



January 13, 2025

Douglas Landing Developments
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Attention: Dr. Gillian Espie

Re: Servicing Options Statement, Terrain Assessment and Hydrogeological Study in Support of Development

9243 McArton Road, Beckwith Township, Ontario
Pinchin File: 283258.001

Pinchin Ltd. (Pinchin) was retained through an Authorization to Proceed, signed by Dr. Gillian Espie of Douglas Landing Developments (Client), to conduct a Servicing Options Statement, Terrain Assessment and Hydrogeological Study in Support of Development at the property located at 9243 McArton Road, Beckwith Township, Ontario (hereafter referred to as the Site). The Site location is shown on Figure 1 and Figure 2 (all figures are provided in Appendix I).

The purpose of the Hydrogeological Study and Terrain Assessment in Support of Development is to fulfill the Municipality requirements for a Services Options Statement, a Terrain Analysis, and a Hydrogeological Study to be completed as components for the development application.

1.0 BACKGROUND

It is Pinchin's understanding that the approximately 54.2-acre (21.9 Hectares (ha)) Site is currently vacant as a previously severed farmland. The Site presently contains various natural features including farmland, woodland, unevaluated wetland, and drainage features. The Client intends to develop the Site into a rural residential development with amenities. The concept plan supplied by the Client indicates that the proposed subdivision will be comprised of twenty-three (23) residential lots, two (2) stormwater management lots, and one wetland block. The average lot size for the residential lots is approximately 0.60 ha.

The Municipality requires a Services Options Statement, a Terrain Analysis, and a Hydrogeological Study to be completed as components by qualified consultants and the investigations are to conform to the Ministry of Environment, Conservation, and Parks (MECP) D-5 Planning for Sewage and Water Services, an implementation guide for municipal planning, servicing, and infrastructure with a focus on sewage and water services (Provincial Policy Statement under Section 3 of the Planning Act).



2.0 SCOPE OF WORK

The scope of work outlined below is based on the guidance of the MECP D-5-3 Servicing Options Statement, MECP D-5-4 Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment, MECP D-5-5, Private Wells: Water Supply Assessment, discussions with Fotenn, and information supplied to Pinchin by the Client. The scope of work consisted of the following activities.

The Servicing Options Statement followed MECP Guideline D-5-3 including:

- Evaluation of proximity of existing or committed full municipal services or communal services and the ultimate potential for future connection to full municipal services or communal services for the whole area proposed for development;
- Review of the proposed development as being part of, or anticipated as being one of a number of proposals for the same development area, in which case the evaluation of servicing options will not be isolated to the site-specific proposal, but will be completed within the context of the development potential; and,
- Review of the environmental suitability of the Site for the proposed services based on information accessible at a municipal scale that can be applied to the proposed Site proposal including:
 - environmental constraints;
 - suitability of the terrain of the Site; and
 - performance of services in similar developments in the surrounding area; and the scale (total areal extent), density, and type of use proposed for the development.

The Terrain Assessment followed MECP Guideline D-5-4 including:

- Discussion and input of proposed locations for groundwater supply wells and septic bed locations with the Client and/or their representative;
- Excavation of up to fifteen (15) test pits across the area of the proposed development. Locations were selected to provide adequate coverage of any anticipated changes in soil type or depth to bedrock or saturated conditions. Where possible the test pits were excavated in the area identified as the preferred location for inground disposal of septic effluent on the lots;
- Test pits were excavated to a maximum depth of approximately 1.5 m below ground surface, or until bedrock or the water table was intersected;



- For each test pit, the soil type, texture, and other characteristics were logged and documented with photographs; and
- Up to 4 samples selected based on representation of the Site areas were collected and submitted to a materials testing laboratory for grain size analysis and estimate of percolation rates.

Every proposed development involving individual on-site sewage systems requires an assessment of the potential impact to groundwater resources. The purpose of the assessment is to ensure that the combined effluent discharges from all the individual on-site sewage systems in a development will have a minimal effect on the groundwater and the present or potential use of the adjacent property. The assessment involves a three-step process with Step 1 being review of lot sizes. Developments consisting of lots which average 1 hectare (with no lot being smaller than 0.8 ha) may not require additional evaluation for areas that are not hydrogeologically sensitive. However, it is noted that the proposed development includes many lots which are less than 0.8 hectare, and as such additional assessment steps as per D-5-4 are required. This requirement will be met through evaluating the isolation of the aquifer and assessing the risk that the development's individual on-site systems will cause concentrations of nitrate-nitrogen in groundwater to exceed 10 mg/L at the downgradient property boundary.

Hydrogeology Study

Based on the Site size, Guideline D-5-5 prescribes a minimum of four (4) test wells as required for completion of the Hydrogeology Study. Guideline D-5-5 notes that the aerial distribution of test wells must be such that hydrogeological conditions across the Site are adequately represented. It is Pinchin's opinion that pumping tests on a minimum of four (4) test wells were required for appropriate evaluation of the Site. Further, it is noted that previously completed hydrogeologic investigations in support of the residential development to the east of the Site provides additional information that was incorporated into the study.

The Hydrogeology Study followed MECP Guideline D-5-5 and included:

- Selection of areas where wells will be installed to provide adequate coverage of the proposed development. The locations of the wells were coordinated with the Client and used the proposed lot fabric for positioning such that the test wells are in suitable locations to become long-term supply wells for the lots;
- After the wells had been drilled, a qualified well contractor licensed with the MECP temporarily installed a pump in each well and disinfected each well in accordance with procedures outlined in the MECP Water Supply Wells: Requirements and Best Practices Manual;



- Constant discharge pumping tests at each of the four wells were completed sequentially. Each pumping test was for a minimum of six hours and at a flow rate required to demonstrate adequate water quantity for the proposed use;
- During the pumping tests the water levels in the pumping well and the adjacent wells on the Site were monitored and recorded. The water levels in select existing private wells close to the Site were monitored where permission from the owner was received;
- One water quality sample was collected from each of the pumping wells during the pumping phase of the constant discharge pumping test. The Sample was collected just prior to cessation of pumping at six (6) hours;
- The water quality samples were submitted to an independent, accredited laboratory for analysis of bacteriological, general inorganic and metal parameters. Results were compared to the Ontario Drinking Water Quality Standards (ODWQS) to assess the quality of the water supply; and
- After the pumping phase of the test is completed the recovery of the water level in each well was monitored.

3.0 METHODOLOGY

Constant Discharge Pumping Tests

The Client retained Air Rock Drilling Co. Ltd. (Air Rock), to install the wells on the Site and to complete the well disinfection, pump installation, and operation for the pumping test work. Dedicated is a licenced well contractor and Site work was completed by licenced well technicians. Water samples were collected by a Pinchin staff member who works under supervision of a registered and practicing professional geoscientist (P.Geo.) in Ontario.

Prior to the pumping test on each well, the well contractor disinfected the well by chlorination as per shock chlorination procedure *Well Regulations – Well Disinfection (Technical Bulletin 1 of 11)*. After approximately 14 to 20 hours of contact time (i.e., the next day) the pumping test was conducted. The pumping test and groundwater sampling event were completed by placing a $\frac{3}{4}$ hp pump to approximately 5 to 10 m above the bottom of the well. The pump was powered by a portable generator. The pumping rate was controlled by a dedicated flow restrictor that maintained the discharge rate for the duration of the pumping test and the pumped water was discharged to the ground approximately 15 m from the well, in a direction that was observed to slope away from the well head. The pumping rate was selected based on well yield as determined during the 1-hr pumping test completed by the Well Contractor at the time of the well installation and the D-5-5 minimum requirement of 13.75 Lpm and to ensure that the well could



sustain the pumping rate for the duration of the pumping test. The duration of the pumping test was 360 mins (6 hrs).

After pumping duration of the test was met, the free chlorine in the groundwater discharge was measured in the field using a Hach DR900 multiparameter portable colorimeter, and if below (0.0 mg/L), Pinchin staff collected a groundwater sample from the well for water quality analysis. If there was still free chlorine in the well, pumping continued until the free chlorine in the groundwater discharge was measured in the field, and if below (0.0 mg/L), then a sample was collected. Samples were collected in laboratory supplied, single-use bottles and were stored on ice and delivery to the laboratory for analysis.

To assess the potential for interference from the pumping activities at the wells located at the Site, pumping tests were completed sequentially on the four Site wells. When one of the Site wells was being pumped the water levels in the other three wells on the Site were monitored. Efforts were made to gain permission to monitor water levels using data loggers in private wells near the Site; namely from nearby residents located along Ridgemont Dr., to the east of the Site. Three residents granted permission for their wells to be included in the monitoring program. The locations of the three domestic supply wells included in the monitoring program are shown on Figure 2 and are summarized below:

- 244 Ridgemont Dr. Approximately 130 m northeast of the Site. The well is a drilled well with well tag A309683. Based on well record in the MECP Water Well database this well was installed on March 31, 2021. The well is 43.7 m deep in completed in limestone with layers of shale and sandstone. The estimated well production at the time of well installation was 40.9 Litres per minute (Lpm) and the static water level was 8.95 metres below top of casing (mbtoc).
- 270 Ridgemont Dr. Approximately 95 m east of the Site. The well is a drilled well with well tag A309684. Based on well record in the MECP Water Well database this well was installed on March 31, 2021. The well is 53.6 meters deep and completed in limestone with layers of sandstone. The estimated well production at the time of well installation was 36.4 Lpm and the static water level was 9.2 mbtoc.
- 322 Ridgemont Dr. Approximately 65 m east of the Site. The well is a drilled well with well tag A296823. A review of the MECP Water Well Database did not locate a well record for this well. At the time of the installation of the data logger for the investigation the static water level was 10.79 mbtoc.

Groundwater samples were submitted to Caduceon Environmental Laboratories (Caduceon) for the 'D-5-5 Subdivision Suite' including bacterial parameters. Caduceon is an independent laboratory accredited by the Standards Council of Canada and the Canadian Association for Laboratory Accreditation. Formal



chain of custody records of the sample submissions were maintained between Pinchin and the staff at Caduceon.

Test Pitting

The Client retained Dedicated Environmental Services Inc. (Dedicated) to complete test pitting as part of the Terrain Assessment portion of this project. Using a mini-excavator, nine (9) test pits were excavated to assess depth to bedrock, soil character and saturation conditions. Additionally, ten (10) boreholes were advanced as part of a separate geotechnical investigation and those data are included in this study. The locations of the test pits and boreholes are shown on Figure 2. The test pits were examined by Pinchin staff who logged the soil stratigraphy, recorded depth to bedrock, and collected representative samples. A selection of samples that characterized the soils encountered across the Site were submitted to Malroz Engineering Inc. Laboratory (Malroz Laboratory) for grain size analysis and percolation (T-time) estimate. Malroz Laboratory is a certified laboratory with the Canadian Council of Independent Laboratories (CCIL).

4.0 QA/QC PROTOCOLS

Various quality assurance/quality control (QA/QC) protocols were followed to ensure that representative groundwater samples were obtained, and that representative analytical data were reported by the laboratory.

Field QA/QC protocols that were employed by Pinchin included the following:

- The groundwater samples were placed in laboratory-supplied sample containers;
- Groundwater samples were collected within the last 10 minutes of the pumping test and after ensuring that free chlorine in the groundwater discharge at the well was below field detection (0.0 mg/L). If the free chlorine level was not yet below detection at the end of the scheduled pumping duration, then the pumping continued until the free chlorine in the discharge water was below detection, at which time the sample was collected;
- The groundwater samples were placed in a cooler on ice immediately upon collection, with appropriate sample temperatures maintained prior to submission to the laboratory;
- The soil samples were placed in single use, sealable sampling bags which were placed in a cooler;
- Dedicated and disposable nitrile gloves were used for sample collection; and



- Sample collection and handling procedures were performed in general accordance with the *MECP Sampling Guideline*, the *APGO Guideline* and Pinchin's SOPs for groundwater sampling.

Groundwater Supply – Regulatory Criteria

The wells are for a domestic water supply, as such the analytical results were compared to the Ontario Drinking Water Standards (ODWQS) health related criteria (MAC) and to the ODWQS aesthetic and operational criteria (AO and OG) as outlined in MECP Guideline *D-5-5 Private Wells: Water Supply Assessment (D-5-5)*.

5.0 FINDINGS

Review of Servicing in the Area

No municipal services about the Site. The closest municipal servicing is located approximately 5 km to the west in Carleton Place. There are no plans to extend this servicing at this time.

There are approximately 40 residential properties present along Ridgemont Dr. which runs north-southeast of the site, approximately 7 residential lots along Douglas Side Road, and another approximately 7 residential lots along McArton Road to the north of the Site. These areas, and other individual residences along County Road #26, are serviced by individual water and wastewater systems.

Based on review of servicing in the area it is determined that the most appropriate servicing for the proposed development is individual well and septic.

Review of Potable Water Supply in the Area

The suitability of individual drilled wells for water supply for the proposed development was assessed by reviewing the available water well records within approximately 500 m of the proposed development boundary. The MECP Well Record Database was reviewed, and a total of 40 well records were identified. The well record numbers and locations are shown on Figure 3, and a summary of well characteristics is included as Table 1 in Appendix II along with the individual well records.

The well records indicated that all the wells were drilled wells. Of the 40 well records where lithology was present, all wells terminated within limestone. It is noted that the well records for many of the wells indicated layers of shale or sandstone within the limestone unit. This may represent just shale layers which are not atypical for the limestone in the area or in some cases be indicative of transition to the sandstone unit that underlays the limestone in the area.



The depth of completion for the drilled wells ranged from 15.8 m to 136.4 m, with the average well depth being 43.0 m. The majority (78%) of the wells were completed between 30 m and 60 m below ground surface (mbgs).

Overburden thickness is generally shallow ranging from 0.0 m to 2.9 m. The average thickness for the overburden was 1.1 m and approximately 88% of the well records indicating overburden thickness less than 2.0 m.

Water was first found at depths ranging from 15.8 m to 71.0 m. Approximately 85% of the well records listed the depth of water first found to be in the range of 15 m to 40 m.

Pumping rates recommended by the drillers at the time of well installation were listed on all of the well records. The recommended pumping rates ranged from 22.7 liters per minute (Lpm) to 136.4 Lpm, with an average recommended pumping rate of 54.4 Lpm. These rates are based on short-term testing but demonstrate the variability and typically high yield in the potable water supply in the vicinity of the Site.

Review of Water Well Records for Site

The well records for the four wells installed on the Site are included in Appendix II. The locations of the wells are shown on Figure 2. The wells were completed by Air Rock Drilling Co. Ltd. (Air Rock), a registered well contractor in Ontario.

Well #1 (A360958)

The well is a drilled well. Steel casing (15.9 cm dia.) was installed to a depth of 12.2 m with a stickup of approximately 0.61 m above ground surface. The annular space was sealed by pressure grouting from ground surface to 12.2 m. The stratigraphy at the well location was described as 0.91 m of sandy clay with stones overlaying limestone bedrock. The well was advanced 29.6 m into the limestone to completion depth of 30.5 m.

Water was found at 20.4 mbgs and 28 mbgs in the limestone unit. The static water level at the time of well completion was 7.74 meters below top of casing (mbtoc).

At the time of well installation the well driller completed a one-hour pumping test at 90.9 Lpm. This rate and duration of testing corresponds to a water taking of approximately 5,454 litres. The recommended pumping rate noted on the well record was 90.9 Lpm. During this pumping test the water level in the well decreased 0.20 m and recovered to the original static level within 3 minutes after pumping was stopped.

This well meets O. Reg. 903 requirements with respect to construction based on Site observations and review of the well record.



Well #2 (A360957)

The well is a drilled well. Steel casing (15.9 cm dia.) was installed to a depth of 12.2 m with a stickup of approximately 0.61 m above ground surface. The annular space was sealed by pressure grouting from ground surface to 12.2 m.

The stratigraphy at the well location was described as 0.91 m of sand and stones overlaying limestone bedrock. The well was advanced 41.8 into the limestone to a completion depth of 42.8 m.

Water was found at 40.5 mbgs in the limestone. The static water level at the time of well completion was 7.13 mbtoc.

At the time of well installation the well driller completed a one-hour pumping test at 54.6 Lpm. This rate and duration of testing corresponds to a water taking of approximately 3,276 litres. The recommended pumping rate on the well record is 54.6 Lpm. During this pumping test the water level in the well decreased 0.67 m and recovered to the original static level within 5 minutes after pumping was stopped.

This well meets O. Reg. 903 requirements with respect to construction based on Site observations and review of the well record.

Well #3 (A360960)

The well is a drilled well. Steel casing (15.9 cm dia.) was installed to a depth of 12.2 m with a stickup of approximately 0.61 m above ground surface. The annular space was sealed by pressure grouting from ground surface to 12.2 m.

The stratigraphy at the well location was described as 0.61 m of sand overlaying limestone bedrock. The well was advanced 51.8 m into the limestone to a completion depth of 51.2 m.

Water was found at a depth of 48.8 m and 50.3 m in the limestone unit. The static water level at the time of well completion was 7.13 mbtoc.

At the time of well installation the well driller completed a one-hour pumping test at 90.9 Lpm. This rate and duration of testing corresponds to a water taking of approximately 5,454 litres. The recommended pumping rate noted on the well record was 90.9 Lpm. During this pumping test the water level in the well decreased 0.15 m and recovered to the original static level within 2 minutes after pumping was stopped.

This well meets O. Reg. 903 requirements with respect to construction based on Site observations and review of the well record.



Well #4 (A360959)

The well is a drilled well. Steel casing (15.9 cm dia.) was installed to a depth of 12.2 m with a stickup of approximately 0.61 m above ground surface. The annular space was sealed by pressure grouting from ground surface to 12.2 m.

The stratigraphy at the well location was described as 0.61 m of sand overlaying limestone bedrock. The well was advanced 54.3 m into the limestone to a completion depth of 54.9 m.

Water was found at 23.5 mbgs and 52.7 in the limestone unit. The static water level at the time of well completion was 5.64 mbtoc.

