 | CON. CON | 08

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Carleton	Goulburn	8	012

[redacted]

137 Bradford St. Ottawa, Ontario

DATE COMPLETED: DAY 05 MO 11 YR 76

HING 005075 | RC 5 | ELEVATION 0372 | RC 5 | BASIN CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
brown	clay			0	8
grey	limestone		soft	8	82
grey	limestone	green streaks	broken	82	85

31 | 0008605 | 00821585 | 00852571

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0083	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	0	0025
06			25	85
06				0085

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	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	0030 GPM	01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
015 FEET	045 FEET	1 ☒ PUMPING 2 ☐ RECOVERY	045 FEET	045 FEET	045 FEET	045 FEET

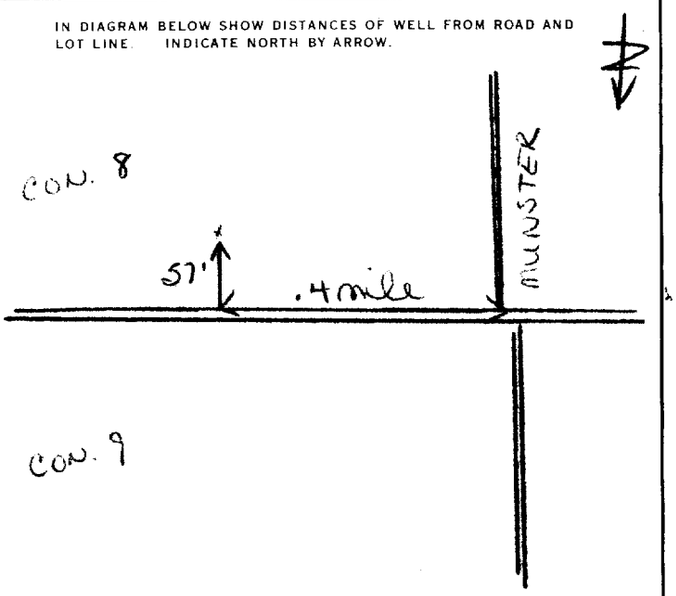
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	055 FEET	0005 GPM

GPM./FT. SPECIFIC CAPACITY

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 54: 1

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 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING ☐ OTHER 9 ☐ NOT USED

METHOD OF DRILLING 57: 5

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	LICENCE NUMBER
Capital Water Supply Ltd.	1558

ADDRESS: Box 490 Stittsville, Ontario

NAME OF DRILLER OR BORER	LICENCE NUMBER
D. McDougall	

SIGNATURE OF CONTRACTOR: Walter Kwarak — SUBMISSION DATE: DAY 9 MO 11 YR 76

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 1558 | DATE RECEIVED 63-66: 09 12 76 | 80

DATE OF INSPECTION: 17/6/77 | INSPECTOR: PA

REMARKS: CSS.83 | P L | WI

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 MOE 07-091

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

Ontario

WATER WELL RECORD

d.P.M.

31 9/4

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

11 | 1515845 | MUNICIP 15003 | CON. CON | 09

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT 011
[redacted]	Goulburn	9	

[redacted] # 1, Stittsville, Ontario

DATE COMPLETED 48-53: DAY 12 MO 02 YR 77

G 05000 | RC 5 | ELEVATION 0435 | RC 5 | BASIN CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
brown	sand	gravel	packed	0	8
grey	limestone	black layers of soft limestone	med	8	98

31 | 00086 28 11 79 | 00982 1585

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0084	1 ☒ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
0095	1 ☒ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼ 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0024
5 7/8	4 ☒ OPEN HOLE		24	98
06	4 ☒ OPEN HOLE			0098

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.)

71 PUMPING TEST

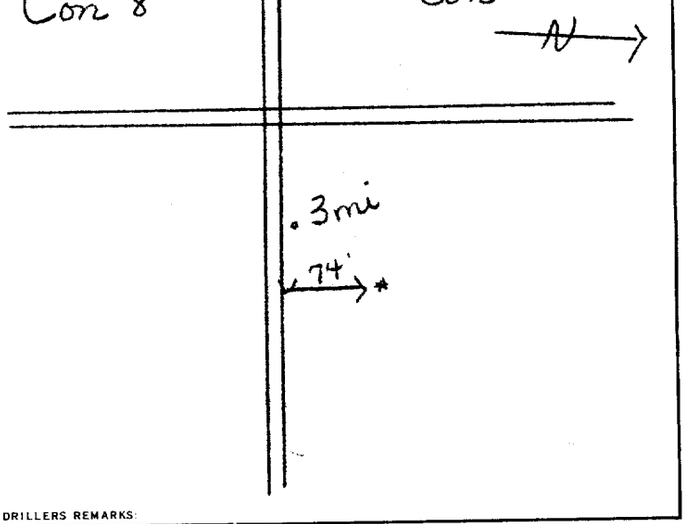
PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER
PUMPING RATE: 0010 GPM
DURATION OF PUMPING: 01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
020 FEET	065 FEET		065 FEET	065 FEET	065 FEET	065 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: 0005 GPM
GPM. / FT. SPECIFIC CAPACITY

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 54: 1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED — 1

WATER USE 55-56: 1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED — 01

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

CONTRACTOR

NAME OF WELL CONTRACTOR: Capital Water Supply Ltd. | LICENCE NUMBER: 1558
ADDRESS: Box 490, Stittsville, Ontario.
NAME OF DRILLER OR BORER: Walter Kavanagh | LICENCE NUMBER:
SIGNATURE OF CONTRACTOR: Walter Kavanagh | SUBMISSION DATE: DAY 14 MO. 2 YR. 77

MINISTRY OF THE ENVIRONMENT COPY

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 1558 | DATE RECEIVED 63-68: 080377 | 80
DATE OF INSPECTION: June 21/77 | INSPECTOR: [illegible] PS
REMARKS:
P PS
WI

FORM 7 MOE 07-091

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

31 G/4

Ontario S.P.M.

1. PRINT ONLY IN SPACES PROVIDED
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11 | 1515932 | MUNICIP. 15003 | CON. CON 09

COUNTY OR DISTRICT | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Faulkburn | CON., BLOCK, TRACT, SURVEY, ETC.: 9 | LOT: 012

[redacted] R. # 1 Stittsville, Ontario | DATE COMPLETED: DAY 24 MO 05 YR 77

NG 05100 | RC 5 | ELEVATION 0430 | RC 5 | BASIN CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
		Previously drilled		0	98
grey	limestone			98	110

31 | 0098 24 | 0110215

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0108	1 ☒ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. - INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
5 7/8	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0101
06			101	110
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE			0110
05	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.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER | PUMPING RATE: 0015 GPM | DURATION OF PUMPING: 02 HOURS 00 MINS

WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
042 FEET	045 FEET	045 FEET	045 FEET	045 FEET	045 FEET

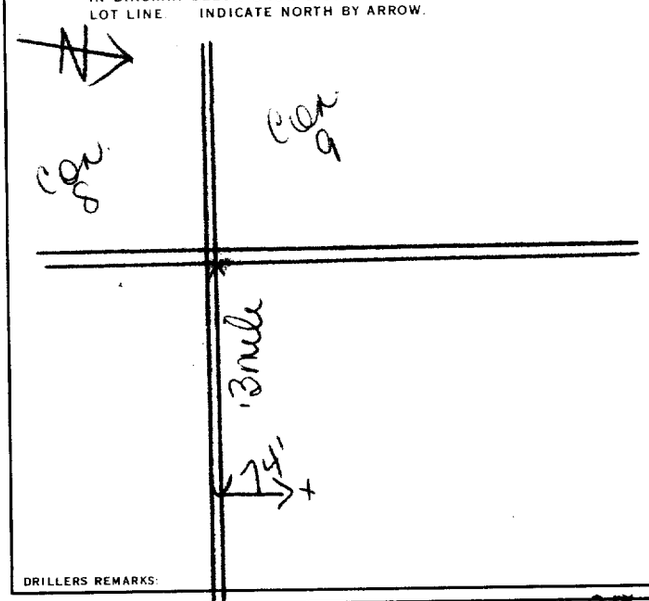
IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING: 060 FEET | RECOMMENDED PUMPING RATE: 005 GPM

GPM./FT. SPECIFIC CAPACITY

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 1
1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE 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 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: Capital Water Supply Ltd. | LICENCE NUMBER: 1558

ADDRESS: Box 490 Stittsville, Ontario

NAME OF DRILLER OR BORER: B. Kavanagh | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: [signature] | SUBMISSION DATE: DAY 26 MO. 5 YR. 77

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 1558 | DATE RECEIVED 06 06 77

DATE OF INSPECTION 14-6-77 | INSPECTOR [signature] 77

REMARKS:

P 1

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FORM 7 MOE 07-091

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

3194

D.P.M.