At the time of well installation the well driller completed a one-hour pumping test at 45.7 Lpm. This rate and duration of testing corresponds to a water taking of approximately 2,742 litres. The recommended pumping rate noted on the well record was 45.7 Lpm. During this pumping test the water level in the well decreased 1.77 m and recovered to the original static level within 20 minutes after pumping was stopped.

This well meets O. Reg. 903 requirements with respect to construction based on Site observations and review of the well record.

5.3 Constant Discharge Pumping Tests

The methodology for the pumping tests is described in a previous section. Information specific to schedule and setup of the individual pumping tests are summarized in Table 2 summarized below.

Table 2: Summary Pumping Test Setup for Each Test Well.

Pumping Well ID	Pumping Test Date & Start Time	Pumping Rate (Lpm)	Pumping Duration (minutes)	Monitoring Network: Well ID, Distance, and Direction from Pumping Well
Well #1 (A360958)	25-Oct-2024 4:00 AM	90.9 Lpm	360 min	Well #2 A360957, 184 m, N.
				Well #3 A360959, 351 m, W.
				Well #4 A360960, 473 m, W.
				322 Ridgemont Dr., 185 m, NE.
				270 Ridgemont Dr., 244 m, NE.
244 Ridgemont Dr., 346 m, SE.				
Well #2 (A360957)	24-Oct-2024 5:15 AM	90.0 Lpm	360 min	Well #1 (A360958), 184 m, S.
				Well #3 A360959, 374 m, SW.
				Well #4 A360960, 541 m, SW.
				322 Ridgemont Dr., 318 m, SE.
				270 Ridgemont Dr., 175 m, E.
244 Ridgemont Dr., 200 m, NE.				



Pumping Well ID	Pumping Test Date & Start Time	Pumping Rate (Lpm)	Pumping Duration (minutes)	Monitoring Network: Well ID, Distance, and Direction from Pumping Well
Well #3 (A360960)	23-Oct-2024 5:45 AM	90.9 Lpm	360 min	Well #1 (A360958), 351 m, E.
				Well #2 A360957, 374 m, NE.
				Well #4 A360960, 189 m, SW.
				322 Ridgemont Dr., 560 m, SE.
				270 Ridgemont Dr., 535 m, E.
Well #4 (A360959)	21-Oct-2024 (6:30 AM)	68.2 Lpm	360 min	244 Ridgemont Dr., 569 m, NE.
				Well #1 (A360958), 473 m, E.
				Well #2 A360957, 541 m, NE.
				Well #3 A360959, 189 m, NE.
				322 Ridgemont Dr., 632 m, E.
270 Ridgemont Dr., 688 m, NE.				
244 Ridgemont Dr., 742 m, NE.				

Well #1 (A360958)

A plot of water drawdown during the Well #1 pumping test is included as Figure 4. During the 6 hours of pumping at 90.9 Lpm, a total of approximately 32,724 L of water were pumped from the well. The maximum drawdown observed in the pumping well was to 9.37 mbtoc (a drawdown of 0.16 m from static water level). When pumping stopped, the water level in the well recovered to greater than 95% within 240 minutes. A summary of the pumping test results is included as Table 3 below.

Table 3: Summary of Pumping Test for Well #1 (A360958).

Duration of Pumping Test (min)	Pumping Rate (Lpm)	Static Water Level (mbtoc)	Maximum Drawdown (mbtoc)	Maximum Drawdown (m)	Total volume of water pumped (L)	Recovery in 10 min (%)	Time to 95+% Recovery (min)
360	90.9	9.22	9.38	0.16	32,724	50 %	240 min

Well #2 (A360957)

A plot of water drawdown during the Well #2 pumping test is included as Figure 5. During the 6 hours of pumping a total of approximately 32,724 L of water were pumped from the well. The maximum drawdown observed in the pumping well was to 9.10 mbtoc (a drawdown of 0.48 m from the static water level). When pumping stopped, the water level in the well recovered to 93% of static within 60 minutes. A summary of the pumping test is included as Table 4 below.



Table 4: Summary of Pumping Test for Well #2 (A360957).

Duration of Pumping Test (min)	Pumping Rate (Lpm)	Static Water Level (mbtoc)	Maximum Drawdown (mbtoc)	Maximum Drawdown (m)	Total volume of water pumped (L)	Recovery in 4 min (%)	Time to 93% Recovery (min)
360	90.9	8.63	9.10	0.48	32,724	80%	60 min

Well #3 (A360960)

A plot of water drawdown during the Well #3 (A360960) pumping test is included as Figure 6. During the 6 hours of pumping a total of approximately 32,724 L of water were pumped from the well. The maximum drawdown observed in the pumping well was to 8.78 mbtoc (a drawdown of 0.07 m from the static water level). When pumping stopped, the water level in the well fully recovered to the original static level 50 minutes. A summary of the pumping test is included as Table 5 below.

Table 5: Summary of Pumping Test for Well #3 (A360960).

Duration of Pumping Test (min)	Pumping Rate (Lpm)	Static Water Level (mbtoc)	Maximum Drawdown (mbtoc)	Maximum Drawdown (m)	Total volume of water pumped (L)	Recovery in 10 min (%)	Time to 100% Recovery (min)
360	90.9	8.71	8.78	0.07	32,724	67%	50 min

Well #4 (A360959)

A plot of water drawdown during the Well #4 pumping test is included as Figure 7. During the 6 hours of pumping at 68.2 Lpm a total of approximately 24,552 L of water were pumped from the well. The maximum drawdown observed in the pumping well was to 9.03 mbtoc (a drawdown of 2.21 m from the static water level). When pumping stopped, the water level in the well fully recovered to the original static level 240 minutes (4 hours). A summary of the pumping test is included as Table 6 below.



Table 6: Summary of Pumping Test for Well #4 (A360959).

Duration of Pumping Test (min)	Pumping Rate (Lpm)	Static Water Level (mbtoc)	Maximum Drawdown (mbtoc)	Maximum Drawdown (m)	Total volume of water pumped (L)	Recovery in 15 min (%)	Time to 95+% Recovery (min)
360	68.2	6.83	9.03	2.21	24,552	70%	240 min

Potential for Well Interference

During each pumping test the other three wells on the Site were instrumented with data loggers to record the water levels in the wells. Additionally, three nearby domestic supply wells along Ridgemont Dr. were included in the monitoring program. The street address of the domestic supply wells monitored and their distance from the pumping wells are included in Table 2.

The private domestic wells monitored during the test remained in service and short duration drawdown and recovery events can be seen in the data. These events reflect the pumps in the domestic wells coming on to repressurize the water supply system at the residences and are not drawdown resulting from the pumping well activities.

Overall, the amount of drawdown in the monitoring network wells that is attributable to pumping activities was small and ranged from zero (no interaction at all) to a maximum of 0.12 m. Approximately 75% of all the interactions across the four pumping tests were less than 0.05 m of attributable drawdown from pumping activities.

Observations regarding potential well interference are summarized below in Table 7.



Table 7: Summary of Findings for Potential Well Interference.

Pumping Well ID	Pumping Rate (Lpm)	Pumping Duration (min)	Monitoring Network: Well ID, Distance and Direction from Pumping Well	Drawdown Attributable to Pumping Activities (m)
Well #1 (A360958)	90.9 Lpm	360 min	Well #2 A360957, 184 m, N.	0.11
			Well #3 A360959, 351 m, W.	0.03
			Well #4 A360960, 473 m, W.	None
			322 Ridgemont Dr., 185 m, NE.	0.11
			270 Ridgemont Dr., 244 m, NE.	0.04
			244 Ridgemont Dr., 346 m, SE.	0.10
Well #2 (A360957)	90.9 Lpm	360 min	Well #1 (A360958), 184 m, S.	0.12
			Well #3 A360959, 374 m, SW.	0.04
			Well #4 A360960, 541 m, SW.	0.02
			322 Ridgemont Dr., 318 m, SE.	0.12
			270 Ridgemont Dr., 175 m, E.	0.04
			244 Ridgemont Dr., 200 m, NE.	0.12
Well #3 (A360960)	90.9 Lpm	360 min	Well #1 (A360958), 351 m, E.	None
			Well #2 A360957, 374 m, NE.	0.02
			Well #4 A360960, 189 m, SW.	None
			322 Ridgemont Dr., 560 m, SE.	0.02
			270 Ridgemont Dr., 535 m, E.	0.04
			244 Ridgemont Dr., 569 m, NE.	0.02
Well #4 (A360959)	68.2 Lpm	360 min	Well #1 (A360958), 473 m, E.	0.02
			Well #2 A360957, 541 m, NE.	0.02
			Well #3 A360959, 189 m, NE.	None
			322 Ridgemont Dr., 632 m, E.	0.02
			270 Ridgemont Dr., 688 m, NE.	None
			244 Ridgemont Dr., 742 m, NE.	0.02

Plots of drawdown versus time for the monitoring wells are provided as follows:

- **Well #1** (A360958), Figure 8a and Figure 8b;
- **Well #2** (A360957), Figure 9a and Figure 9b (reduced y-axis);
- **Well #3** (A360960), Figure 10a and Figure 10b (reduced y-axis); and
- **Well #4** (A360959), Figure 11a and Figure 11b (reduced y-axis).

Based on these data no adverse interference between wells on the proposed development and existing domestic supply wells is to be anticipated.



5.4 Water Supply – Quality

The summary of the groundwater analytical results along with the ODWQS Health Related Maximum Allowable Concentration (MAC) and Aesthetic Objective (AO) as well as the Aesthetic Limits as listed in the MECP D-5-5 Guideline are presented in Table 8 in Appendix III. The laboratory Certificate of Analysis for the groundwater samples is provided in Appendix IV. Residual chlorine was measured in the field and confirmed to be below detection prior to collection of the raw groundwater samples prior to cessation of pumping.

Well #1 (A360958)

Water quality results for the raw groundwater sample collected from Well #1 (A360958) prior to cessation of the pumping test met the applicable criteria:

- Health Related Parameters (MAC)
 - The analytical result for sodium was 39.8 mg/L compared to the Warning Level MAC of 20 mg/L. This health-related limit is a "warning level" only. Exceedance calls for a recommendation that the local Medical Officer of Health be notified in order to alert persons with medical conditions or dietary restrictions.
- Aesthetic Objective (AO) & Operational Guideline (OG) Related Parameters
 - The analytical result for manganese was 0.144 mg/L compared to the AO criteria of 0.05 mg/L; and
 - The analytical result for hardness exceeded was 343 mg/L compared to the OG of 80-100 mg/L. Hardness did not exceed the AO criteria of 500 mg/L.

The raw water quality is considered good and suitable as a potable water source. If the user finds the elevated hardness to be unpalatable or cause objectional staining, treatment systems such as a water softened could be incorporated into the water treatment system. Treating hardness usually results in a decrease in manganese as well. If sodium levels pose a dietary or medical concern an undercounter reverse osmosis system connected to a dedicate drinking water spigot could be part of the water treatment system.



Well #2 (A360957)

Water quality results for the raw groundwater sample collected from Well #2 (A360957) prior to cessation of the pumping test met the applicable criteria, with the following exceptions:

- Health Related Parameters (MAC)
 - All analyzed parameters complied with MACs.
- Aesthetic Objective (AO) & Operational Guideline (OG) Related Parameters
 - The analytical result for hardness was 311 mg/L compared to the OG of 80-100 mg/L. Hardness did not exceed the AO criteria of 500 mg/L.

The raw water quality is considered good and suitable as a potable water source. If the user finds the elevated hardness to be unpalatable or cause objectional staining, treatment systems such as a water softener could be incorporated into the water treatment system.

Well #3 (A360960)

Water quality results for the raw groundwater sample collected from Well #3 (A360960) prior to cessation of the pumping test met the applicable criteria:

- Health Related Parameters (MAC)
 - All analyzed parameters complied with MACs.
- Aesthetic Objective (AO) & Operational Guideline (OG) Related Parameters
 - The analytical result for hardness was 357 mg/L compared to the OG of 80-100 mg/L. Hardness did not exceed the AO criteria of 500 mg/L.

The raw water quality is considered good and suitable as a potable water source. If the user finds the elevated hardness to be unpalatable or cause objectional staining, treatment systems such as a water softener could be incorporated into the water treatment system.



Well #4 (A360959)

Water quality results for the raw groundwater sample collected from Well #4 (A360959) prior to cessation of the pumping test met the applicable criteria, with the following exceptions:

- Health Related Parameters (MAC)
 - All analyzed parameters complied with MACs.
- Aesthetic Objective (AO) & Operational Guideline (OG) Related Parameters
 - The analytical result for hardness was 385 mg/L compared to the OG of 80-100 mg/L. Hardness did not exceed the AO criteria of 500 mg/L.

The raw water quality is considered good and suitable as a potable water source. If the user finds the elevated hardness to be unpalatable or cause objectional staining, treatment systems such as a water softener could be incorporated into the water treatment system.

5.5 Water Treatment Options

- **Preventative Disinfection** - As a preventative and best management practice it is recommended that any water supply system utilizing an individual well as the supply source include water disinfection. The most common treatment to meet this recommendation is disinfection by UV with appropriate particulate pre-filtration. Such systems are readily available.
- **Hardness** - Hardness has an Operational Guideline of 80 to 100 mg/L, a range considered to provide an acceptable balance between corrosion and incrustation and to aid in source selection when applicable. Water supplies with a hardness greater than 200 mg/L are considered poor but tolerable. Hardness in excess of 500 mg/L in drinking water is unacceptable for most domestic purposes however, neither the MECP D-5-5 nor the ODWQS guidance provide an upper limit for treatability. The analytical result for hardness for samples collected from wells ranged from 272 mg/L to 332 mg/L. If the user finds the water unpalatable or wishes to reduce any scaling that may occur, an off-the-shelf water softener solution would readily provide treatment. Such systems are readily available.
- **Manganese** - The Aesthetic Objective (AO) for manganese is 0.05 mg/L. manganese is objectionable in water supplies because it can stain laundry and fixtures black, and at excessive concentrations causes undesirable tastes in beverages. Manganese is present in some groundwaters because of chemically reducing underground conditions coupled



with presence of manganese mineral deposits. A water softener is often the best tool for removing manganese. The water softener can handle significant quantities of manganese, but it only works well if all the manganese is un-precipitated. Alternatively, there are a variety of filter systems available that may be more effective depending on the overall water chemistry.

A water treatment professional should be consulted for appropriate equipment sizing and treatment options.

Site Suitability for In-Ground Wastewater Disposal

Nine test pits were excavated across the Site to investigate the suitability of the Site for in-ground wastewater disposal. On Dec 2, 2024, the test pits excavated by a contractor retained by the Client using a Kubota min-excavator. The test pits were examined by Pinchin staff who logged the soil stratigraphy, recorded depth to bedrock, and collected representative samples.

Based on the observations made on the 9 test pits, the overburden can be described as shallow with the overburden thickness ranging from 0.15 m to 0.30 m, with the exception of test pit TP-4 which was advanced to 1.98 mbgs and did not encounter bedrock. The limestone bedrock surface has some degree of surficial weathering. The average overburden thickness was approximately 0.44 m. The overburden is a brown silty sand with some gravel. The overburden was loose and damp. Groundwater was not encountered in any of the test pits. Table 9 describes the stratigraphy observed in each of the test pits.

Samples from TP-1, TP-5, TP-7, and TP-8 were submitted to Malroz Engineering Inc. Laboratory (Malroz Laboratory) for grain size analysis and percolation (T-time) estimate. Results of the grain size analysis are included as in Appendix IV.

The sample collected from test pit TP-1 (0.05 m to 0.15 m) was comprised of approximately 4% gravel, 64% sand, and 32% silt and clay. The material was categorized as silty SAND with trace gravel. The estimated T-time from the sample was 8 to 20 min/cm.

The sample collected from TP-5 (0.05 m to 0.30 m) was comprised of approximately 14% gravel, 63% sand, 24% silt and clay. The material was categorized as silty Clayey SAND with some gravel. The estimated T-time from the sample was 8 to 20 min/cm.

The sample collected from TP-7 (0.05 m to 0.15 m) was comprised of approximately 15% gravel, 66% sand, and 18% silt and clay. The material was categorized as SAND, some gravel, some silt and clay. The estimated T-time from the sample was 8 to 20 min/cm.



The sample collected from TP-8 (0.05 m to 0.30 m) was comprised of approximately 10% gravel, 62% sand, and 28% silt and clay. The material was categorized as silty, clayey SAND with some gravel. The estimated T-time from the sample was 8 to 20 min/cm.

For Class IV systems, the Ontario Building Code (OBC) requires a minimum of 900 mm (0.900 m) separation from the base of the gravel layer of the bed to the bedrock (or saturated overburden conditions). This thickness requirement of overburden was only observed in one test pit; TP-4 where bedrock was not encountered above 1.98 m, where excavation stopped.

Table 9 Test Pit Stratigraphy and Observations.

Test Pit ID	Easting	Northing	Interval (mbgs)	Description
TP-1	415179	5003150	0 - 0.05	Topsoil with grass roots. Dry.
			0.05 - 0.15	Brown Silty Sand with small roots. Loose. Dry.
			0.15	Limestone Bedrock. Dry.
TP-2	415201	5003246	0 - 0.05	Topsoil with grass roots. Dry.
			0.05 - 0.20	Brown Silty Sand. Loose. Dry.
			0.20	Limestone Bedrock. Dry.
TP-3	415065	5003195	0 - 0.05	Topsoil with grass roots. Dry.
			0.05 - 0.30	Brown Silty Sand. Loose. Dry.
			0.30	Limestone Bedrock. Dry.
TP-4	414986	5003218	0 - 0.15	Topsoil with corn stalk. Loose. Dry.
			0.15 - 0.30	Brown Silty Sand. Loose. Dry.
			0.30 - 1.98	Brown Silty Sand. Loose with Gravel. Dry.
			1.98	Bedrock not encountered.
TP-5	414997	5003117	0 - 0.05	Topsoil with small roots. Loose. Damp.
			0.05 - 0.30	Brown Silty Sand. Loose. Dry.
			0.30	Limestone Bedrock. Dry.
TP-6	415365	5003468	0 - 0.05	Topsoil with grass roots. Dry.
			0.05 - 0.30	Brown Silty Sand. Loose. Dry.
			0.30	Limestone Bedrock. Dry.
TP-7	415398	5003369	0 - 0.05	Topsoil with grass roots. Dry.
			0.05 - 0.15	Brown Silty Sand with small roots. Loose. Dry.
			0.15	Limestone Bedrock. Dry.
TP-8	415440	5003281	0 - 0.05	Topsoil with grass roots. Dry.
			0.05 - 0.30	Brown Silty Sand with small roots. Loose. Dry.
			0.30	Limestone Bedrock. Dry.



Test Pit ID	Easting	Northing	Interval (mbgs)	Description
TP-9	415496	5003297	0 - 0.05	Topsoil with grass roots. Dry.
			0.05 - 0.30	Brown Silty Sand with small roots. Loose. Dry.
			0.30	Limestone Bedrock. Dry.

Notes: Coordinates are in Zone T18. The bold and shaded description indicates the sample was submitted for analysis.

As a component of a geotechnical investigation completed on the Site by Pinchin, ten boreholes were advanced to bedrock across the Site. The location of the boreholes are shown on Figure 2 and the borehole logs are included in Appendix IV. Based on the borehole logs the depth to bedrock ranged from 0.15 m to 0.61 m, with an average overburden thickness of 0.44 m.

It is Pinchin’s understanding that the Municipality requires a minimum of 0.25 m (10”) of natural material to be present which can be scarified prior to construction of the bed. If the 0.25 m of natural material is not present, then additional lower permeability material must be incorporated in the base of the system design as well. Based on these requirements additional material would be needed at some of the lots for Class IV systems.

A tertiary system has system specific design criteria to allow for less imported material, and in some cases a less elevated mound. This may make a tertiary system a preferred cost or space saving approach. A variety of tertiary systems are approved with some specifically designed to be employed in shallow soil conditions. Additional costs associated with tertiary systems may be at least partially offset by the requirement for additional imported material that would be required for a Class IV system to address the shallow overburden conditions. The reduced footprint associated with a tertiary system can also provide more flexibility in location on the lot. A tertiary system also provides a greater overall degree of wastewater treatment and thereby increased protection for the environment.

If sufficient thickness of natural material is present, and OBC and municipal design requirements are incorporated into the system design, then Class IV systems are adequate for wastewater treatment servicing at the Site. Placement of systems must meet all OBC setbacks. Based on the percolation rates obtained during this investigation, Class IV system beds would require on the order of 300 m² of area for a 4-bedroom single family dwelling. More refined sizing would be calculated by the septic designer based on daily flow calculations made from actual building design plans, but for the purpose of assessing if there is adequate space on the proposed lots for the systems, these estimated areas are more than sufficient to assess whether sufficient space on the lots is present.



Each proposed lot has sufficient area for a primary septic infiltration bed location and an alternative location. Specific location of the primary and alternate septic infiltration bed as well as the system selection and design are specific to the dwelling design and size which are beyond the scope of this study.

Assessment of Potential for Groundwater Impact by on-Site Sewage System

The three-step procedure outlined in the MECP guideline: *D-5-4 Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment* was used to assess groundwater impact potential from on-site sewage systems for the proposed development.

The purpose of the assessment is to ensure that the effluent discharges from the individual on-site sewage systems will have a minimal effect on the groundwater and the present or potential use of the adjacent property. For the purposes of the D-5-4 Guideline, the Ontario Drinking Water Objective (ODWO) of 10 mg/L of nitrate-nitrogen is used as an indicator of groundwater impact potential.

The assessment involves a three-step process. The need to advance to the next step depends on not meeting conditions defined in the previous step.

For developments where the lot size for each private residence within the development is one hectare or larger, the risk that the boundary limits imposed by these guidelines may be exceeded by individual systems is considered acceptable in most cases. Developments consisting of lots which average 1 hectare (with no lot being smaller than 0.8 ha), may not require a detailed hydrogeological assessment, provided that it can be demonstrated that the area is not hydrogeologically sensitive. In such circumstances, it is the responsibility of the proponent to obtain a professional analysis from a qualified consultant that the area is not hydrogeologically sensitive.

It is assumed that attenuative processes within a one-hectare lot will be sufficient to reduce the nitrate-nitrogen to an acceptable concentration in groundwater below adjacent properties. It should be noted that sufficient attenuative processes may not be present in hydrogeologically sensitive environments, or where there is little water surplus available.

Step 1 – Lot Size Considerations

For developments where the lot size for each private residence within the development is one hectare (ha) or larger, the risk that the boundary limits imposed by these guidelines may be exceeded by individual systems is considered acceptable in most cases.

Based on the conceptual Site design provided by the client, the proposed lot sizes range from approximately 0.40 ha to 1.43 ha. The average lot size is approximately 0.60 ha.



The average lot size is less than 1 ha, and the smallest lot is less than 0.8 ha. The proposed development does not satisfy Step 1, and the assessment must proceed to Step 2.

Step 2 - System Isolation Considerations

Where proposed lot sizes are less than one hectare, the proponent and/or the consultant is/are responsible for assessing the potential risk to groundwater. Developments will normally be considered as low risk where it can be demonstrated that sewage effluent is hydrogeologically isolated from existing or potential supply aquifer(s).

Based on the observations made on the 9 test pits, the overburden can be described as shallow with the overburden thickness ranging from 0.15 m to greater than 1.98 m overlaying limestone bedrock. At most of the test pit locations the overburden thickness was 0.30 m or less. The overburden does not provide sufficient isolation.

The depth to first water found water as reported in the well records for the four Site wells ranged from 15.8 mbgs to 71.0 mbgs. It is noted that the surface of the limestone bedrock often exhibits weathering, but such weathering is thin (on the order of 0.2 m or less) with competent rock below. Based on the above observed conditions and the review of the MECP Well Record database it is concluded that, in general, the water-bearing features in aquifers targeted has on the order of greater than 15 m of bedrock isolating it from the surface. Usually, isolation is considered to be present if greater than 10 m of competent rock is present between ground surface and the water-bearing features. It is also noted that the use of tertiary treatment systems for wastewater treatment would provide considerable additional protection to the aquifer by reducing the effluent strength.

Step 2 of the assessment of potential for groundwater impact by on-Site sewage system is met and the assessment does not need to advance to Step 3.

The Site is suitable for in-ground wastewater disposal based on overburden character and Water Quality Impact Risk Assessment as per D-5-4.

6.1 Conclusions and Recommendations

- No municipal or communal servicing options are available to the location of the proposed development. Residential dwellings in the area are serviced by individual wells and in-ground wastewater treatment systems. Individual wells and in-ground wastewater treatment systems are a suitable servicing approach for the proposed development.



- Disinfection of the raw water supply from each well is recommended. This recommendation is most commonly addressed by a UV-system or chlorination with appropriate pre-filtration. Such systems are readily available.
- Hardness in the raw water can be expected to exceed the ODWQS operational guideline of 100-150 mg/L but is expected to be considerably below 500 mg/L and within a range that is easily treatable with a water softener. If the user finds the hard water unpalatable or has concerns on scale buildup, hardness can be easily treated with a water softener.
- With respect to in-ground wastewater disposal, the proposed lot sizes are suitable for the proposed development and provide sufficient space for a primary and alternative septic bed location for Class IV type systems. The areas required if tertiary wastewater treatment systems are used would be notably reduced.
- Class IV systems are suitable for the for the in-ground wastewater disposal. However, it is suggested that the client consider tertiary treatment systems which would provide enhanced wastewater treatment, require smaller bed sizes, and perhaps provide a cost saving based on less imported material being required.

Based on the findings of this Servicing Options Statement, Terrain Assessment and Hydrogeological Study in Support of Development

It is Pinchin's professional opinion that:

- Potable water and wastewater servicing is the most appropriate approach for servicing the proposed development;
- The water supply wells installed on the Site are capable of providing sufficient quantity of water for the proposed residential development;
- Water quality is good, but if the user finds the hardness or manganese to be unpalatable or problematic, then treatment by way of a simple water softener or filter systems may effectively address this condition. Sodium exceeded the 20 mg/L warning level at one of the wells. If sodium levels pose a dietary or medical concern, an undercounter reverse osmosis system connected to a dedicate drinking water spigot could be part of the water treatment system;
- No unacceptable adverse interference is expected to surrounding groundwater users from the proposed development;



- There is adequate space for Class IV in-ground wastewater disposal beds (primary and alternative) for all proposed lots;
- Overburden is generally thin on the Site and additional material would be required to be included meet OBC and Municipal design requirements for Class IV systems for some lots. Such considerations would be incorporated into the system design by the septic installer and is beyond the scope of this investigation; and
- The Site is suitable for the proposed development with respect to individual servicing for both potable water supply and wastewater disposal.

7.0 TERMS AND LIMITATIONS

This Servicing Options Statement, Terrain Assessment and Hydrogeological Study in Support of Development was performed for Douglas Landing Developments (Client) in order to fulfill the hydrogeological-related requirements as identified by the municipality.

Conclusions derived are specific to the immediate area of study and cannot be extrapolated extensively away from a sample location. Samples have been analyzed for a set of parameters as specified in the MECP Guideline D-5.

No environmental assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions on a property. Performance of this Servicing Options Statement, Terrain Assessment and Hydrogeological Study in Support of Development is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions on the Site.

This Servicing Options Statement, Terrain Assessment and Hydrogeological Study in Support of Development was performed in general compliance with currently acceptable practices for environmental site investigations, and specific Client requests, as applicable to this Site.

This report was prepared for the exclusive use of the Client, subject to the terms, conditions and limitations contained within the duly authorized proposal for this project. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

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Pinchin makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and these interpretations may change over time.

CLOSING REMARKS

We trust that the foregoing information is satisfactory for your present requirements.

Should you have any questions about the report or require additional information, please contact the Project Manager at 613.449.3731 or ptibble@pinchin.com.

Pinchin Ltd.

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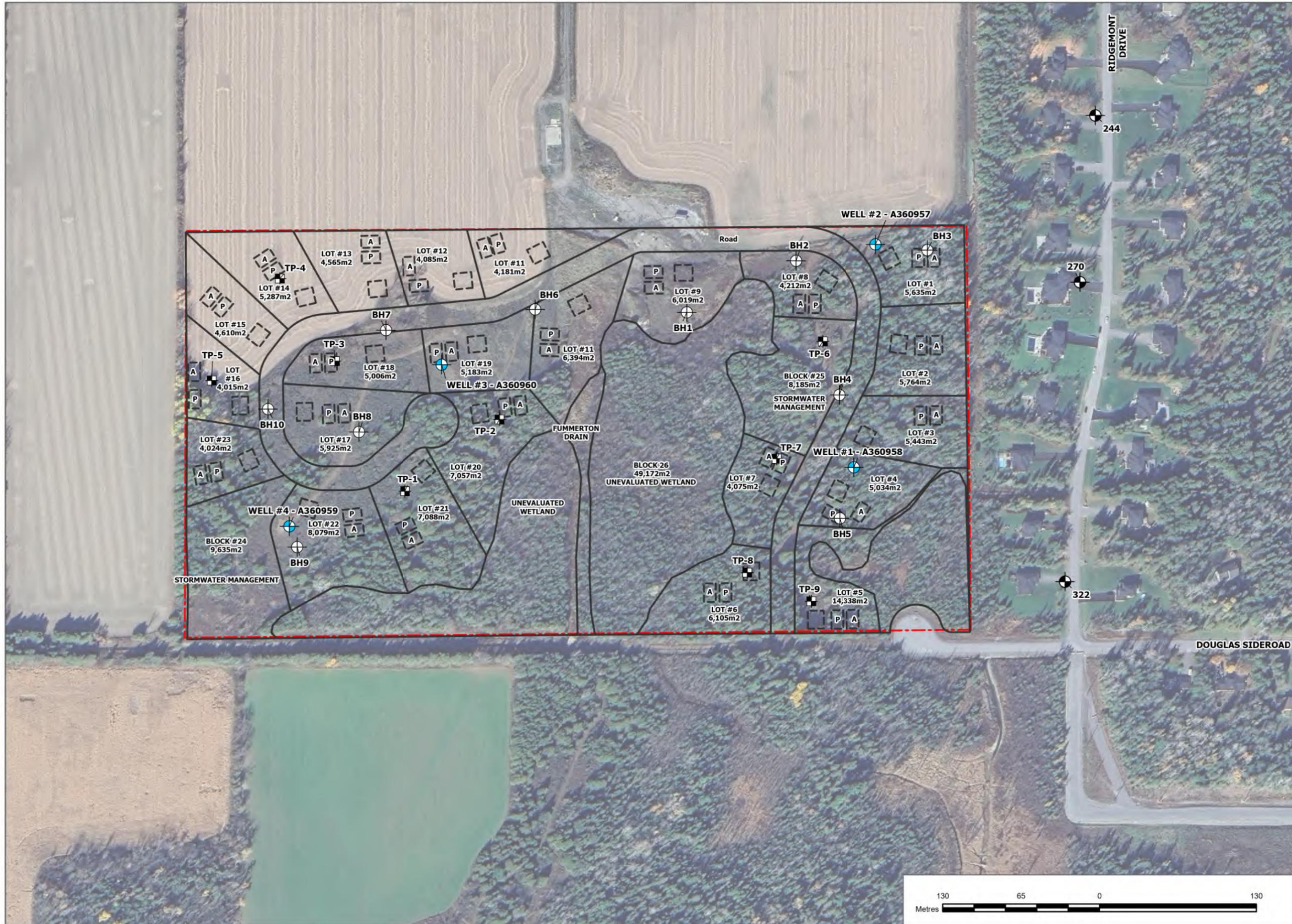
- Encl.: Appendix I - Figures
- Appendix II - Tables
- Appendix III - MECP Well Records
- Appendix IV - Laboratory Certificates

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 Template: Groundwater Monitoring Report Template, EDR, July 23, 2024

APPENDIX I
Figures



PROJECT NAME:		HYDROGEOLOGICAL STUDY AND TERRAIN ASSESSMENT	
CLIENT NAME:		DOUGLAS LANDING DEVELOPMENTS	
PROJECT LOCATION:		9243 MCARTON ROAD, BECKWITH TOWNSHIP, ONTARIO	
FIGURE NAME:		KEY MAP	
PROJECT NUMBER:	SCALE:	DRAWN BY:	REVIEWED BY:
283358.001	AS SHOWN	CF	PT
DATE:			FIGURE NUMBER
JANUARY 2025			1



LEGEND

	DOMESTIC MONITORING WELL
	BOREHOLE
	GROUNDWATER MONITORING WELL
	TEST PIT
	SITE FEATURES
	LOT PARCEL
	SITE BOUNDARY

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 3) Legend is color dependent. Non-colour copies may alter interpretation.
 4) Coordinate system: NAD 1983 CSRS UTM Zone 18N.
 5) Source: Pinchin Ltd., © OpenStreetMap (and) contributors, CC-BY-SA.



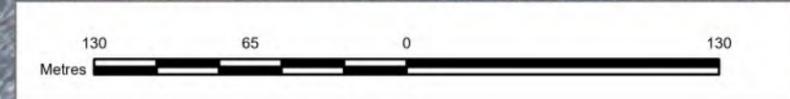
PROJECT NAME
HYDROGEOLOGICAL STUDY AND TERRAIN ASSESSMENT

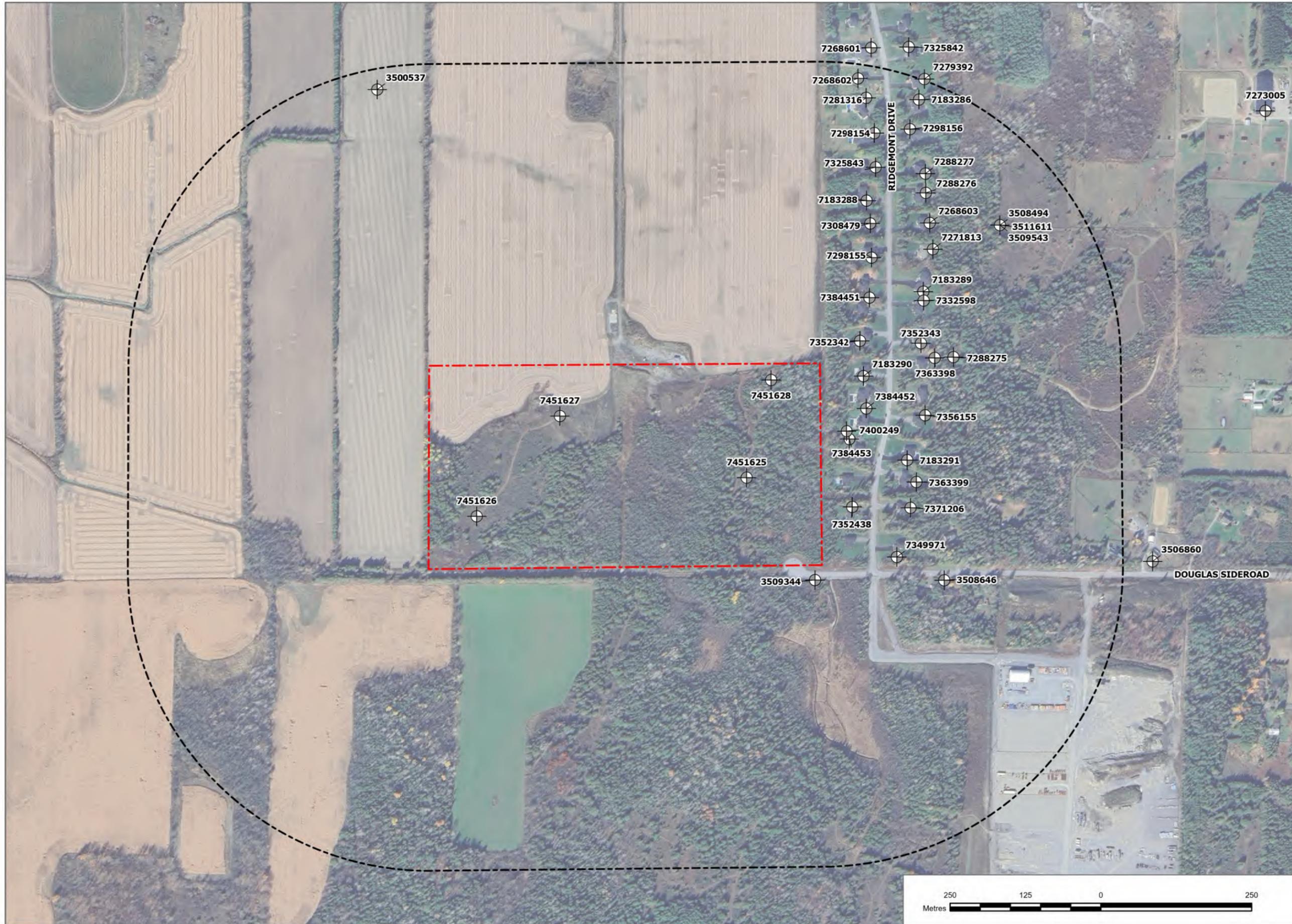
CLIENT NAME
DOUGLAS LANDING DEVELOPMENTS

PROJECT LOCATION
9243 MCARTON ROAD, BECKWITH TOWNSHIP, ONTARIO

FIGURE NAME
SITE PLAN WITH LAYOUT AND TESTING LOCATIONS

PROJECT NUMBER: 283358.001	SCALE: AS SHOWN
DRAWN BY: CF	REVIEWED BY: PT
DATE: JANUARY 2025	FIGURE NUMBER: 2





LEGEND

-  MECP WELL
-  SITE BOUNDARY
-  500M BUFFER

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PROJECT NAME
HYDROGEOLOGICAL STUDY AND TERRAIN ASSESSMENT

CLIENT NAME
DOUGLAS LANDING DEVELOPMENTS

PROJECT LOCATION
9243 MCARTON ROAD, BECKWITH TOWNSHIP, ONTARIO

FIGURE NAME
MECP WELLS WITHIN 500M

PROJECT NUMBER:
283358.001 SCALE
AS SHOWN

DRAWN BY
CF REVIEWED BY
PT

DATE
JANUARY 2025 FIGURE NUMBER
3

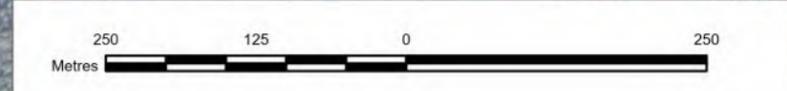


Figure 4: Pumping Well #1 (A360958)