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

11 | 1515941 | MUNICIP 15003 | CON. CON | 08

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Carleton	Goulburn	8	011 12

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Cavanagh Constr.	Ashton, Ontario	DAY 30 MO 05 YR 77

21 | UTM ZONE 18 | EASTING 423800 | NORTHING 5004850 | RC 5 | ELEVATION 0360 | RC 5 | BASIN CODE 216

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
grey	crushed rock	fill	loose	0	1
brown	sand	broken rock	packed	1	4
grey	limestone		medium hard	4	30
grey	limestone	black streaks	medium soft	30	40
black	limestone		very soft	40	75
green	sandstone		medium soft	75	90

31 | 0001212017 7 | 0004628127 1 | 0030215 73 | 0040215 85 | 0075815 90 85 | 0090414 885

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0088	1 ☐ FRESH 3 ☒ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼ 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE	188	0	0024
6¼	4 ☒ OPEN HOLE		24	90
06	4 ☒ OPEN HOLE			0090

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.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER | PUMPING RATE: 0020 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
048 FEET	048 FEET		048 FEET	048 FEET	048 FEET	048 FEET

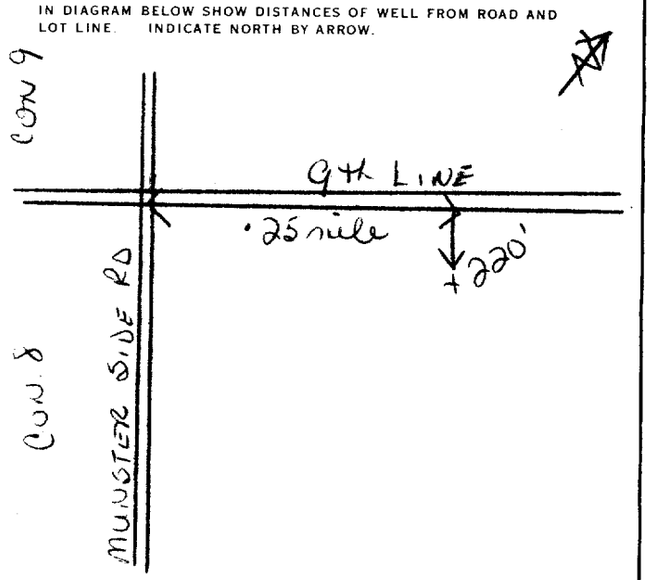
IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: – FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING: 065 FEET | RECOMMENDED PUMPING RATE: 0005 GPM

50-53 ——•—— GPM./FT. SPECIFIC CAPACITY

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 54: 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 ☒ 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: Capital Water Supply Ltd. | LICENCE NUMBER: 1558

ADDRESS: Box 490 Stittsville, Ontario

NAME OF DRILLER OR BORER: J. Moore | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: Walter Cavanagh | SUBMISSION DATE: DAY 2 MO. 6 YR. 77

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 1558 | DATE RECEIVED 63-68: 070677

DATE OF INSPECTION: Aug 11/77 | INSPECTOR: Hill

REMARKS:

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MINISTRY OF THE ENVIRONMENT COPY

FORM 7 MOE 07-091

Ministry of the Environment

Ontario

The Ontario Water Resources Act

WATER WELL RECORD

31G4e

1. PRINT ONLY IN SPACES PROVIDED
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11 — 1516554 — MUNICIP. 15003 — CON. CON — 09

COUNTY OR DISTRICT: Carleton — TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Goulbourn — CON., BLOCK, TRACT, SURVEY, ETC.: Con 9, — LOT: Pt 12

[redacted] Box 630 Richmond Ont. — DATE COMPLETED: DAY 11 MO 05 YR 78

05300 — 4 — ELEVATION 6430 — 27 — 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
grey	clay			0	4
grey	limestone			4	58

31 — 0004205 — 0058215

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0050	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
0058	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
06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0020
	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	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	0015 GPM	01 HOURS 00 MINS

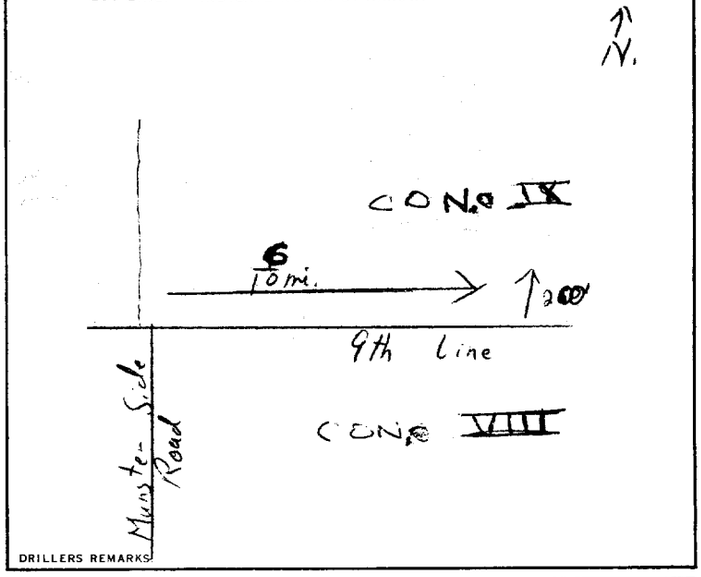
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
002 FEET	025 FEET	1 ☒ PUMPING 2 ☐ RECOVERY	025 FEET	025 FEET	025 FEET	025 FEET

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

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☒ SHALLOW ☐ DEEP	025 FEET	0005 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

1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE 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 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: Henry Mans Well Drilling — LICENCE NUMBER: 3644

ADDRESS: Box 326 Richmond Ont.

NAME OF DRILLER OR BORER: Henry Mans — LICENCE NUMBER:

SIGNATURE OF CONTRACTOR — SUBMISSION DATE: DAY 15 MO 5 YR 78

OFFICE USE ONLY

DATA SOURCE 1 — CONTRACTOR 3644 — DATE RECEIVED 12078 ~~12078~~

DATE OF INSPECTION 15/5/79 — INSPECTOR Km. J.P.I.

REMARKS:

FORM NO. 0506—4—77

MINISTRY OF THE ENVIRONMENT COPY

3164e

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
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11 1517686 MUNICIP 15003 CON. CON 09

COUNTY OR DISTRICT Carleton | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE Torbourn | CON. BLOCK, TRACT, SURVEY, ETC. Con 9 | LOT 012

[redacted] Stittsville Ont.

DATE COMPLETED DAY 21 MO 09 YR 81

ELEVATION 0005199 RC 4 | ELEVATION 0440 RC 4 | BASIN CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
grey	gravel			0	9
grey	limestone		shaly	9	87

31 0009211 0087215182

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0086	1 ☒ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0022
06	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		22	0087
	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.)

71 PUMPING TEST

PUMPING TEST METHOD 1 ☒ PUMP 2 ☐ BAILER | PUMPING RATE 0015 GPM | DURATION OF PUMPING 01 HOURS 00 MINS

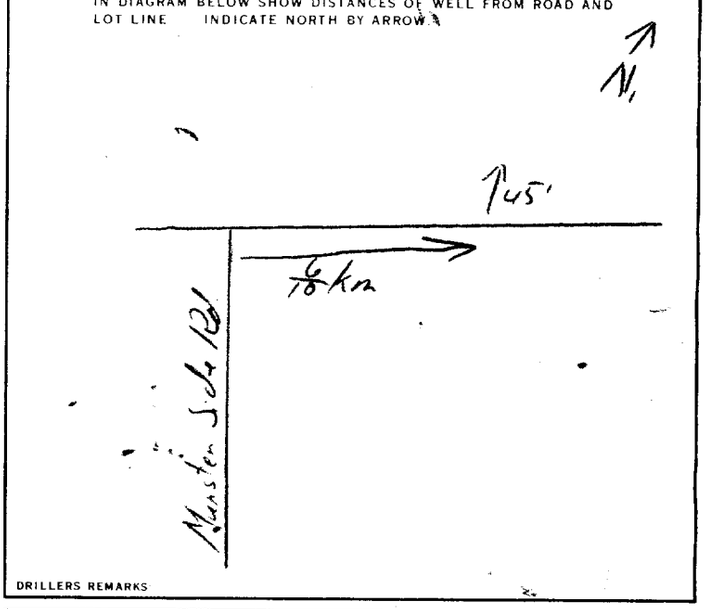
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☒ PUMPING 2 ☐ RECOVERY) 15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
047 FEET	080 FEET	080 FEET	080 FEET	080 FEET	080 FEET

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 080 FEET | RECOMMENDED PUMPING RATE 0010 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 1
1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED POOR QUALITY 7 ☐ UNFINISHED

WATER USE 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 5
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 Henry Mains Well Drilling | LICENCE NUMBER 3644

ADDRESS Box 326, Richmond Ont.

NAME OF DRILLER OR BORER Henry Mains | LICENCE NUMBER

SIGNATURE OF CONTRACTOR Henry Mains | SUBMISSION DATE DAY 23 MO 9 YR 81

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 3644 | DATE RECEIVED 12 01 82

DATE OF INSPECTION | INSPECTOR

REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

3164e

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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

11 1518141 MUNICIP 15003 CON. CON 108

COUNTY OR DISTRICT: OTTAWA CARLETON
TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: GOULBOURN
CON., BLOCK, TRACT, SURVEY, ETC.: 9
LOT: 012
[redacted] x 744 STITTSVILLE
DATE COMPLETED: DAY 10 MO 02 YR 83
UTM: 005299 RC 4 ELEVATION 0420 RC 4 BASIN CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BROWN	EARTH	FILL	LOOSE	0'	5'
GRAY	LIMESTONE			5'	37'

31 0005C029117 0037215

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0037	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
~~6~~ 6"	1 ☐ STEEL 2 ☐ GALVANIZED 1 ☐ CONCRETE ~~4 ☐ OPEN HOLE~~	1.88	0'	0022
			22'	37'
06	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE			0037
	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

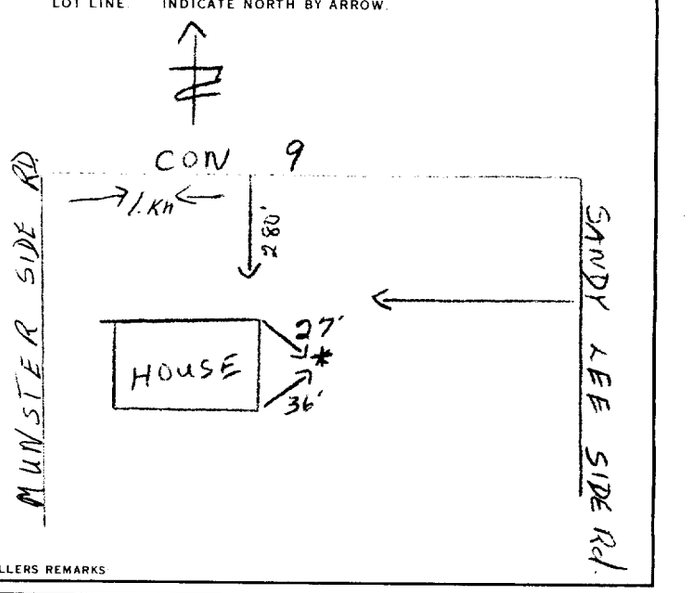
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER
PUMPING RATE: 0007 GPM
DURATION OF PUMPING: 01 HOURS 00 MINS
WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
001' FEET	025 FEET	025 FEET	025 FEET	025 FEET	025 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: 030 FEET
RECOMMENDED PUMPING RATE: 0005 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 1

1 ☒ WATER SUPPLY 5 ☐ ABANDONED, INSUFFICIENT SUPPLY
2 ☐ OBSERVATION WELL 6 ☐ ABANDONED, POOR QUALITY
3 ☐ TEST HOLE 7 ☐ UNFINISHED
4 ☐ RECHARGE WELL

WATER USE 01

1 ☒ DOMESTIC 5 ☐ COMMERCIAL
2 ☐ STOCK 6 ☐ MUNICIPAL
3 ☐ IRRIGATION 7 ☐ PUBLIC SUPPLY
4 ☐ INDUSTRIAL 8 ☐ COOLING OR AIR CONDITIONING
☐ OTHER 9 ☐ NOT USED

METHOD OF DRILLING 1

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

CONTRACTOR

NAME OF WELL CONTRACTOR: M. KAVANAGH & SON — LICENCE NUMBER: 3142
ADDRESS: RR 2 CARLETON PLACE
NAME OF DRILLER OR BORER: MIKE KAVANAGH — LICENCE NUMBER: 3142
SIGNATURE OF CONTRACTOR: Michael Kavanagh — SUBMISSION DATE: DAY 14 MO 2 YR 83

OFFICE USE ONLY

DATA SOURCE 58: 1
CONTRACTOR 59-62: 3142
DATE RECEIVED 63-68: 030383
DATE OF INSPECTION:
INSPECTOR:
REMARKS:

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

3164e

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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

11 1518643 MUNICIP 15003 CON. CON 08

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC	LOT
Ottawa-Carleton	Goulbourn	Conc. 8	012

[redacted] R. # 1; Stittsville, Ont.

DATE COMPLETED DAY 20 MO 10 YR 83

UTM ING 0051 99 | RC 4 | ELEVATION 0430 | RC 4 | BASIN CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Hardpan		Packed	0	7
Gray	Limestone		Medium	7	90

31 0007614 79 | 0090215 78

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0087'	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☒ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE	188	0	0020
6 1/4				
06	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☒ OPEN HOLE		20	0090
6 1/4				
	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.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER

PUMPING RATE: 0010 GPM | DURATION OF PUMPING: 01 HOURS 00 MINS

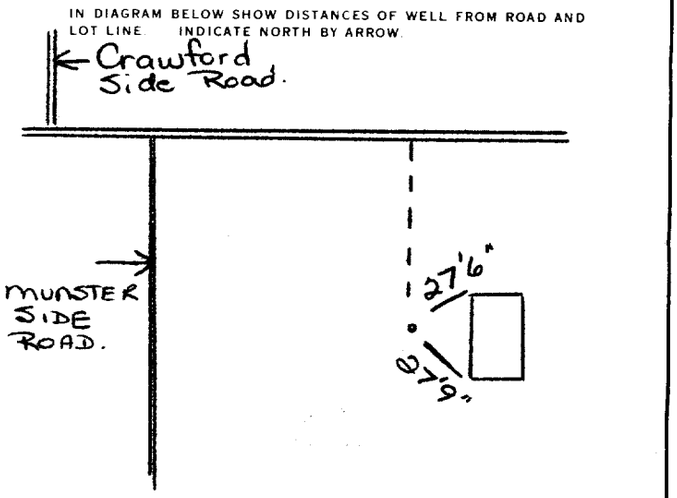
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
048 FEET	060 FEET		060 FEET	060 FEET	060 FEET	060 FEET