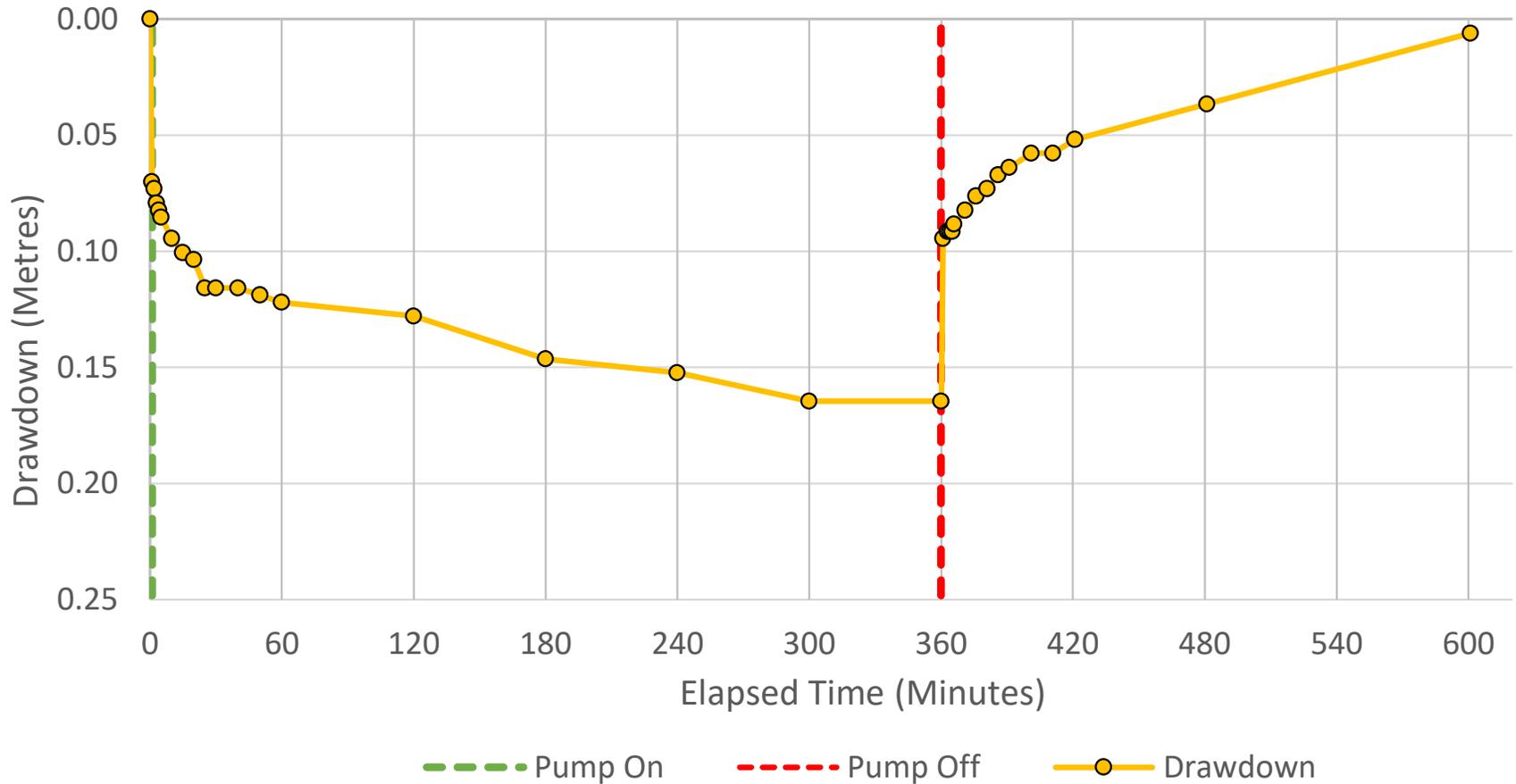


Figure 5: Pumping Well #2 (A360957)

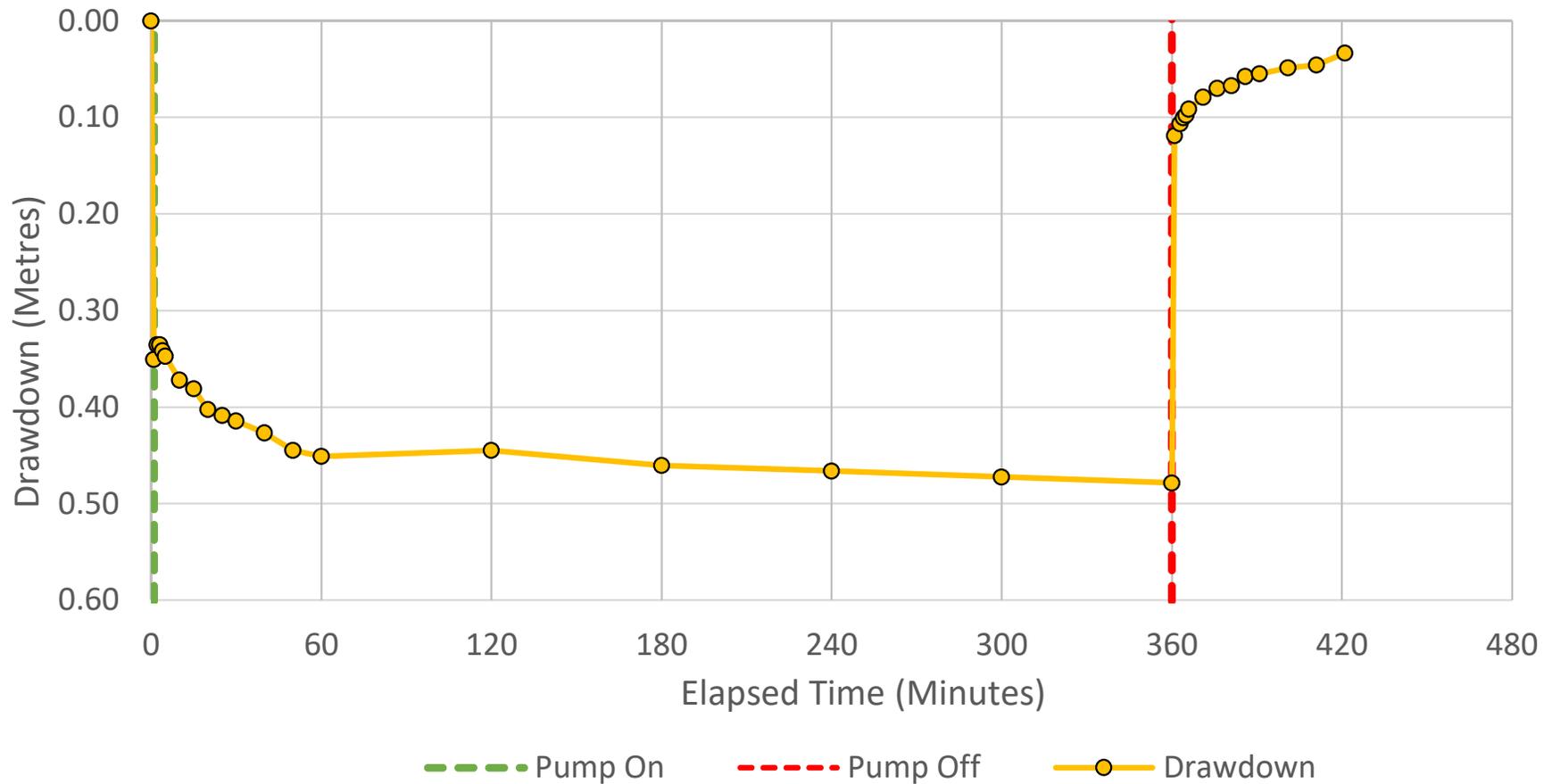
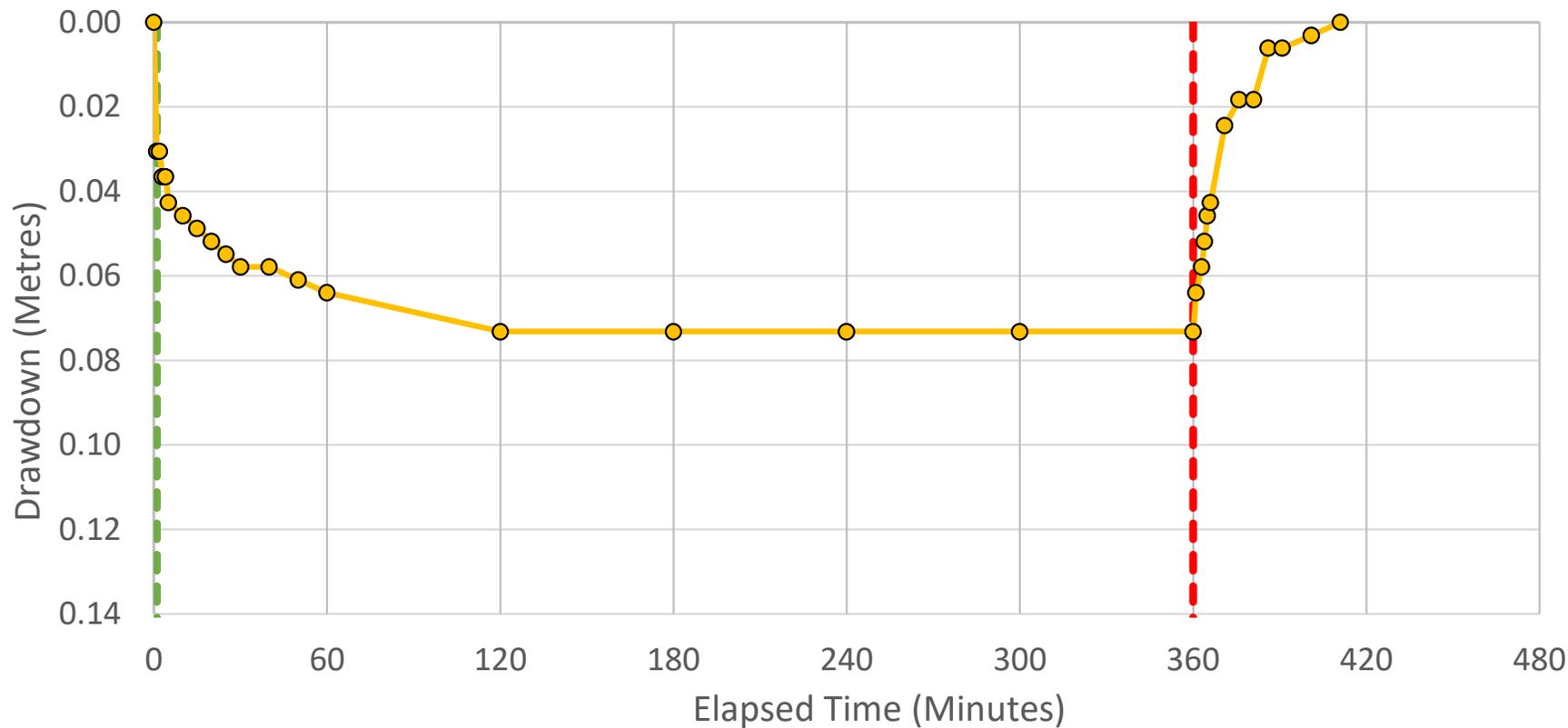


Figure 6: Pumping Well #3 (A360960)



--- Pump On --- Pump Off --- Drawdown

Figure 7: Pumping Well #4 (A360959)

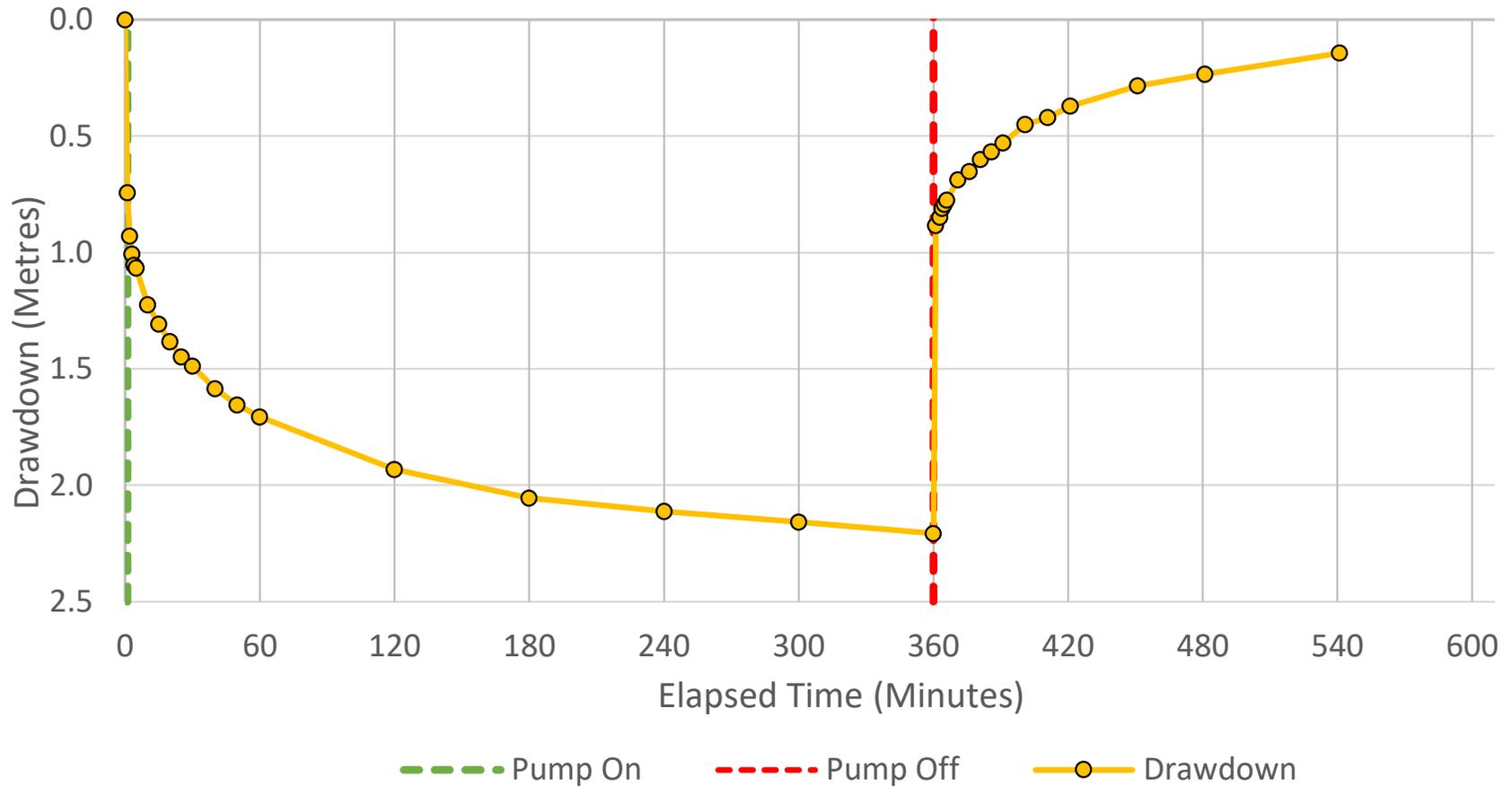


Figure 8a: Water Level Drawdown and Recovery During Pumping Test
Pumping Well A360957 (Well #1)

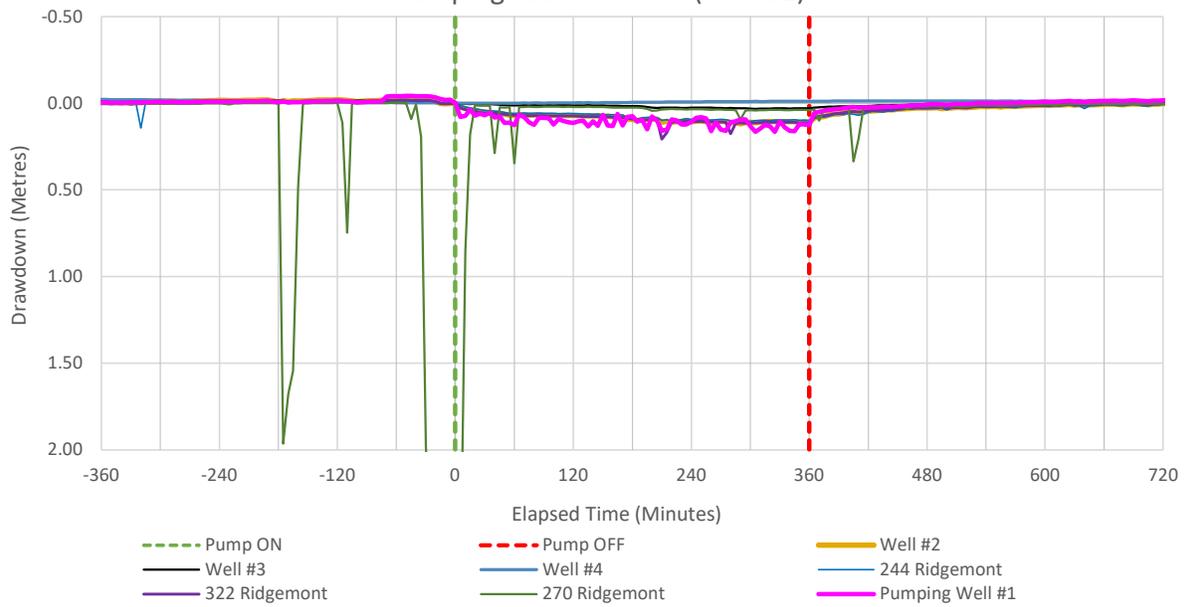


Figure 8b: Water Level Drawdown and Recovery During Pumping Test
Pumping Well A360957 (Well #1) Reduced Y-axis

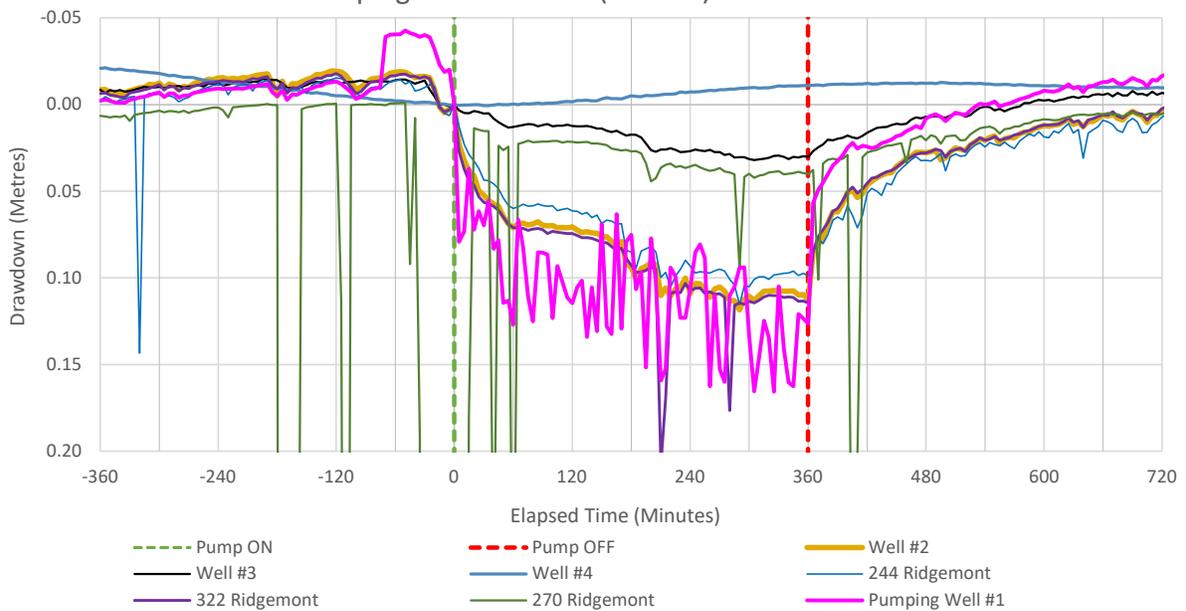


Figure 9a: Water Level Drawdown and Recovery During Pumping Test
Pumping Well A360957 (Well #2)

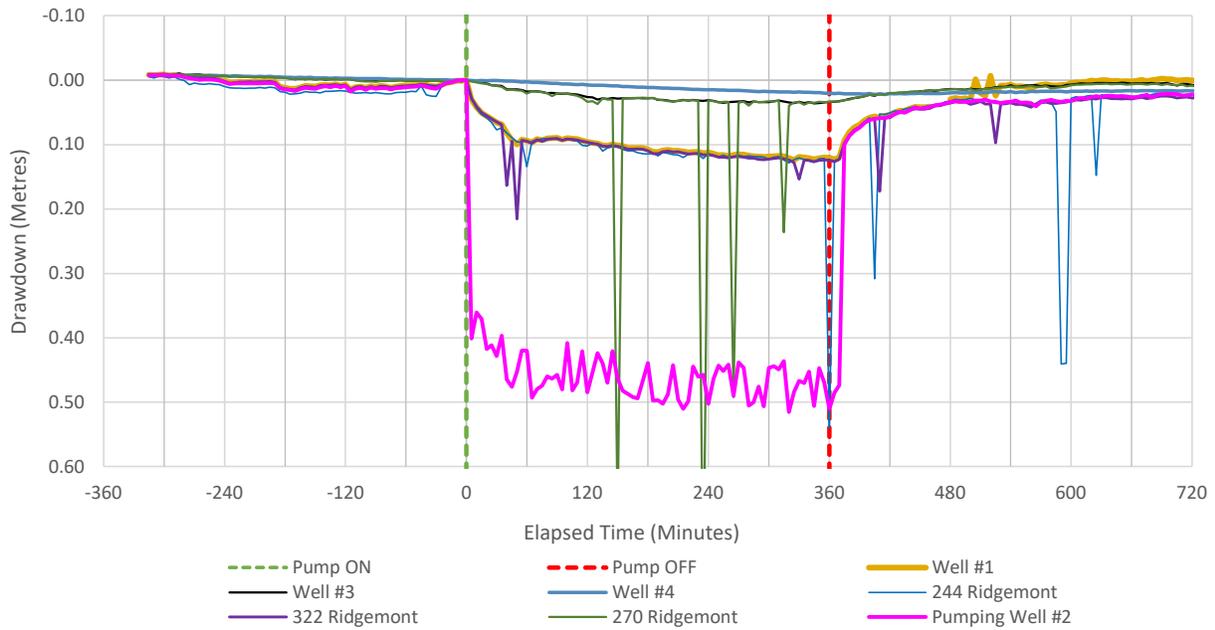


Figure 9b: Water Level Drawdown and Recovery During Pumping Test
Pumping Well A360957 (Well #2) Reduced Y-axis

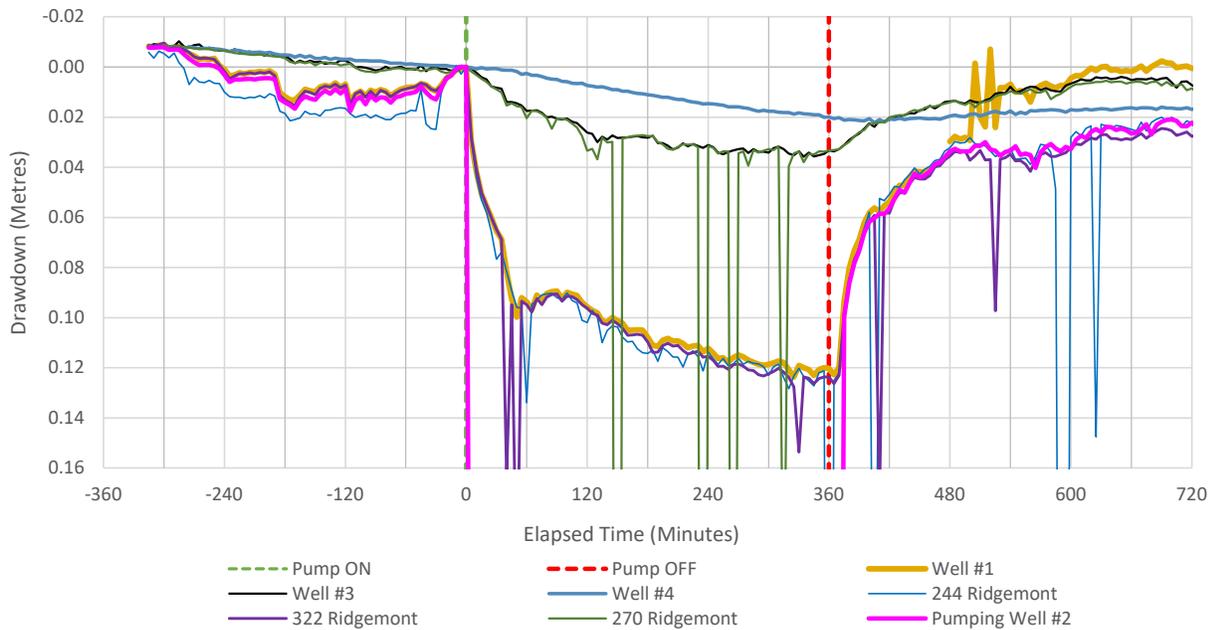


Figure 10a: Water Level Drawdown and Recovery During Pumping Test
Pumping Well A360959 (Well #3)

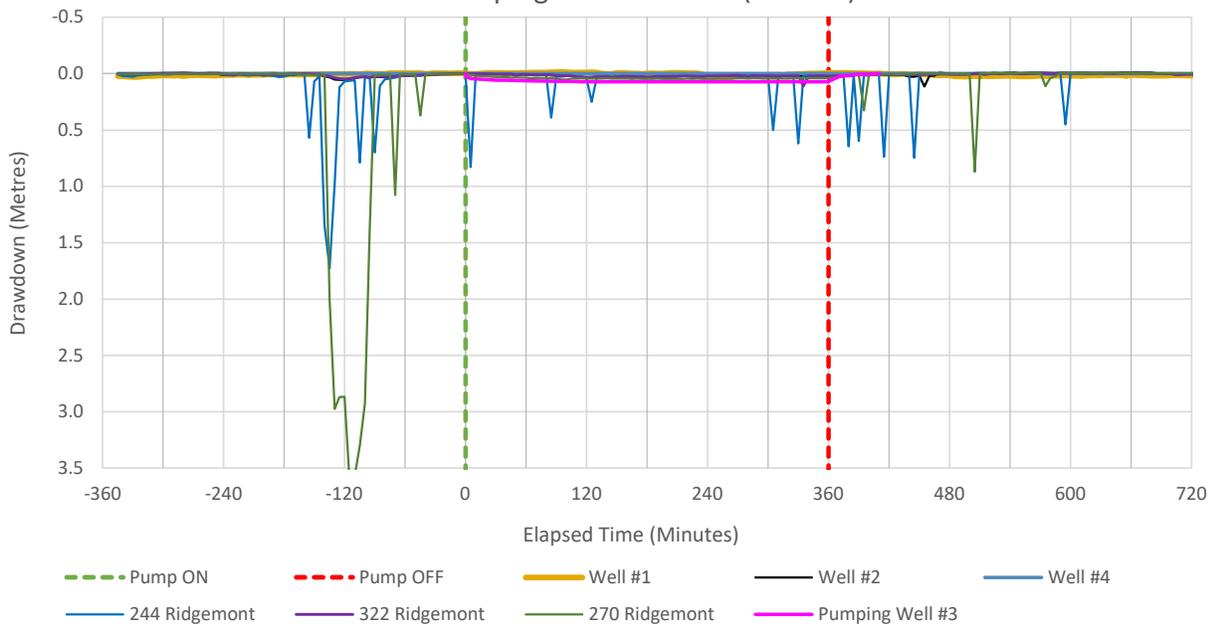


Figure 10b: Water Level Drawdown and Recovery During Pumping Test
Pumping Well A360959 (Well #3) Reduced Y-axis

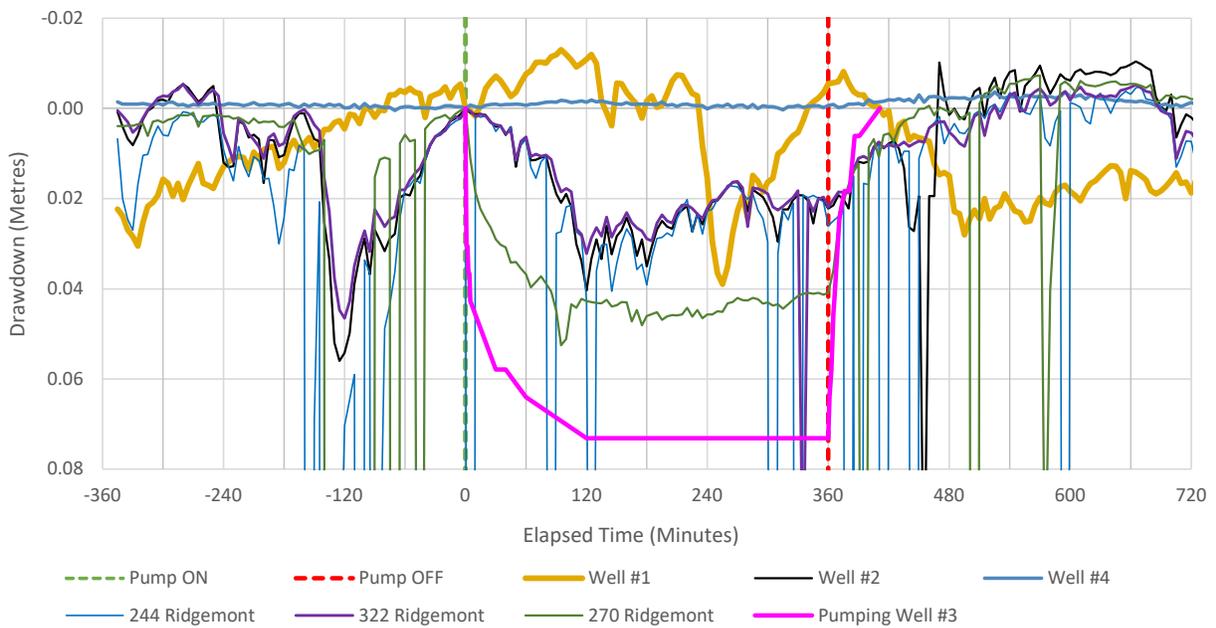


Figure 11a: Water Level Drawdown and Recovery During Pumping Test
Pumping Well A360959 (Well #4)

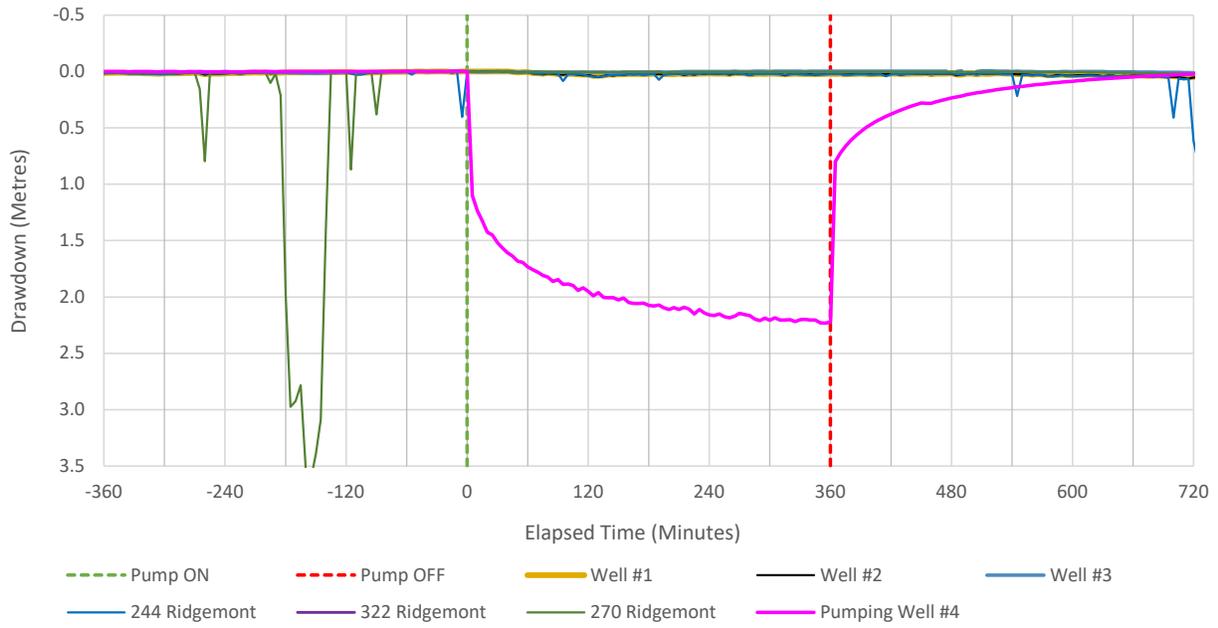
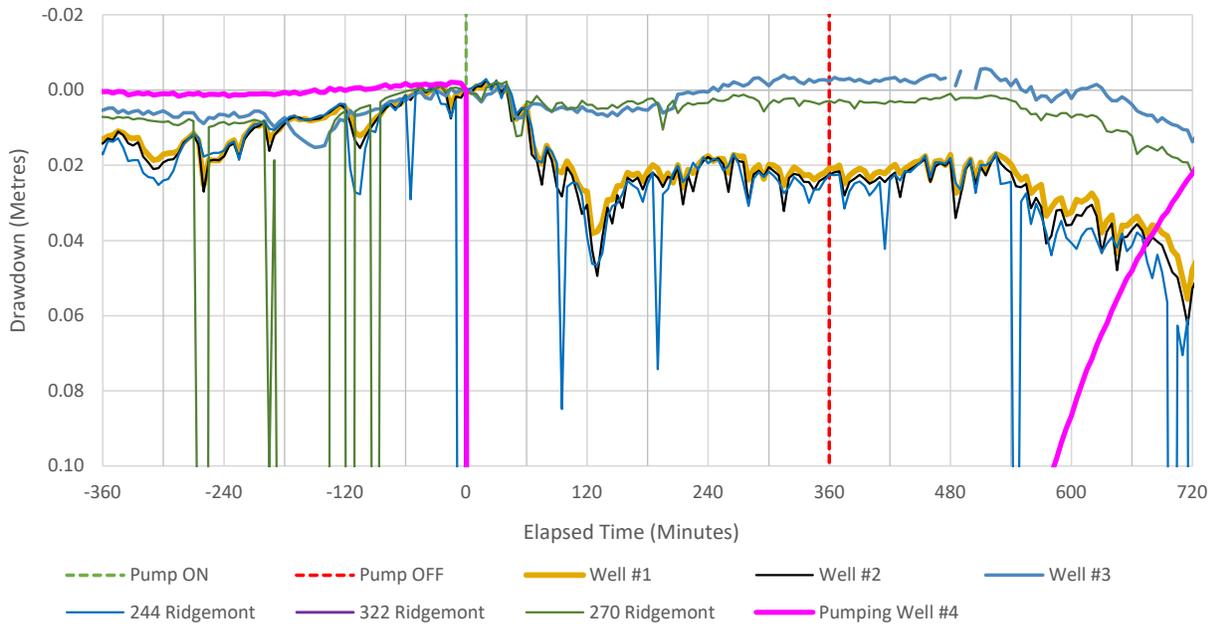