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: 070 FEET | RECOMMENDED PUMPING RATE: 0005 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 54: 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 5: 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: Capital Water Supply Ltd. | LICENCE NUMBER: 1558

ADDRESS: Box 490; Stittsville, Ont. K0A 3G0

NAME OF DRILLER OR BORER: W. Kavanagh | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: W. Kavanagh | SUBMISSION DATE: DAY 21 MO. 10 YR. 83

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 1558 | DATE RECEIVED 63-68: 23 11 83

DATE OF INSPECTION | INSPECTOR

REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below) A026096 / A026096

Well Record

Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

- For use in the **Province of Ontario** only. This document is a permanent **legal** document. Please retain for future reference.
- All Sections **must** be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- **All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Ministry Use Only

MUN | CON | LOT

[redacted]

Address of Well Location (County/District/Municipality)	Township	Lot	Concession
Ottawa Carleton 5	Goulbourn	12	9

RR#/Street Number/Name	City/Town/Village	Site/Compartment/Block/Tract etc.
7579 Flewellyn Road	Stittsville	

GPS Reading: NAD 83 | Zone 18 | Easting 42 41 62 | Northing 50 054 99 | Unit Make/Model: Garmin | Mode of Operation: ☐ Undifferentiated ☒ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To
Brown	Sandy Soil	Stones		0	1.82
Brown	Shale			1.82	3.35
Gray	Limestone			3.35	12.19
Green & Red	Shale			12.19	35.96

Hole Diameter

Depth From	Depth To (Metres)	Diameter (Centimetres)
0	6.40	22.75
6.40	35.96	15.23

Water Record

Water found at ___ Metres / Kind of Water

- 32. m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other not tested
- ___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
- ___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

After test of well yield, water was: ☒ Clear and sediment free ☐ Other, specify

Chlorinated ☒ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To (Metres)
Casing				
15.86	☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	.48	+ .45	6.40
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.		
No Casing or Screen				
15.23	☒ Open hole		6.40	35.96

Test of Well Yield

Pumping test method: submersible

Pump intake set at - (metres) 30.47

Pumping rate - (litres/min) 54.6

Duration of pumping 2 hrs + ___ min

Final water level end of pumping 14.93 metres

Recommended pump type. ☐ Shallow ☒ Deep

Recommended pump depth. 22.85 metres

Recommended pump rate. 45.5 (litres/min)

If flowing give rate - (litres/min)

If pumping discontinued, give reason.

	Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level		13.94		
1	1	14.64	1	13.84
2	2	14.76	2	13.85
3	3	14.81	3	13.89
4	4	14.83	4	13.96
5	5	14.85	5	13.96
10	10	14.87	10	13.96
15	15	14.89	15	13.96
20	20	14.88	20	13.95
25	25	14.89	25	13.95
30	30	14.90	30	13.95
40	40	14.90	40	13.95
50	50	14.91	50	13.95
60	60	14.91	60	13.95

Plugging and Sealing Record

☒ Annular space ☐ Abandonment

Depth set at - From	Depth set at - To (Metres)	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
6.40	0	Grouted - Bentonite Slurry	.132m3

Method of Construction

☐ Cable Tool ☒ Rotary (air) ☐ Diamond ☐ Digging
☐ Rotary (conventional) ☒ Air percussion ☐ Jetting ☐ Other
☐ Rotary (reverse) ☐ Boring ☐ Driving

Water Use

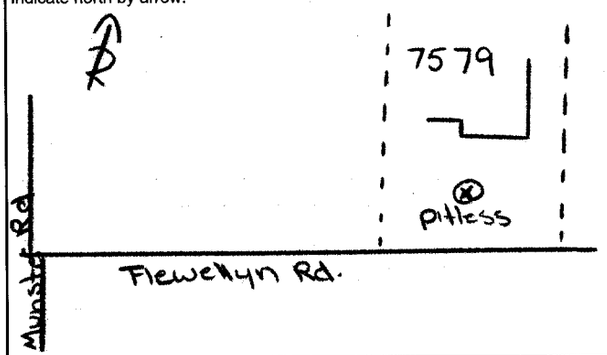
☒ Domestic ☐ Industrial ☐ Public Supply ☐ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

☒ Water Supply ☐ Recharge well ☐ Unfinished ☐ Abandoned, (Other)
☐ Observation well ☐ Abandoned, insufficient supply ☐ Dewatering
☐ Test Hole ☐ Abandoned, poor quality ☐ Replacement well

Location of Well

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



Audit No. Z 26062

Date Well Completed: YYYY 2005 MM 7 DD 12

Was the well owner's information package delivered? ☒ Yes ☐ No

Date Delivered: YYYY 2005 MM 7 DD 13

Well Contractor/Technician Information

Name of Well Contractor: Capital Water Supply Ltd.

Well Contractor's Licence No.: 1558

Business Address (street name, number, city etc.): P.O. Box 490 Stittsville, Ontario K2S 1A6

Name of Well Technician (last name, first name): Miller; Stephen

Well Technician's Licence No.: T0097

Signature of Technician/Contractor: x [signature]

Date Submitted: YYYY 2005 MM 7 DD 14

Ministry Use Only

Data Source | Contractor 1558

Date Received: YYYY SEP 12 2005 MM DD

Date of Inspection: YYYY MM DD

Remarks

Well Record Number

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☐ Well Owner's Copy ☐ *Cette formule est disponible en français*

Ontario

Ministry of the Environment, Conservation and Parks

Measurements recorded in: ☑ Metric ☐ Imperial

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

A282456

Tag#:A282456

Well Record

Regulation 903 Ontario Water Resources Act

5-24721 Page ____ of ____

[redacted]

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
7598 Flewellyn Rd			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Stittsville	Ontario	K2S1B6

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	424113	5065304		

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
BRN	top soil		soft	0	0.31
BRN	sand	silt	soft	0.31	1.52
GRY	limestone	shale	layered	1.52	6.7

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
0	3.35	bentonite	
3.35	6.7	filter sand	

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	To
5.20	PVC	.390	0	3.66

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
6.05	PVC	10	3.66	6.7

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

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	3.1	11.43
3.1	6.7	8.89

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.

See Map
MW3

Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Drilling Group	7294

Business Address (Street Number/Name)	Municipality
129 Kingwood Dr.	Stittsville

Province	Postal Code	Business E-mail Address
ON	L4A8G1	wreed@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
9059410794	McCoy, James

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
7101		2020/03/30

Well owner's information package delivered ☐ Yes ☐ No

Date Package Delivered YYYY MM DD

Date Work Completed 2020/03/20

Ministry Use Only

Audit No. Z324267

Received 10 2020

0506E (2018/12)

Ministry's Copy

THE BACKGROUND IMAGE CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENSE - CITY OF OTTAWA.

LEGEND

[redacted]

0 5m 10m 20m

HORIZONTAL 1:500

[redacted]

exp Services Inc

[redacted]

DATE: JAN 2020	CLIENT: [redacted] 2582448 ONTARIO LTD.	project no. [redacted]
DESIGN: [redacted] CHECKED: [redacted]		scale: 1:500
DRAWN BY: [redacted]	TITLE: 7598 FLEWELLYN RD. - SITE PLAN	FIG 2

C-7241
Z-324267

FEB 19 2020

7364348

Ontario — Ministry of the Environment, Conservation and Parks

Measurements recorded in: ☐ Metric ☒ Imperial

Well Tag No. *(Place Sticker and/or Print Below)* A296273

Well Record

Regulation 903 Ontario Water Resources Act

5-25224 Page ____ of ____

[redacted] 8784884 CANADA INC. C/O

Address of Well Location (Street Number/Name)	Township	Lot	Concession
7609 Flewellyn Road			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa (Stittsville)	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	424007	5005342		

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
BLK	Topsoil		Soft	0	1
BRN	Coarse Sand	Gravel Silt	Soft loose	1	6
GRY	Limestone		hard	6	20

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
+3	1	monument Casing	
1	9	bentonite	
9	20	Filter Sand	

Method of Construction

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

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
2.067	PVC	.154	+3	10

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
2.375	PVC	10	10	20

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

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	

Water Details

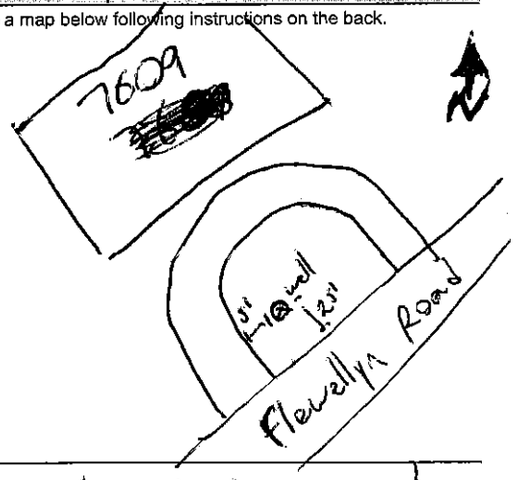
Water found at Depth (m/ft)	Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	7	4.5
7	20	3

Map of Well Location

Please provide a map below following instructions on the back.



Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Drilling Group	7214

Business Address (Street Number/Name)	Municipality
129 Ringwood Dr	Stittsville

Province	Postal Code	Business E-mail Address
ON	K2A3G1	wrecords@stratagroup.ca

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
9055940799	McKay James

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
7107		

Comments: EXP General Contractor On Site

Well owner's information package delivered ☐ Yes ☐ No

Date Package Delivered

Date Work Completed 2020 05 25

Ministry Use Only

Audit No. Z333418

Received

Ministry's Copy

7364349

Ontario — Ministry of the Environment, Conservation and Parks

Well Tag#: A296272 (Below) A296272

Well Record

Regulation 903 Ontario Water Resources Act

6-25224 Page _____ of _____

Measurements recorded in: ☐ Metric ☒ Imperial

[redacted]

Address of Well Location (Street Number/Name): 7617 Flewellyn Road

Township | Lot | Concession

County/District/Municipality | City/Town/Village: Ohaver (Stittsville) | Province: Ontario | Postal Code

UTM Coordinates: NAD 83 Zone 18 Easting 423996 Northing 5005734

Municipal Plan and Sublot Number | Other

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	To
BLK	Topsoil		Soft loose	0	1
BRN	Coarse Sand	Gravel S.H.	Soft loose	1	6
GRY	Clay	S.H. Gravel	hard dense	6	7
GRY	Limestone		hard	7	20

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
+3	1	Monument Casing	
1	9	Hole plug	
9	20	Filter Sand	

Method of Construction

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

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	To
2.067	PVC	.154	+3	10

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
2.375	PVC	10	10	20

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)	Gas	Kind of Water: Fresh / Untested / Other, specify
	☐	
	☐	
	☐	

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	8	4.5
8	20	3

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)

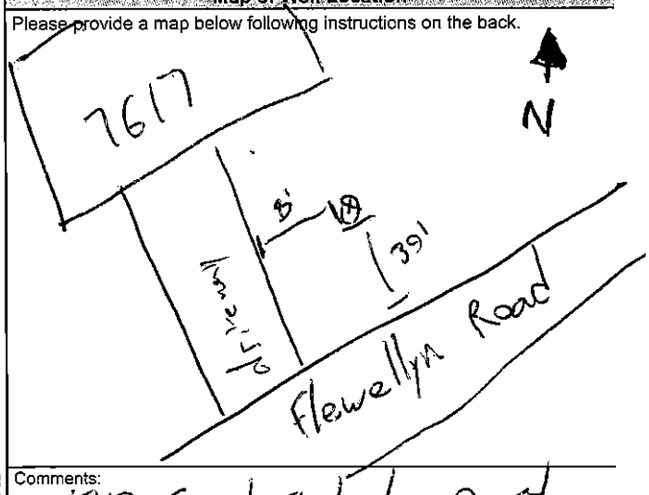
Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

Draw Down Time (min)	Water Level (m/ft)	Recovery Time (min)	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: EXP General Contractor On Site

Well Contractor and Well Technician Information

Business Name of Well Contractor: Strata Drilling Group | Well Contractor's Licence No.: 7241

Business Address (Street Number/Name): 129 Ringwood Dr | Municipality: Stouffville

Province: ON | Postal Code: L4A8C1 | Business E-mail Address: wrecords@stratasoil.com

Bus. Telephone No. (inc. area code): 9057940791 | Name of Well Technician (Last Name, First Name): McCoy, James

Well Technician's Licence No.: 7107 | Signature of Technician and/or Contractor | Date Submitted: YYYY MM DD

Well owner's information package delivered ☐ Yes ☐ No

Date Package Delivered: YYYY MM DD

Date Work Completed: 2020 05 25

Ministry Use Only

Audit No. Z338146

AUG 17 2020

Received

0506E (2018/12)

Ministry's Copy

Ontario

Ministry of the Environment, Conservation and Parks

Measurements recorded in: ☑ Metric ☐ Imperial

Well Tag No. *(Place Sticker and/or Print Below)* A296136

Well Record

Regulation 903 Ontario Water Resources Act

S-25532 Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	8784884 Canada Inc.		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. *(inc. area code)*
7628 Flewellyn Road	Stittsville	ON	K2S1B6	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
7623 Flewellyn Road			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	423987	5065314		

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
BRN	top soil		soft	0	.31
BRN	clay	silt	soft	.31	2.13
GRY	limestone		layered	2.13	6.1

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
0	.31	concrete/monument	
.31	2.74	bentonite	
2.74	6.1	filter sand	

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	To
5.20	PVC	.340	0	3.1

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
6.03	PVC	10	3.1	6.1

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)	☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, *specify*

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	3.1	11.93
3.1	6.1	8.89

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)*

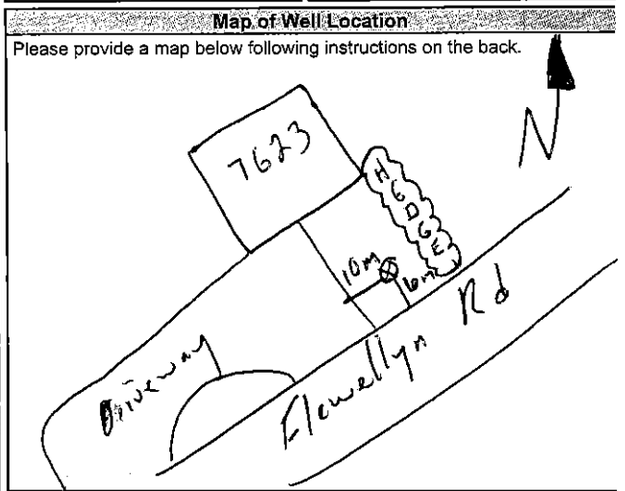
Well production *(l/min / GPM)*

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.
Strata Drilling Group	7241

Business Address (Street Number/Name)	Municipality
129 Ringwood Dr.	Stouffville

Province	Postal Code	Business E-mail Address
ON	L4A8G1	

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)
905 940 7919	Mayo, James

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
7107		2020 09 04

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No		2020 08 14

Ministry Use Only

Audit No. Z338288

Received OCT 06 2020

0506E (2018/12) **Ministry's Copy**

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation
7628 Flewellyn Road
Ottawa, Ontario

DATUM Geodetic

FILE NO. PG5783

REMARKS

HOLE NO. BH 1-21

BORINGS BY Track-Mount Power Auger **DATE** May 21, 2021

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)
GROUND SURFACE						0	129.19
FILL: Brown silty sand with gravel and rock fragments 0.15		SS	1	100	50+		
		RC	1	100	31	1	128.19
		RC	2	100	65	2	127.19
		RC	3	100	100	3	126.19
BEDROCK: Poor to excellent quality, grey limestone interbedded with grey dolostone and shale						4	125.19
- vertical seams from 6.45 to 6.8m and 7.7 to 8.0m depths		RC	4	100	72	5	124.19
		RC	5	100	57	6	123.19
		RC	6	100	68	7	122.19
		RC	7	100	88	8	121.19
						9	120.19
10.06						10	119.19
End of Borehole							