Figure 11b: Water Level Drawdown and Recovery During Pumping Test
Pumping Well A360959 (Well #4) Reduced Y-axis



APPENDIX II
Tables

TABLE 1
Summary of Supply Well Characteristics for Wells within ~500 m of the Site
Douglas Landing Developments
9243 McArton Road, Beckwith Township, Ontario

Well Record I.D.	Well Tag Number	Audit Number	Well Type	Well Depth (m)	Overburden Thickness (m)	Unit(s) Well Completed In	Recommended Pumping rate (LPM)	Date of Completion (yyyy-mm-dd)	Water Found at (m)		
3500537	N/A	N/A	Drilled	18.0	0.91	Limestone	45.5	1958-10-09	16.8		
3506860	N/A	N/A	Drilled	18.6	0.61	Shale	81.8	1984-06-14	16.5		
3508494	N/A	41124	Drilled	38.1	0.91	Sandstone	22.7	1988-09-02	36.6		
3508646	N/A	44884	Drilled	16.8	2.10	Limestone	36.4	1988-12-12	16.2		
3509344	N/A	73407	Drilled	15.8	2.40	Limestone	36.4	1990-05-30	15.8		
3509543	N/A	73442	Drilled	28.00	0.61	Limestone	136.4	1990-10-13	25.0	28.3	
3511611	N/A	153198	Drilled	37.5	0.61	Limestone	22.7	1995-10-30	34.1		
7183286	A127986	Z128553	Drilled	73.2	1.83	Limestone / Sandstone	90.9	2012-05-31	71.0		
7183288	A128058	Z128554	Drilled	55.2	0.91	Limestone / Sandstone	90.9	2012-05-08	52.1		
7183289	A128068	Z128555	Drilled	75.3	0.91	Limestone / Sandstone	90.9	2012-05-09	51.8	73.2	
7183290	A128066	Z128556	Drilled	55.2	1.22	Limestone / Sandstone	90.9	2012-05-09	50.3	52.4	
7183291	A128062	Z128557	Drilled	43.3	1.22	Limestone / Sandstone	90.9	2012-05-09	23.5	36.9	40.2
7268601	A195938	Z223093	Drilled	42.4	1.07	Limestone / Sandstone	45.5	2016-06-20	27.7	38.1	
7268602	A195941	Z223094	Drilled	30.5	0.91	Limestone / Sandstone	54.6	2016-06-21	27.1	30.2	
7268603	A195942	Z223095	Drilled	42.4	0.00	Limestone / Sandstone	27.8	2016-06-23	25.3	42.4	
7271813	A195956	Z223096	Drilled	42.4	0.00	Limestone / Sandstone	36.4	2016-09-06	42.4		
7279392	A195975	Z243269	Drilled	73.2	0.00	Limestone / Sandstone	68.2	2017-01-05	38.7	71.6	
7281316	A213224	Z243284	Drilled	39.6	2.10	Limestone	22.7	2017-01-31	35.8		
7288275	A213226	Z260669	Drilled	42.7	1.72	Limestone / Shale layers	40.9	2017-05-11	21.3	39.6	
7288276	A213245	Z260668	Drilled	42.7	1.22	Limestone	36.4	2017-05-12	39.3		
7288277	A213227	Z260670	Drilled	42.7	1.68	Limestone / Shale layers	54.6	2017-05-13	25.1	40.4	
7298154	A227986	Z260689	Drilled	42.7	1.37	Limestone / Shale layers	31.8	2017-10-10	24.4	42.7	
7298155	A227987	Z260700	Drilled	36.6	0.91	Limestone / Shale layers	45.5	2017-10-10	25.3	32.9	
7298156	A213255	Z260690	Drilled	36.6	1.98	Limestone / Shale layers	68.3	2017-09-29	19.2	28.0	
7308479	A228006	Z260717	Drilled	54.9	0.61	Limestone / Shale layers	68.3	2018-03-07	39.0	52.3	
7325842	A252424	Z292769	Drilled	54.9	0.61	Limestone / Shale layers	45.5	2018-12-10	25.3	36.6	
7325843	A252425	Z292768	Drilled	36.6	0.46	Limestone / Shale layers	54.6	2018-12-09	25.6	32.0	
7332598	A252405	Z292766	Drilled	61.0	0.00	Limestone	36.4	2019-04-15	23.8	56.1	
7349971	A276761	Z318977	Drilled	37.8	2.44	Limestone / Sandstone layers	45.5	2019-12-04	26.5	34.7	
7352342	A276752	Z318991	Drilled	30.2	1.37	Limestone / Shale layers	54.6	2019-12-19	25.8		
7352343	A276739	Z318976	Drilled	54.9	0.91	Limestone / Sandstone layers	36.4	2019-11-11	24.4	30.5	
7352438	A276753	Z318978	Drilled	48.8	1.22	Limestone	31.8	2019-12-10	20.7	33.2	45.1
7356155	A276774	Z334321	Drilled	36.6	0.00	Limestone / Sandstone layers	63.6	2020-03-12	25.3	32.9	
7363398	A296816	Z334345	Drilled	48.8	0.91	Limestone / Sandstone	68.2	2020-07-01	32.8	46.6	
7363399	A296814	Z334339	Drilled	48.8	1.22	Limestone / Sandstone layers	36.4	2020-07-02	23.5	29.9	42.1
7371206	A296837	Z349864	Drilled	54.9	1.83	Limestone	40.9	2020-09-30	27.1	48.8	
7384451	A309683	Z349898	Drilled	42.7	1.22	Limestone / Sandstone layers	40.9	2021-03-31	23.5	25.6	36.6
7384452	A309684	Z349906	Drilled	53.6	2.90	Limestone / Sandstone layers	36.4	2021-03-31	50.6		
7384453	A309682	Z349899	Drilled	30.5	1.52	Limestone / Sandstone layers	90.9	2021-03-31	20.4	28.0	
7390397	A309702	Z361794	Drilled	36.6	0.15	Limestone / Shale layers	54.6	2021-06-05	18.6	29.9	
Site Wells											
7451625	A360958	Z394524	Drilled	30.5	0.91	Limestone	90.9	2023-03-02	20.4	28.0	
7451628	A360957	Z394525	Drilled	42.7	0.91	Limestone	54.6	2023-03-02	40.5		
7451627	A360960	Z394526	Drilled	51.8	0.61	Limestone	90.9	2023-03-01	48.8	50.3	
7451626	A360959	Z394527	Drilled	54.9	0.61	Limestone	45.7	2023-02-28	23.5	52.7	

TABLE 8
RAW WELL WATER ANALYTICAL RESULTS
 Douglas Landing Developments
 9243 McArton Road, Beckwith Township, Ontario

Parameter	Units	MDL	ODWQS Standards		Sample Designation			
			Standard	Type of Standard	Sample Collection Date (dd/mm/yyyy)			
					Well #1 A360958	Well #2 A360957	Well #3 A360960	Well #4 A360959
					25-10-2024	24-10-2024	23-10-2024	21-10-2024
Microbiological Parameters								
E. Coli	CFU/100mL	1	0	MAC	0	0	0	0
Total Coliforms	CFU/100mL	1	0	MAC	0	0	0	0
General Inorganics								
Alkalinity, total	mg/L	5	30-500	OG	260	262	277	279
Ammonia as N	mg/L	0.01	-	-	0.2	0.2	0.13	<0.05
Dissolved Organic Carbon	mg/L	1	5	AO	1.8	1.7	2.4	1.5
Colour	TCU	2	5	AO	3	<2	<2	<2
Conductivity	uS/cm	1	-	-	672	636	737	781
Hardness	mg/L		500 / 80-100	AO / OG	343	311	357	385
pH	pH Units	0.1	6.5-8.5	OG	8.17	8.08	7.99	8.14
Total Dissolved Solids	mg/L	10	500	-	349	330	385	409
Turbidity	NTU	0.1	5	AO	2.0	2.5	1.2	0.5
Anions								
Chloride	mg/L	0.5	250	AO	19.9	23.3	39.3	49.8
Fluoride	mg/L	0.1	1.5	MAC	<0.1	<0.1	<0.1	<0.1
Nitrate as N	mg/L	0.1	10	MAC	<0.05	0.05	<0.05	1.08
Nitrite as N	mg/L	0.1	1	MAC	<0.05	<0.05	<0.05	<0.05
Sulphate	mg/L	1	500	AO	61	38	58	64
Metals								
Calcium	mg/L	0.02	-	-	90.8	74.8	84	94.4
Iron	mg/L	0.005	0.3	AO	0.131	0.214	0.10	0.027
Magnesium	mg/L	0.2	-	-	28.2	30.1	35.7	36.2
Manganese	mg/L	0.001	0.05	AO	0.144	0.009	0.008	0.007
Potassium	mg/L	0.1	-	-	8	4.2	3.9	3.1
Sodium	mg/L	0.2	20 / 200	MAC* / AO	39.8	8.0	11.3	15

Notes:

**Ontario Drinking Water
Quality Standards**

Type of Standard

MAC: Maximum Acceptable Concentration
 AO: Aesthetic Objective
 OG: Operational Guidelines

BOLD
BOLD
BOLD

Exceed MAC Standard
 Exceeds AO or OG Standard
 Reportable Detection Limit Exceeds Standard

* This health-related limit for sodium is a "warning level" only. Exceedance calls for a recommendation that the local Medical Officer of Health be notified in order to alert persons with relevant medical conditions. Sodium also has an Aesthetic Objective of 200 mg/L. Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines June 2003 Revised June 2006 (PIBS 4449e01)

APPENDIX III
MECP Water Well Records

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: Dr. Gillian Espie
 Last Name/Organization: Dr. Gillian Espie
 E-mail Address: [blank]
 Well Constructed by Well Owner:

Mailing Address (Street Number/Name): 1 Forillon Crescent
 Municipality: Kanata
 Province: ON
 Postal Code: K2M 2W5
 Telephone No. (inc. area code): [blank]

Well Location
 Address of Well Location (Street Number/Name): (NO Civic) Ramsay Concession 12
 Township: Beckwith
 Lot: PAL 25
 Concession: 12
 City/Town/Village: Ashton
 County/District/Municipality: Lanark
 UTM Coordinates: Zone: Easting: Northing: NAD 83 18 415351 5003544
 Municipal Plan and Sublot Number: [blank]

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)
	Sand	Stones		0' 3'
Grey	Green Limestone			3' 133'
Grey	Green Limestone			133' 140'

TEST WELL # 2 OF 4

Annular Space

Depth Set at (m)	Type of Sealing Used (Material and Type)	Volume Placed (m³)
40' 30'	Neat cement	10.92
30' 0'	Bentonite slurry	8.4

Method of Construction

Cable Tool
 Rotary (Conventional)
 Rotary (Reverse)
 Jetting
 Driving
 Digging
 Percussion
 Other, specify

Well Use
 Domestic
 Commercial
 Municipal
 Industrial
 Cooling & Air Conditioning
 Not used
 Dewatering
 Monitoring

Construction Record - Casing

Inside Diameter (mm)	Material (Plastic, Galvanized, Steel)	Wall Thickness (mm)	Depth (m)	Status of Well
6 1/4"	Steel	.188"	40'	Water Supply
6"	Open Hole		140'	Test Hole

Construction Record - Screen

Outside Diameter (mm)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m)
			40'
			140'

Water Details

Water found at Depth (m)	Kind of Water	Depth (m)	Diameter (cm)
133'	Gas	0' 40'	9 3/4"
	Gas	40' 140'	6"

Well Contractor and Well Technician Information

Business Name of Well Contractor: Air Rock Drilling Co. Ltd.
 Well Contractor's Licence No.: 7681
 Business Address (Street Number/Name): 6669 Franktown Road, Richmond

Business Name of Well Technician: Hanna, Jeremy
 Well Technician's Licence No.: 13632

Date Package Delivered: 2023 03 02
 Ministry Use Only: Audit No. 2394525
 Received: [Signature]

Results of Well Yield Testing

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

Time (min)	Water Level (m)	Recovery Water Level (m)
1	24.2	24.3
2	24.5	23.9
3	24.7	23.7
4	24.8	23.5
5	24.9	23.4
10	25.1	23.4
15	25.2	23.4
20	25.3	23.4
25	25.3	23.4
30	25.4	23.4
40	25.5	23.4
50	25.5	23.4
60	25.6	23.4

Recommended pump depth (m): 100'
 Recommended pump rate (l/min/GPM): 15
 Well production (l/min/GPM): 15



Well Owner's Information
 Name: Hanna, Jeremy
 Signature: [Signature]
 Date: 2023 03 02

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: Dr. Gillian Espie
 Last Name/Organization: Dr. Gillian Espie
 E-mail Address: [blank]
 Well Constructed by Well Owner:

Mailing Address (Street Number/Name): 1 Forillon Crescent
 Municipality: Kanata
 Province: ON
 Postal Code: K2M 2W5
 Telephone No. (inc. area code): [blank]

Well Location
 Address of Well Location (Street Number/Name): (NO Civic) Ramsay Concession 12
 Township: Beckwith
 Lot: P/L 25
 Concession: 12
 City/Town/Village: Ashton
 County/District/Municipality: Lanark
 UTM Coordinates: Zone: Easting: Northing: NAD 83 18 415424 5003394
 Municipal Plan and Sublot Number: [blank]

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)
	Sandy Clay	Stones		0' 3'
Grey	Green Limestone			3' 67'
Grey	Green Limestone			67' 92'
Grey	Green Limestone			92' 100'

TEST WELL # 1 OF 4

Annular Space

Depth Set at (m)	Type of Sealing Used (Material and Type)	Volume Placed (m³)
40' 30'	Neat cement	10.92
30' 0'	Bentonite slurry	4.2

Method of Construction

Cable Tool
 Rotary (Conventional)
 Rotary (Reverse)
 Jetting
 Driving
 Digging
 Percussion
 Other, specify

Well Use
 Domestic
 Commercial
 Municipal
 Industrial
 Cooling & Air Conditioning
 Not used
 Dewatering
 Monitoring

Construction Record - Casing

Inside Diameter (mm)	Material (Plastic, Galvanized, Concrete, Steel)	Wall Thickness (mm)	Depth (m)	Status of Well
6 1/4"	Steel	.188"	40'	Water Supply
6"	Open Hole		100'	Test Hole

Construction Record - Screen

Outside Diameter (mm)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m)
			40'
			100'

Water Details

Water found at Depth (m)	Kind of Water	Depth (m)	Diameter (cm)
87'	Gas	0' 40'	9 3/4"
	Gas	40' 100'	6"

Well Contractor and Well Technician Information

Business Name of Well Contractor: Air Rock Drilling Co. Ltd.
 Well Contractor's Licence No.: 7681
 Business Address (Street Number/Name): 6669 Franktown Road, Richmond

Business Name of Well Technician: Hanna, Jeremy
 Well Technician's Licence No.: 13632

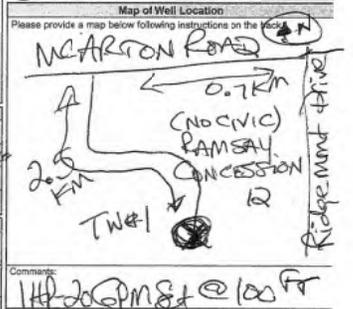
Date Package Delivered: 2023 03 02
 Ministry Use Only: Audit No. 2394524
 Received: [Signature]

Results of Well Yield Testing

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

Time (min)	Water Level (m)	Recovery Water Level (m)
1	25.4	26
2	25.6	25.5
3	25.6	25.4
4	25.7	25.4
5	25.7	25.4
10	25.8	25.4
15	25.8	25.4
20	25.9	25.4
25	25.9	25.4
30	25.9	25.4
40	26	25.4
50	26	25.4
60	26	25.4

Recommended pump depth (m): 100'
 Recommended pump rate (l/min/GPM): 20
 Well production (l/min/GPM): 20



Well Owner's Information
 Name: Hanna, Jeremy
 Signature: [Signature]
 Date: 2023 03 02

Measurements recorded in: Metric Imperial
 Tag#: A360959 (rit Below) A360959 Page of

Well Owner's Information
 First Name: Last Name/Organization: E-mail Address: Well Constructed by Well Owner
 Mailing Address (Street Number/Name): **Dr. Gillian Espie** Municipality: **Kanata** Province: **ON** Postal Code: **K2M 2W5** Telephone No. (inc. area code):

Well Location
 Address of Well Location (Street Number/Name): **1 Forillon Crescent** Township: **Beckwith** Lot: **P/L 25** Concession: **12**
 Address of Well Location (Street Number/Name): **(NO Civic) Ramsay Concession 12** Township: **Beckwith** Lot: **P/L 25** Concession: **12**
 County/District/Municipality: **Lanark** City/Town/Village: **Ashton** Province: **Ontario** Postal Code:

UTM Coordinates: Zone: **18** Easting: **415121** Northing: **5003057** Other: **TW#484**

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)

General Colour	Most Common Material	Other Materials	General Description	Depth (m) (ft)
	Sand			0' 2'
Grey	Limestone			2' 77'
Grey	Limestone			77' 173'
Grey	Limestone			173' 180'

TEST WELL # 4 of 4

Annular Space

Depth Set at (m) (ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³) (ft ³)
40' 30'	Neat cement	10.92
30' 0'	Bentonite slurry	4.2

Method of Construction

Method of Construction	Well Use
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Public
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Municipal
<input type="checkbox"/> Drilling	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Digging	<input type="checkbox"/> Dewatering
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Livestock
<input type="checkbox"/> Other, specify	<input type="checkbox"/> Irrigation
	<input type="checkbox"/> Cooling & Air Conditioning
	<input type="checkbox"/> Industrial
	<input type="checkbox"/> Other, specify

Construction Record - Casing

Inside Diameter (mm) (in)	Open Hole OR Material (Galvanized, Fiberglass, Concrete, Plastic, Steel)	Well Thickness (mm) (in)	Depth (m) (ft)	Status of Well
6 1/4"	Steel	.188"	+2' 40'	<input checked="" type="checkbox"/> Water Supply
6"	Open Hole		40' 180'	<input type="checkbox"/> Replacement Well
				<input type="checkbox"/> Test Hole
				<input type="checkbox"/> Recharge Well
				<input type="checkbox"/> Dewatering Well
				<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)
				<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify

Construction Record - Screen

Outside Diameter (mm) (in)	Material (Plastic, Galvanized, Steel)	Screen (mm) (in)	Depth (m) (ft)	Status of Well
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify

Water Details

Water found at Depth (m) (ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Unstated <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Hole Diameter (mm) (in)
77' (m) (ft)		6"
172' (m) (ft)		4"
172' (m) (ft)		6"

Well Contractor and Well Technician Information
 Business Name of Well Contractor: **Air Rock Drilling Co. Ltd.** Well Contractor's Licence No.: **47681**
 Business Address (Street Number/Name): **6809 Franktown Road** Municipality: **Richmond**

Province: **ON** Postal Code: **K0A 2Z0** Business E-mail Address: **air-rock@sympatico.ca**
 Bus. Telephone No. (inc. area code): **813882170** Name of Well Technician (Last Name, First Name): **Hanna, Jeremy**
 Well Technician's Licence No.: **13632** Signature of Technician and/or Contractor: **[Signature]** Date: **2023-03-31**

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: Pump intake set at (m) (ft) **170**

Pumping rate (l/min) (GPM): **10**

Duration of pumping: **1** hrs + **0** min

Final water level end of pumping (m) (ft): **24.3**

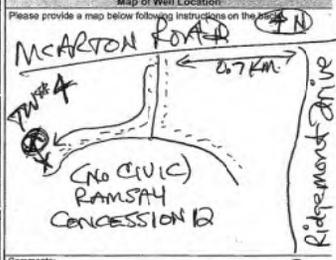
If flowing give rate (l/min) (GPM): **0**

Recommended pump depth (m) (ft): **190**

Recommended pump rate (l/min) (GPM): **0**

Well production (l/min) (GPM): **0**

Perforated? Yes No



Comments: **100' log set @ 140'**

Well owner's information package received: **2023-03-02** Ministry Use Only: Audit No.: **2394527**

Well owner's information package received: **2023-03-02** Ministry Use Only: Audit No.: **2394527**

Measurements recorded in: Metric Imperial
 Tag#: A360960 (rit Below) A360960 Page of

Well Owner's Information
 First Name: Last Name/Organization: E-mail Address: Well Constructed by Well Owner
 Mailing Address (Street Number/Name): **Dr. Gillian Espie** Municipality: **Kanata** Province: **ON** Postal Code: **K2M 2W5** Telephone No. (inc. area code):

Well Location
 Address of Well Location (Street Number/Name): **1 Forillon Crescent** Township: **Beckwith** Lot: **P/L 25** Concession: **12**
 Address of Well Location (Street Number/Name): **(NO Civic) Ramsay Concession 12** Township: **Beckwith** Lot: **P/L 25** Concession: **12**
 County/District/Municipality: **Lanark** City/Town/Village: **Ashton** Province: **Ontario** Postal Code:

UTM Coordinates: Zone: **18** Easting: **415121** Northing: **5003273** Other: **TW#384**

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)

General Colour	Most Common Material	Other Materials	General Description	Depth (m) (ft)
	Sand			0' 2'
Grey	Limestone			2' 160'
Grey	Limestone			160' 170'

TEST WELL # 3 of 4

Annular Space

Depth Set at (m) (ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³) (ft ³)
40' 30'	Neat cement	10.92
30' 0'	Bentonite slurry	4.2

Method of Construction

Method of Construction	Well Use
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Public
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Municipal
<input type="checkbox"/> Drilling	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Digging	<input type="checkbox"/> Dewatering
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Livestock
<input type="checkbox"/> Other, specify	<input type="checkbox"/> Irrigation
	<input type="checkbox"/> Cooling & Air Conditioning
	<input type="checkbox"/> Industrial
	<input type="checkbox"/> Other, specify

Construction Record - Casing

Inside Diameter (mm) (in)	Open Hole OR Material (Galvanized, Fiberglass, Concrete, Plastic, Steel)	Well Thickness (mm) (in)	Depth (m) (ft)	Status of Well
6 1/4"	Steel	.188"	+2' 40'	<input checked="" type="checkbox"/> Water Supply
6"	Open Hole		40' 170'	<input type="checkbox"/> Replacement Well
				<input type="checkbox"/> Test Hole
				<input type="checkbox"/> Recharge Well
				<input type="checkbox"/> Dewatering Well
				<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)
				<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify

Construction Record - Screen

Outside Diameter (mm) (in)	Material (Plastic, Galvanized, Steel)	Screen (mm) (in)	Depth (m) (ft)	Status of Well
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify

Water Details

Water found at Depth (m) (ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Unstated <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Hole Diameter (mm) (in)
160' (m) (ft)		6"
165' (m) (ft)		4"
165' (m) (ft)		6"

Well Contractor and Well Technician Information
 Business Name of Well Contractor: **Air Rock Drilling Co. Ltd.** Well Contractor's Licence No.: **47681**
 Business Address (Street Number/Name): **6809 Franktown Road** Municipality: **Richmond**

Province: **ON** Postal Code: **K0A 2Z0** Business E-mail Address: **air-rock@sympatico.ca**
 Bus. Telephone No. (inc. area code): **813882170** Name of Well Technician (Last Name, First Name): **Hanna, Jeremy**
 Well Technician's Licence No.: **13632** Signature of Technician and/or Contractor: **[Signature]** Date: **2023-03-31**

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: Pump intake set at (m) (ft) **23.4'**

Pumping rate (l/min) (GPM): **20**

Duration of pumping: **1** hrs + **0** min

Final water level end of pumping (m) (ft): **23.9**

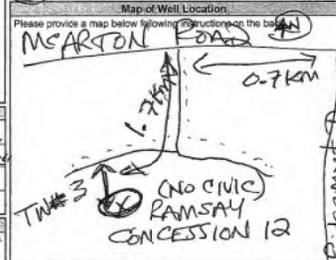
If flowing give rate (l/min) (GPM): **0**

Recommended pump depth (m) (ft): **100'**

Recommended pump rate (l/min) (GPM): **20**

Well production (l/min) (GPM): **0**

Perforated? Yes No



Comments: **100' log set @ 100'**

Well owner's information package received: **2023-03-02** Ministry Use Only: Audit No.: **2394526**

Well owner's information package received: **2023-03-02** Ministry Use Only: Audit No.: **2394526**

The Ontario Water Resources Act
WATER WELL RECORD

3506860 35002 CON 112

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

COUNTY OR DISTRICT: LANARK TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: BECKWITH CON. BLOCK, TRACT, SURVEY, ETC.: 12 LOT: 026

DATE COMPLETED: DAY 13 MONTH 05 YEAR 84

UNIQUE IDENTIFICATION NO.: 003499 5 0450 5 26 BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Brown	Sand		Fine	0	2
Brown	Shail		Soft	2	61

MOB
WELL

31 0001608 000161781

32

41 WATER RECORD

51 CASING & OPEN HOLE RECORD

61 PLUGGING & SEALING RECORD

71 PUMPING TEST

1. PUMP BAILEY 0020 GPM 01 HOURS 00 MINS

2. PUMPING RECOVERY

3. STATIC LEVEL

4. WATER LEVELS DURING PUMPING

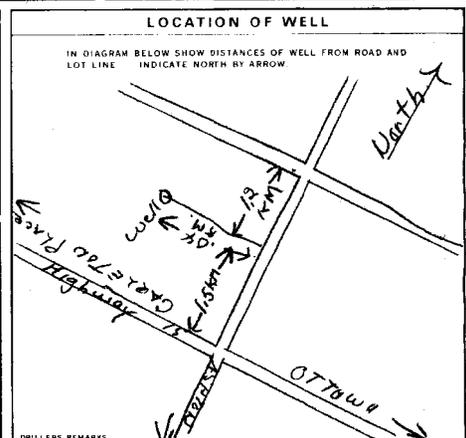
5. WATER AT END OF TEST

6. PUMP INITIAL SET AT

7. RECOMMENDED PUMP TYPE

8. RECOMMENDED PUMP SETTING

9. RECOMMENDED PUMPING RATE



8. FINAL STATUS OF WELL

9. WATER USE

10. METHOD OF DRILLING

CONTRACTOR: BOYD CAMERON LICENCE NUMBER: 1567

ADDRESS: R.R. 2 CLAYTON ONT.

NAME OF DRILLER OR BORER: Boyd Cameron LICENCE NUMBER: 020884

DATE OF INSPECTION: 1567 INSPECTOR: 020884

REMARKS: CSSIES



ONTARIO
The Water-well Drillers Act, 1954
Department of Mines

35 No 537
GROUND WATER BRANCH
OCT 24 1958
ONTARIO WATER RESOURCES COMMISSION

Water-Well Record

UTM 1182 41145110E
191R 50103121710N
Elev. 99 11
Basin 1284 31 F1E

ip, Village, Town or City: BECKWITH
Village, Town or City).....
Address FLMONT

Date completed 7 05 84
(day) (month) (year)

Pipe and Casing Record

Casing diameter (s) 6"
Length (s) 8'
Type of screen W
Length of screen 2.5'

Pumping Test

Static level 17
Pumping rate 10 G.P.M.
Pumping level 25
Duration of test 2 H.R.

Well Log

Water Record

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)
<u>Top Soil</u>	<u>0</u>	<u>3</u>	<u>1.0</u>		
<u>13 LIME</u>	<u>3</u>	<u>39</u>	<u>5.5</u>	<u>38</u>	<u>FRESH.</u>

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

Is water clear or cloudy? CLEAR

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

Drilling firm C.S.P.B. BERRY WELL DRILLING CO.

Address VERONA

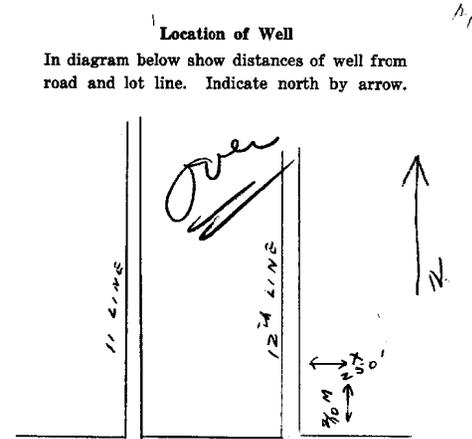
Name of Driller H. M. GEE

Address CLAYTON

Licence Number.....

I certify that the foregoing statements of fact are true.

Date 04.9.58 H. M. GEE
Signature of Licensee





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 3508646 35002 CON
PL 27A-345
COUNTY OR DISTRICT: LANARK
TOWNSHIP/BOROUGH/CITY/TOWN/VILLAGE: BECKWITH
CON. BLOCK/TRACT/SURVEY ETC.: 11
LOT: 26
DATE COMPLETED: 48-93
DAY: 30 MO: 11 YR: 88

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
BROWN	CLAY SAND	STONE'S	PACKED	0'	7'
GREY	LIMESTONE		HARD	7'	40'
BLACK	LIMESTONE		POROUS	40'	55'

31
32

<p>41 WATER RECORD</p> <p>WATER FOUND AT - FEET: 53</p> <p>KIND OF WATER: 1 FRESH, 2 SALTY, 3 SULPHUR, 4 MINERALS, 5 GAS</p>	<p>51 CASING & OPEN HOLE RECORD</p> <p>INSIDE DIAM. INCHES: 6 1/2"</p> <p>MATERIAL: 1 STEEL, 2 GALVANIZED, 3 CONCRETE, 4 OPEN HOLE, 5 PLASTIC</p> <p>WELL THICKNESS INCHES: 1.88</p> <p>DEPTH - FEET: 0' 22', 22' 55'</p>	<p>61 PLUGGING & SEALING RECORD</p> <p>DEPTH SET AT - FEET: 4' 21"</p> <p>MATERIAL AND TYPE: TYPE 10 PORTLAND</p>
--	---	---

71 PUMPING TEST METHOD: 1 PUMP, 2 BAILER

PUMPING RATE: 10 GPM

DURATION OF PUMPING: 2 HOURS

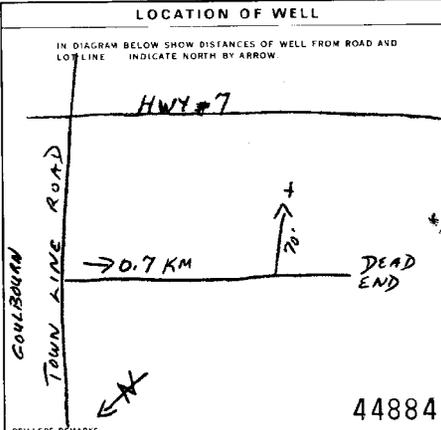
STATIC LEVEL: 25 FEET

WATER LEVELS DURING PUMPING: 25 FEET, 25 FEET, 25 FEET, 25 FEET

RECOMMENDED PUMP TYPE: 1 SHALLOW, 2 DEEP

RECOMMENDED PUMP SETTING: 40 FEET

RECOMMENDED PUMPING RATE: 8 GPM



FINAL STATUS OF WELL: 1 WATER SUPPLY, 2 OBSERVATION WELL, 3 TEST HOLE, 4 RECHARGE WELL

WATER USE: 1 DOMESTIC, 2 STOCK, 3 IRRIGATION, 4 INDUSTRIAL, 5 OTHER

METHOD OF CONSTRUCTION: 1 CABLE TOOL, 2 ROTARY (CONVENTIONAL), 3 ROTARY (REVERSE), 4 ROTARY (AIR), 5 AIR PERCUSSION

CONTRACTOR: M. KAVANAGH & SON WELL DRILLING

WELL CONTRACTOR'S LICENCE NUMBER: 3142

NAME OF WELL TECHNICIAN: LONNY M'NEELY

WELL TECHNICIAN'S LICENCE NUMBER: 98-194

DATE RECEIVED: JAN 12 1989

DATE OF INSPECTION: []

INSPECTOR: []

REMARKS: WDE, CSS.ES



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 3508494 35002 CON
COUNTY OR DISTRICT: LANARK
TOWNSHIP/BOROUGH/CITY/TOWN/VILLAGE: BECKWITH
CON. BLOCK/TRACT/SURVEY ETC.: 12
LOT: 26
DATE COMPLETED: 48-93
DAY: 1 MO: 9 YR: 88

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
	clay			0'	3'
black	green sandstone			3'	30'
gray	sandstone			30'	83'
gray	sandstone			83'	125'

31
32

<p>41 WATER RECORD</p> <p>WATER FOUND AT - FEET: 120</p> <p>KIND OF WATER: 1 FRESH, 2 SALTY, 3 SULPHUR, 4 MINERALS, 5 GAS</p>	<p>51 CASING & OPEN HOLE RECORD</p> <p>INSIDE DIAM. INCHES: 6 1/2"</p> <p>MATERIAL: 1 STEEL, 2 GALVANIZED, 3 CONCRETE, 4 OPEN HOLE, 5 PLASTIC</p> <p>WELL THICKNESS INCHES: 1.88</p> <p>DEPTH - FEET: 0' 22"</p>	<p>61 PLUGGING & SEALING RECORD</p> <p>DEPTH SET AT - FEET: 0' 22"</p> <p>MATERIAL AND TYPE: cement</p>
---	--	---