Pen. Resist. Blows/0.3m
● 50 mm Dia. Cone
○ Water Content %

20 40 60 80

Monitoring Well Construction

20 40 60 80 100
Shear Strength (kPa)
▲ Undisturbed △ Remoulded

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation
7628 Flewellyn Road
Ottawa, Ontario

DATUM Geodetic

FILE NO. PG5783

REMARKS

HOLE NO. BH 2-21

BORINGS BY Track-Mount Power Auger **DATE** May 21, 2021

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)
GROUND SURFACE						0	129.38
FILL: Brown silty sand with crushed stone 0.20		SS	1		50+		
		RC	1	100	35	1	128.38
		RC	2	100	40	2	127.38
		RC	3	100	88	3	126.38
BEDROCK: Poor to excellent quality, grey limestone interbedded with grey dolostone and shale		RC	4	100	92	4	125.38
		RC	5	100	66	5	124.38
		RC	6	100	25	6	123.38
		RC	7	100	72	7	122.38
						8	121.38
						9	120.38
10.11						10	119.38
End of Borehole							

Pen. Resist. Blows/0.3m
● 50 mm Dia. Cone
○ Water Content %
20 40 60 80

Monitoring Well Construction

20 40 60 80 100
Shear Strength (kPa)
▲ Undisturbed △ Remoulded

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation
7628 Flewellyn Road
Ottawa, Ontario

DATUM Geodetic

FILE NO. PG5783

REMARKS

HOLE NO. BH 3-21

BORINGS BY Track-Mount Power Auger **DATE** May 25, 2021

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone ○ Water Content %	Monitoring Well Construction
GROUND SURFACE									
FILL: Brown silty sand with gravel and rock fragments 0.15		SS	1	75	50+	0	128.16		
		RC	1	100	81	1	127.16		
		RC	2	100	80	2	126.16		
		RC	3	100	80	3	125.16		
BEDROCK: Good to excellent quality, grey limestone interbedded with grey dolostone and shale		RC	4	100	63	4	124.16		
		RC	5	100	76	5	123.16		
		RC	6	100	89	6	122.16		
		RC	7	100	97	7	121.16		
10.06 End of Borehole						8	120.16		
						9	119.16		
						10	118.16		

Pen. Resist. Blows/0.3m: 20 40 60 80

Water Content %: 20 40 60 80

Shear Strength (kPa): 20 40 60 80 100

▲ Undisturbed △ Remoulded

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation
7628 Flewellyn Road
Ottawa, Ontario

DATUM Geodetic

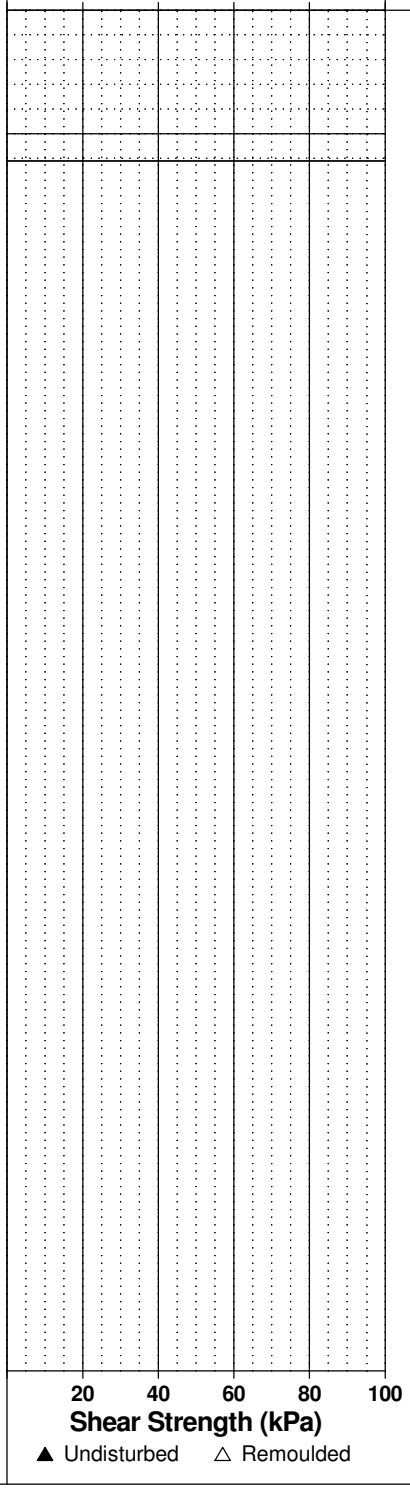
FILE NO. PG5783

REMARKS

HOLE NO. BH 4-21

BORINGS BY Track-Mount Power Auger **DATE** May 25, 2021

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone ○ Water Content %	Monitoring Well Construction
GROUND SURFACE									
TOPSOIL 0.10		AU	1			0	126.71		
GLACIAL TILL: Brown silty sand with gravel, cobbles and boulders, trace clay		SS	2		50+	1	125.71		
1.22									
End of Borehole									
Practical refusal to augering at 1.22m depth									
(BH dry upon completion)									



patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation
7628 Flewellyn Road
Ottawa, Ontario

DATUM Geodetic

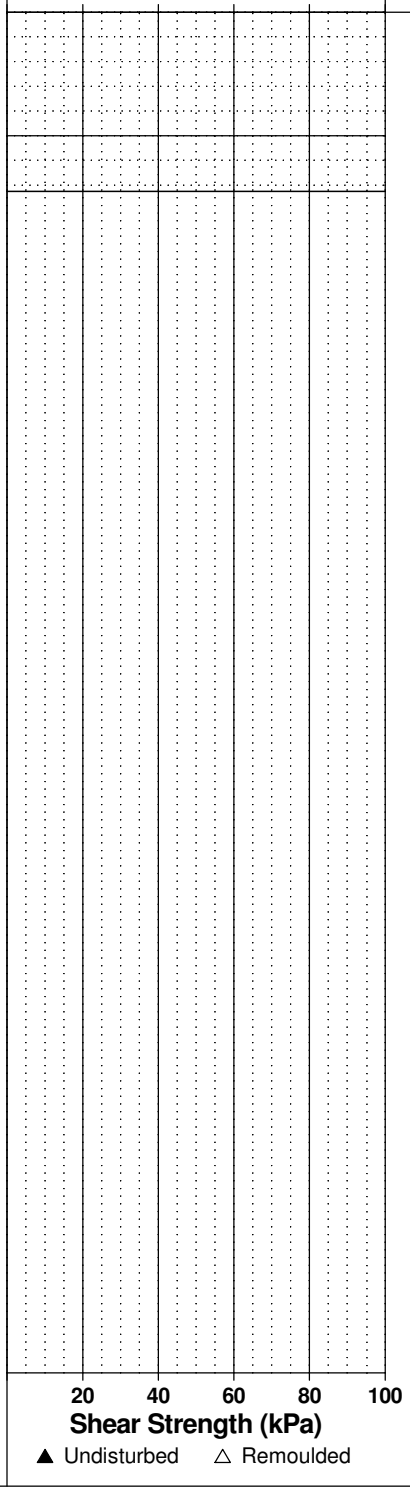
FILE NO. PG5783

REMARKS

HOLE NO. BH 5-21

BORINGS BY Track-Mount Power Auger **DATE** May 25, 2021

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone ○ Water Content %	Monitoring Well Construction
GROUND SURFACE									
TOPSOIL 0.10		AU	1			0	126.70		
GLACIAL TILL: Brown silty sand, some gravel, cobbles and boulders, trace clay		SS	2	33	9	1	125.70		
1.45									
End of Borehole									
Practical refusal to augering at 1.45m depth									
(BH dry upon completion)									



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154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation
7628 Flewellyn Road
Ottawa, Ontario

DATUM Geodetic

FILE NO. PG5783

REMARKS

HOLE NO. BH 6-21

BORINGS BY Track-Mount Power Auger **DATE** May 25, 2021

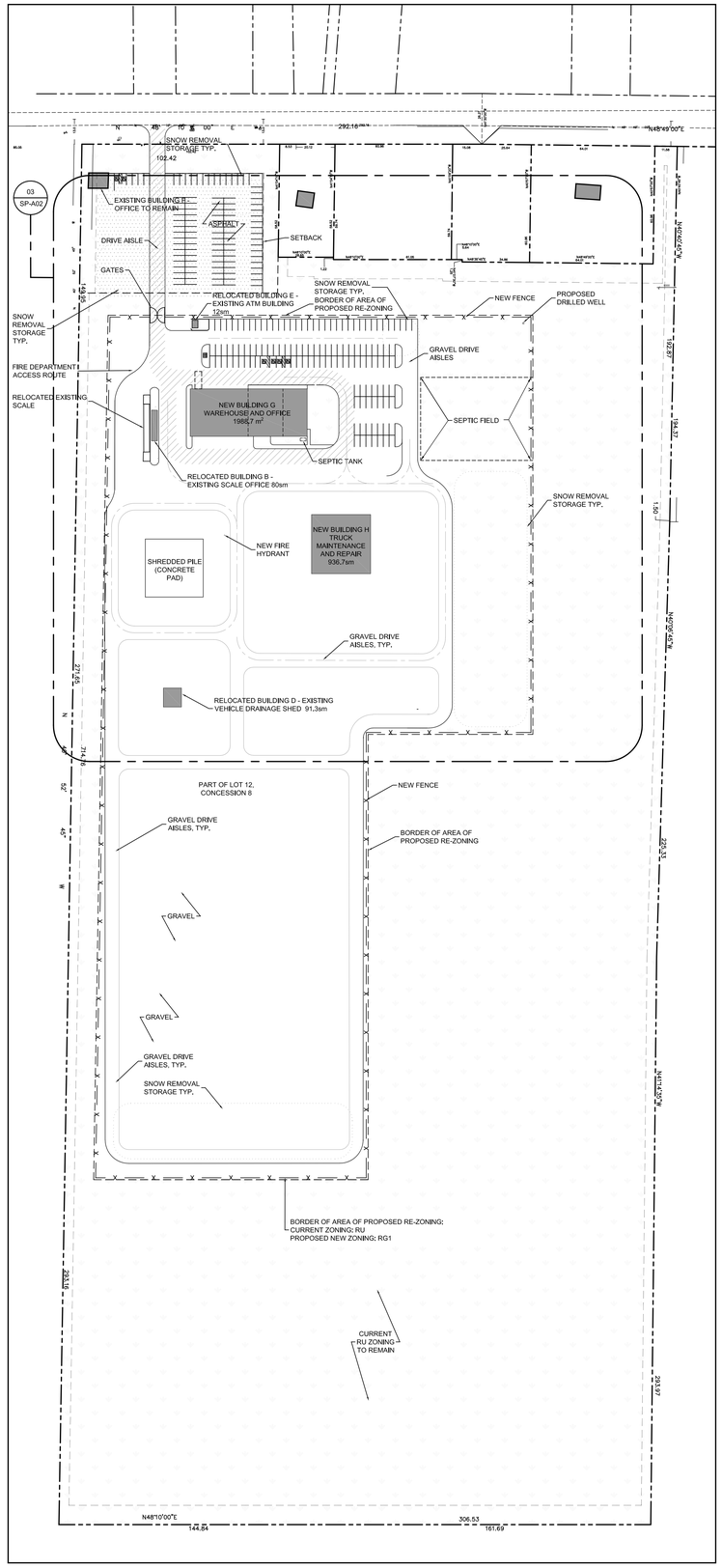
SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone ○ Water Content %	Monitoring Well Construction
GROUND SURFACE									
FILL: Brown silty sand with gravel, trace organics		AU	1			0	126.78		
0.25									
TOPSOIL		AU	2						
0.60									
GLACIAL TILL: Brown silty sand, some gravel, cobbles and boulders, trace clay		SS	2	58	9	1	125.78		
		SS	3	0	36				
						2	124.78		
2.23									
End of Borehole									
Practical refusal to augering at 2.23m depth									
(BH dry upon completion)									

20 40 60 80

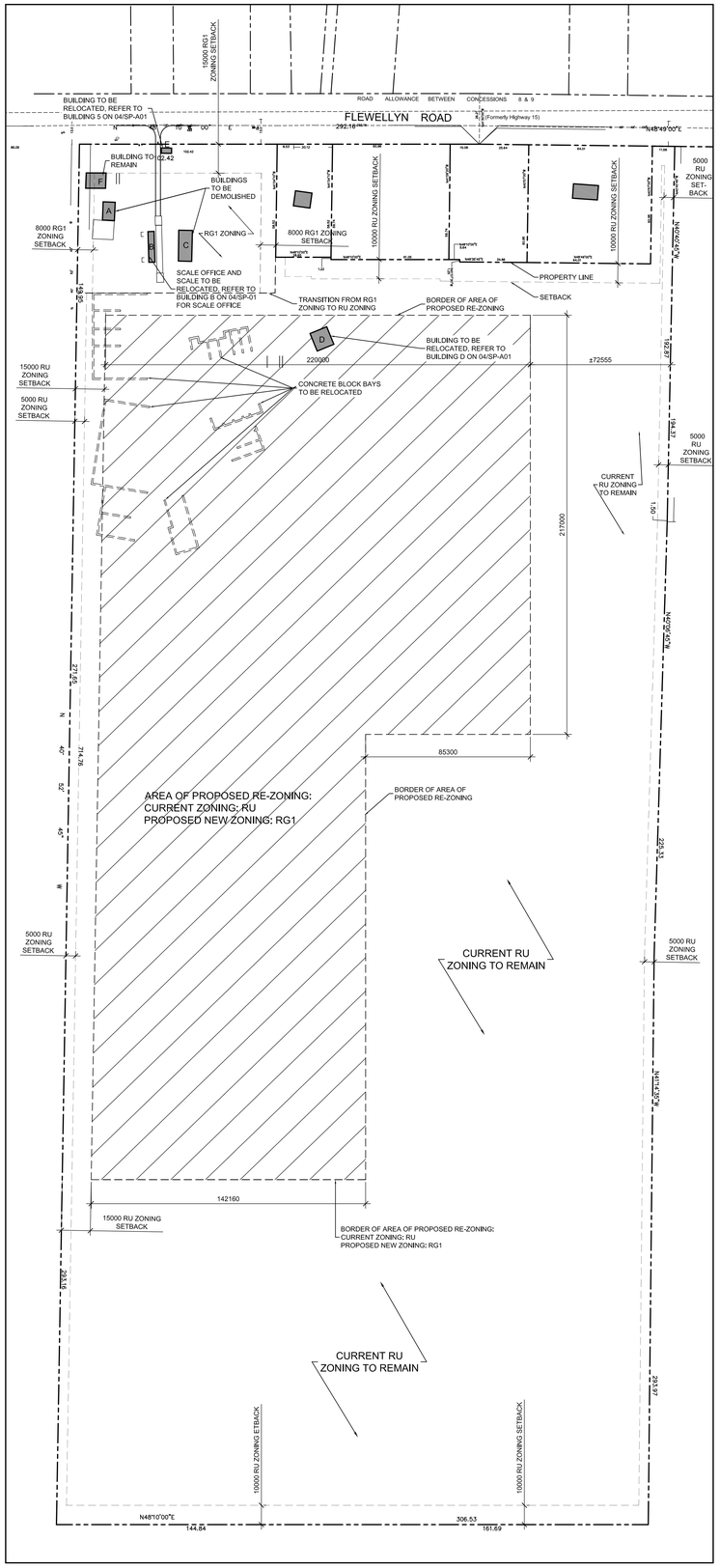
20 40 60 80 100

Shear Strength (kPa)

▲ Undisturbed △ Remoulded



04 SP-A01 FULL SITE PLAN: NEW LAYOUT
SCALE: 1:1250



03 SP-A01 FULL SITE PLAN - EXISTING BUILDINGS, ZONING AND PROPOSED REZONING
SCALE: 1:1500

SITE INFORMATION:

SITE AREA: 20.725 hectares / 51.21 acres

LEGAL DESCRIPTION: PART OF LOT 12, CONCESSION 8
GEOGRAPHIC TOWNSHIP OF GOULBOURN
CITY OF OTTAWA
PIN: 04438-0006

BUILDING INFORMATION

EXISTING BUILDING AREA:

BUILDING A -	FERROUS METALS	59.0 SM
BUILDING B -	WEIGH SCALE OFFICE	49.9 SM
BUILDING C -	STAFF TRAILERS	111.8 SM
BUILDING D -	VEHICLE DRAINAGE SHED	91.4 SM
BUILDING E -	ATM	14.5 SM
BUILDING F -	OFFICE	81.4 SM
TOTAL		408.0 SM

NOTE: BUILDINGS A & C ARE PROPOSED TO BE DEMOLISHED; BUILDINGS B, D & E ARE PROPOSED TO BE RELOCATED

NEW BUILDING AREA:

BUILDING G -	WAREHOUSE AND OFFICE (2 STOREYS)	2,008.6 SM
BUILDING H -	TRUCK MAINTENANCE AND REPAIR	937.0 SM
TOTAL AREA PROPOSED		2,945.6 SM

EXISTING TO REMAIN AND TO BE RELOCATED BUILDING AREA:

BUILDING B -	WEIGH SCALE OFFICE (RELOCATED)	49.9 SM
BUILDING D -	VEHICLE DRAINAGE SHED (RELOCATED)	91.4 SM
BUILDING E -	ATM (RELOCATED)	14.5 SM
BUILDING F-	OFFICE	81.4 SM
TOTAL TO REMAIN		237.2 SM

ZONING INFORMATION (CITY OF OTTAWA BYLAW 2008 250)

CURRENT ZONING DESIGNATIONS: RG1[21r] - RURAL GENERAL INDUSTRIAL
RU - RURAL COUNTRYSIDE

RG1 ZONING IS TO REMAIN; A PORTION OF THE AREA CURRENTLY ZONED AS RU IS PROPOSED TO BE ZONED AS RG1

ZONING BYLAW 2008-250 (Part 11 Sections 219, 220 and 227)

RG1 PERMITTED USES:
ANIMAL CARE ESTABLISHMENT
ANIMAL HOSPITAL
AUTOMOBILE BODY SHOP
AUTOMOBILE DEALERSHIP
AUTOMOBILE SERVICE STATION
CANNABIS PRODUCTION FACILITY
DRIVE-THROUGH FACILITY
DWELLING UNIT
GAS BAR
HEAVY EQUIP. & VEHICLE SALES, RENTAL & SERV.
KENNEL
LEAF AND YARD WASTE COMPOSTING FACILITY
LIGHT INDUSTRIAL USES
PARKING LOT
PRINTING PLANT
RETAIL STORE (LIMITED TO AGRIC., CONST. & LANDSCAPE EQUIP. & SUPPLIES)
SERVICE AND REPAIR SHOP
STORAGE YARD
TRUCK TRANSPORT TERMINAL
WAREHOUSE
WASTE PROCESSING AND TRANSFER FACILITY (NON-PUTRESCIBLE)

RU PERMITTED USES:
AGRICULTURAL USE
AGRICULTURE-RELATED USE
ANIMAL CARE ESTABLISHMENT
ANIMAL HOSPITAL
ARTIST STUDIO
BED AND BREAKFAST
CANNABIS PRODUCTION FACILITY
CEMETERY
DETACHED DWELLING
EQUESTRIAN ESTABLISHMENT
ENVIRON. PRESERVE & EDUCATIONAL AREA
FORESTRY OPERATION
GROUP HOME
HOME-BASED BUSINESS
HOME-BASED DAY CARE
KENNEL
ON-FARM DIVERSIFIED USE
RETIREMENT HOME
SECONDARY DWELLING UNIT

EXCEPTION 21R:
A DETACHED DWELLING MUST BE ACCESSORY TO A PRINCIPAL USE.

ZONING PROVISIONS (TABLE 219 AND 227):

	RG1	RU
MINIMUM LOT WIDTH:	60 M	50 M (60 M IF AGRICULTURAL)
MINIMUM LOT AREA:	8.0 HA	0.8 HA (2.0 HA IF AGRICULTURAL)
MINIMUM SETBACKS:		
FRONT YARD:	15.0 M	10.0 M
REAR YARD:	15.0 M	10.0 M
INTERIOR SIDE YARD:	8.0 M	5.0 M
CORNER SIDE YARD:	12.0 M	10.0 M
MAXIMUM BUILDING HEIGHT:	15.0 M	12.0 M
MAXIMUM LOT COVERAGE:	50%	20%

PARKING (Part 4, Sections 100-114)

PARKING DESIGNATION: SCHEDULE 1A: AREA D - RURAL

PARKING SPACES (TABLE 101, ROWS N49, N59 AND N95):
MINIMUM PARKING REQUIRED:
LIGHT INDUSTRIAL: 8 (0.8 PER 100 SM OF GFA)
OFFICE 24 (2.4 PER 100 SM OF GFA)
WAREHOUSE: 4 (0.4 PER 100 SM OF GFA)
TOTAL 36

PROPOSED PARKING : 224 (INCLUDING 91 FOR "CFT AUTO" STOCK)

PARKING AREA LANDSCAPING PROVISIONS (SECTION 110):
LANDSCAPE BUFFER REQUIRED: 1.5 M FOR PARKING AREAS NOT ABUTTING A STREET
PROPOSED: MINIMUM 1.5 M

BICYCLE PARKING (SECTION 111): 1 PER 1,000 SM
REQUIRED FOR BUILDING G: 3 REQUIRED FOR BUILDING H: 1
PROPOSED FOR BUILDING G: 3 PROPOSED FOR BUILDING H: 1
NOTE THAT BUILDING G AND BUILDING H PROPOSED BICYCLE PARKING WILL BE PROVIDED IN ONE LOCATION CLOSE TO BUILDING G
MINIMUM WIDTH: 0.6 M
MINIMUM LENGTH: 1.8 M

SEE 03/SP-A02 FOR CONTINUATION OF ZONING INFORMATION

02 SP-A01 SITE, BUILDING AND ZONING INFORMATION
SCALE: N/A

LEGEND
PROPERTY LINE
SETBACK FOR RU AND RG1 ZONING
BORDER OF AREA OF PROPOSED RE-ZONING
SNOW REMOVAL STORAGE
FENCE
AREA OF PROPOSED RE-ZONING SHOWN IN 03/SP-A01
EXISTING LANDSCAPE TO REMAIN
ASPHALT
FIRE DEPARTMENT ACCESS ZONE
0 25m 50m 100m

01 SP-A01 LEGEND & SCALE
SCALE: N/A

MCROBIE
ARCHITECTS + INTERIOR DESIGNERS

LOCATION PLAN

North
TRUE NORTH PROJECT NORTH

Revisions

No.	By	Description	Date
01	JT	ISSUED FOR SITE PLAN APPLICATION	31 JAN 2024
02	JT	REVISED AND ISSUED FOR REVIEW	15 AUG 2024

Project
CFT
SITE PLAN
ZONING AMENDMENT

7628 FLEWELLYN RD., OTTAWA

Drawing
ZONING INFORMATION
LOCATION PLAN, EXIST. AND NEW SITE PLAN

Scale AS NOTED
Stamp
Drawn JAS/KE
Checked

Project No. 21-139
Drawing No. SP-A01
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28 X 40 – PLOT ISO B1