71 PUMPING TEST METHOD: 1 PUMP, 2 BAILER

PUMPING RATE: 5 GPM

DURATION OF PUMPING: 30 HOURS

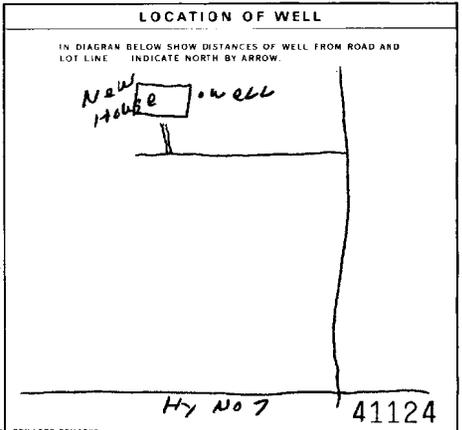
STATIC LEVEL: 28 FEET

WATER LEVELS DURING PUMPING: 28 FEET, 32 FEET, 32 FEET, 32 FEET

RECOMMENDED PUMP TYPE: 1 SHALLOW, 2 DEEP

RECOMMENDED PUMP SETTING: 105 FEET

RECOMMENDED PUMPING RATE: 5 GPM



FINAL STATUS OF WELL: 1 WATER SUPPLY, 2 OBSERVATION WELL, 3 TEST HOLE, 4 RECHARGE WELL

WATER USE: 1 DOMESTIC, 2 STOCK, 3 IRRIGATION, 4 INDUSTRIAL, 5 OTHER

METHOD OF CONSTRUCTION: 1 CABLE TOOL, 2 ROTARY (CONVENTIONAL), 3 ROTARY (REVERSE), 4 ROTARY (AIR), 5 AIR PERCUSSION

CONTRACTOR: Guy Hall Ltd

WELL CONTRACTOR'S LICENCE NUMBER: 2558

NAME OF WELL TECHNICIAN: Carl Stummell

WELL TECHNICIAN'S LICENCE NUMBER: 70050

DATE RECEIVED: OCT 21 1988

DATE OF INSPECTION: []

INSPECTOR: []

REMARKS: CSS.ES



Ministry
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The Ontario Water Resources Act
WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED. 2. CHECK CORRECT BOX WHERE APPLICABLE. COUNTY OR DISTRICT: **LANARK** TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: **BECKWITH** CON. BLOCK TRACT SURVEY ETC.: **12** LOT: **26** DATE COMPLETED: **9** DAY **10** MO **10** YR **90**

WELL NO.: **3509543** MUNICIPAL: **35002** CON: **CON** DATE COMPLETED: **9** DAY **10** MO **10** YR **90**

WELL NO.: **RR3 CARP ONT.** MUNICIPAL: **KDAIKO** CON: **CON** DATE COMPLETED: **9** DAY **10** MO **10** YR **90**

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
BROWN	EARTH		LOOSE	0'	2'
GREY	LIMESTONE		HARD	2'	40'
GREY/BLACK	LIMESTONE	SHALE	POROUS	40'	95'

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
82	1 FRESH 2 SALTY 3 SULPHUR 4 MINERALS 5 GAS
93	1 FRESH 2 SALTY 3 SULPHUR 4 MINERALS 5 GAS

51 CASING & OPEN HOLE RECORD

DEPTH - FEET	MATERIAL	WELL THICKNESS - INCHES
0' - 22'	STEEL	1.88
22' - 95'	CONCRETE	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE	CEMENT GROUT LEAD PACKER, ETC.
0 - 21	TYPE 10	
	PORTLAND	

71 PUMPING TEST METHOD

1 PUMP 2 BAILEY 30 GPM 15 MIN 30 MIN

LOCATION OF WELL

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

RAMSAY HUNTLEY
BECKWITH
73442

FINAL STATUS OF WELL

1 WATER SUPPLY 2 OBSERVATION WELL 3 TEST HOLE 4 RECHARGE WELL

WATER USE

1 DOMESTIC 2 STOCK 3 IRRIGATION 4 INDUSTRIAL

METHOD OF CONSTRUCTION

1 CABLE TOOL 2 ROTARY (CONVENTIONAL) 3 ROTARY (REVERSE) 4 ROTARY (AIR) 5 AIR PERCUSSION

CONTRACTOR NAME OF WELL CONTRACTOR: **M. KAVANAGH & SON WELL DRILLING 3142** WELL CONTRACTOR'S LICENCE NUMBER: **3142**

ADDRESS: **RR2 CARLETON PLACE MIKE KAVANAGH 117 Kavanagh** WELL TECHNICIAN'S LICENCE NUMBER: **17-0197**

DATE OF INSPECTION: **NOV 01 1990** SIGNATURE OF TECHNICIAN/CONTRACTOR: **Mike Kavanagh** SUBMISSION DATE: **DAY 13 MO 10 YR 90**



Ministry
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Ontario

The Ontario Water Resources Act
WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED. 2. CHECK CORRECT BOX WHERE APPLICABLE. COUNTY OR DISTRICT: **LANARK** TOWNSHIP, BOROUGH, CITY, TOWN, V. LAJE: **BECKWITH** CON. BLOCK TRACT SURVEY ETC.: **11** LOT: **26** DATE COMPLETED: **29** DAY **5** MO **90**

WELL NO.: **3509344** MUNICIPAL: **35002** CON: **CON** DATE COMPLETED: **29** DAY **5** MO **90**

WELL NO.: **RR4 ALMONTIE, ONT.** MUNICIPAL: **KDAIKO** CON: **CON** DATE COMPLETED: **29** DAY **5** MO **90**

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
BROWN	FILL	SAND STONE'S	PACKED	0'	8'
GREY	LIMESTONE		HARD	8'	52'

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
52	1 FRESH 2 SALTY 3 SULPHUR 4 MINERALS 5 GAS

51 CASING & OPEN HOLE RECORD

DEPTH - FEET	MATERIAL	WELL THICKNESS - INCHES
0' - 22'	STEEL	1.88
22' - 52'	CONCRETE	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE	CEMENT GROUT LEAD PACKER, ETC.
0 - 21	TYPE 10	
	PORTLAND	

71 PUMPING TEST METHOD

1 PUMP 2 BAILEY 30 GPM 15 MIN 30 MIN

LOCATION OF WELL

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

Hwy 7
ASHTON STATION ROAD
73407

FINAL STATUS OF WELL

1 WATER SUPPLY 2 OBSERVATION WELL 3 TEST HOLE 4 RECHARGE WELL

WATER USE

1 DOMESTIC 2 STOCK 3 IRRIGATION 4 INDUSTRIAL

METHOD OF CONSTRUCTION

1 CABLE TOOL 2 ROTARY (CONVENTIONAL) 3 ROTARY (REVERSE) 4 ROTARY (AIR) 5 AIR PERCUSSION

CONTRACTOR NAME OF WELL CONTRACTOR: **M. KAVANAGH & SON WELL DRILLING 3142** WELL CONTRACTOR'S LICENCE NUMBER: **3142**

ADDRESS: **RR2 CARLETON PLACE LONNY McNEELY 59777** WELL TECHNICIAN'S LICENCE NUMBER: **17-0197**

DATE OF INSPECTION: **JUN 06 1990** SIGNATURE OF TECHNICIAN/CONTRACTOR: **Lonny McNeely** SUBMISSION DATE: **DAY 30 MO 5 YR 90**

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: _____ Last Name / Organization: **McArton Road Co-Tenancy**
 Mailing Address (Street Number/Name): **9094 Cavanaugh Road** Municipality: **Ashton** Province: **ON** Postal Code: **K0A1B0** Telephone No. (inc. area code): _____
Well Location
 Address of Well Location (Street Number/Name): **9153 McArton Road** Township: **Beckwith** Lot: **P/L 6** Concession: **12**
 County/District/Municipality: **Ashton** Province: **Ontario** Postal Code: _____
 UTM Coordinates: Zone, Easting: **NAD 83 18 415241** Northing: **6004059**

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
	Sand	Boulders		0'	6'
Green	Limestone			6'	233'
Green	Limestone			233'	240'

Annular Space

Depth Set at (m/ft)	Type of Sealing Used (Material and Type)	Volume Placed (m ³ /ft ³)
From 0 To 62'	Neat cement	65.5

Method of Construction

Cable Tool Diamond Public Commercial Not used
 Rotary (Conventional) Jetting Domestic Municipal Dewatering
 Rotary (Reverse) Drilling Livestock Test Hole Monitoring
 Boring Digging Irrigation Cooling & Air Conditioning
 Air percussion 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)		Status of Well
			From	To	
6"	Steel	188"	2'	62'	<input checked="" type="checkbox"/> Replacement Well <input checked="" type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify: _____ <input type="checkbox"/> Other, specify: _____
5 7/8"	Open Hole		62'	240'	

Construction Record - Screen

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

Water Details

Water found at Depth (m/ft)	Kind of Water:	Depth (m/ft)	Diameter (cm/in)
233'	Fresh <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Other, specify: _____	0' to 62'	6"
	Fresh <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify: _____	62' to 240'	5 7/8"

Well Contractor and Well Technician Information

Business Name of Well Contractor: **Air Rock Drilling Co. Ltd.** Well Contractor's Licence No.: **1119**
 Business Address (Street Number/Name): **6659 Franktown Road, RR#1** Municipality: **Richmond**
 Province: **ON** Postal Code: **K0A1Z20** Business E-mail Address: **air-rock@sympatico.ca**
 Bus. Telephone No. (inc. area code): **8138982170** Name of Well Technician (Last Name, First Name): **Purcell, Shannon**
 Well Technician's Licence No.: **T2122** Signature of Technician and/or Contractor: *[Signature]* Date Submitted: **2012 05 31**

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**

Time (min)	Draw Down		Recovery	
	Water Level (m/ft)	Static Level	Water Level (m/ft)	Static Level
1	28.6'	28.1'	28.1'	28.1'
2	28.6'	28.1'	28.1'	28.1'
3	28.6'	28.1'	28.1'	28.1'
4	28.6'	28.1'	28.1'	28.1'
5	28.6'	28.1'	28.1'	28.1'
10	28.6'	28.1'	28.1'	28.1'
15	28.6'	28.1'	28.1'	28.1'
20	28.6'	28.1'	28.1'	28.1'
25	28.6'	28.1'	28.1'	28.1'
30	28.6'	28.1'	28.1'	28.1'
40	28.6'	28.1'	28.1'	28.1'
50	28.6'	28.1'	28.1'	28.1'
60	28.6'	28.1'	28.1'	28.1'

Pump intake set at (m/ft): **200**
 Pumping rate (l/min / GPM): **20**
 Duration of pumping: **1** hrs + **0** min
 Final water level end of pumping (m/ft): **28.6"**
 If flowing give rate (l/min / GPM): **X**
 Recommended pump depth (m/ft): **100' (34HP-15gpm)**
 Recommended pump rate (l/min / GPM): **20**
 Well production (l/min / GPM): **20**
 Disinfected? **X** Yes No

Map of Well Location

Please provide a map below following instructions on the back.

Comments: **(34HP-15gpm Sat @ 100ft)**

Well owner's information package delivered: **2012 05 14**
 Date Work Completed: **2012 05 08**
 Ministry Use Only: Audit No. **z 128553**

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

County of District: **Lanark** Township/Borough/City/Town/Village: **Beckwith** Con. block tract survey, etc.: **12** Lot: **26**
 Owner's surname: **Neillcorp General Contracting Ltd.** First name: **R.R. #1** Address: **Ramsay Meadows Carleton Place, Ontario** Date completed: **16 27 20 95**
 Zone: **R7C 3P1** Easting: **11C** Elevation: **A0** Base: **C**

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
Brown	Sandy Clay		Wet	0	2
Gray	Limestone		Hard	2	123

WATER RECORD

Water found at - feet	Kind of water	Inside diam inches	Material	Well thickness inches	Depth - feet
112	NOT TESTED	6 1/4"	Galvanized	188	0 to 41
		6 1/8"	Steel		41 to 123

PLUGGING & SEALING RECORD

Depth set at - feet	Material and type (Cement grout, bentonite, etc.)
From 39'6" To 0	Grouted Cement (5)

PUMPING TEST

Pumping test method: Pump Bailer Pumping rate: **12 GPM** Duration of pumping: **1** Hours _____ Mins

Static level	Water level end of pumping	Water levels during Pumping	Recovery
31 feet	60 feet	15 min: 120 feet, 30 min: 100 feet, 45 min: 75 feet, 60 min: 60 feet	<input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Recovery

If flowing give rate: _____ GPM
 Recommended pump type: Shallow Deep
 Recommended pump setting: **75** feet
 Recommended pump rate: **5** GPM

FINAL STATUS OF WELL

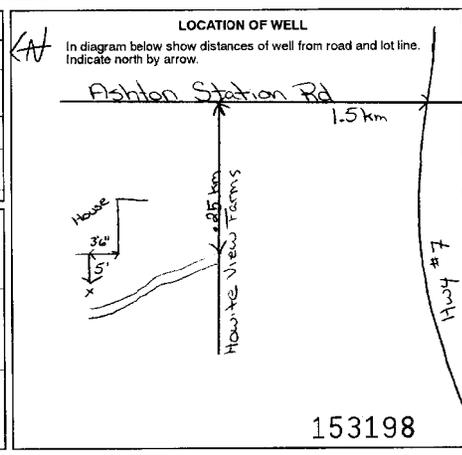
Water supply Abandoned, insufficient supply Unfinished
 Observation well Abandoned, poor quality Replacement well
 Test hole Abandoned (Other)
 Recharge well Dewatering

WATER USE

Domestic Commercial Not used
 Stock Municipal Other
 Irrigation Public supply
 Industrial Cooling & air conditioning

METHOD OF CONSTRUCTION

Cable tool Air percussion Drilling
 Rotary (conventional) Boring Digging
 Rotary (reverse) Diamond Other
 Rotary (air) Jetting



Name of Well Contractor: **Capital Water Supply Ltd.** Well Contractor's Licence No.: **1558**
 Address: **P.O. Box 490 Stittsville, Ontario K2S 1A6**
 Name of Well Technician: **S. Miller** Well Technician's Licence No.: **TO097**
 Signature of Technician/Contractor: *[Signature]* Submission date: **day 30 mo 10 yr 95**

MINISTRY USE ONLY: **1558** **NOV 07 1995**
 CSS.ES

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: _____ Last Name / Organization: **McArton Road Co-Tenancy** E-mail Address: _____
 Mailing Address (Street Number/Name): **9094 Cavanagh Road** Municipality: **Ashton** Province: **ON** Postal Code: **K0A1B0** Telephone No. (inc. area code): _____
Well Location
 Address of Well Location (Street Number/Name): **9153 McArton Road** Township: **Beckwith** Lot: **P/L 6** Corcession: **12**
 County/District/Municipality: **Ashton** Province: **Ontario** Postal Code: _____
UTM Coordinates Zone: **18** Easting: **415451** Northing: **5003819**

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)	From	To
	Clay			0'	3'	
Grey	Limestone			3'	170'	
Grey	Limestone			170'	216'	
Grey	Limestone	q Sand Stone		216'	240'	
Grey	Limestone	q Sand Stone		240'	247'	

Annular Space

Depth Set at (m)	Type of Sealant Used (Material and Type)	Volume Placed (m³)
60' to 0'	Neat cement	25

Method of Construction
 Cable Tool Rotary (Conventional) Rotary (Reverse) Boring Air percussion Other, specify _____

Well Use
 Commercial Municipal Industrial Other, specify _____
 Not used Dewatering Monitoring Cooling & Air Conditioning

Construction Record - Casing

Inside Diameter (cm)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm)	Depth (m)	Status of Well
6"	Steel	188"	60'	Water Supply
6"	Open Hole		247'	Replacement Well

Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m)
			60' to 247'

Water Details

Water found at Depth (m)	Kind of Water (Fresh, Gas, Other, specify)	Hole Diameter (cm)
170'	Gas	6"
240'	Gas	6"

Well Contractor and Well Technician Information
 Business Name of Well Contractor: **Air Rock Drilling Co. Ltd.** Well Contractor's Licence No.: **1119**
 Business Address (Street Number/Name): **8859 Frankton Road, RR#1** Municipality: **Richmond**
 Province: **ON** Postal Code: **K0A2Z0** Business E-mail Address: **air-rock@sympatico.ca**
 Bus. Telephone No. (inc. area code): **6138382170** Name of Well Technician (Last Name, First Name): **Purcell Shannon**
 Well Technician's Licence No.: **T2122** Signature of Technician and/or Contractor: _____ Date Submitted: **2012 05 31**

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: _____

Draw Down	Recovery		
Time (min)	Water Level (m)	Time (min)	Water Level (m)
Static Level	34.6'	35.1'	
1	35'	1	34.6'
2	35'	2	34.6'
3	35'	3	34.6'
4	35'	4	34.6'
5	35'	5	34.6'
10	35'	10	34.6'
15	35'	15	34.6'
20	35'	20	34.6'
25	35.1'	25	35.0'
30	35.1'	30	34.6'
40	35.1'	40	34.6'
50	35.1'	50	34.6'
60	35.1'	60	34.6'

Recommended pump depth (m): **100'** (3/4 HP 159pm)
 Recommended pump rate (l/min @ 20m): **20**
 Well production (l/min @ 20m): **20**
 Disinfected? Yes No

Map of Well Location
 Please provide a map below following instructions on the back.

Comments: **TEST WELL #4 (3/4 HP 159pm Set @ 100ft)**

Well owner's information package delivered: Yes No
 Date Package Delivered: **2012 05 14**
 Date Work Completed: **2012 05 09**
 Ministry Use Only: Audit No. **z 128555** Received: **JUN 29 2012**

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: _____ Last Name / Organization: **McArton Road Co-Tenancy** E-mail Address: _____
 Mailing Address (Street Number/Name): **9094 Cavanagh Road** Municipality: **Ashton** Province: **ON** Postal Code: **K0A1B0** Telephone No. (inc. area code): _____
Well Location
 Address of Well Location (Street Number/Name): **9153 McArton Road** Township: **Beckwith** Lot: **P/L 6** Corcession: **12**
 County/District/Municipality: **Ashton** Province: **Ontario** Postal Code: _____
UTM Coordinates Zone: **18** Easting: **415282** Northing: **5003874**

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)	From	To
	Sand			0'	3'	
Grey	Limestone			3'	171'	
Grey	Limestone			171'	181'	

Annular Space

Depth Set at (m)	Type of Sealant Used (Material and Type)	Volume Placed (m³)
60' to 0'	Neat cement	23.4

Method of Construction
 Cable Tool Rotary (Conventional) Rotary (Reverse) Boring Air percussion Other, specify _____

Well Use
 Commercial Municipal Industrial Other, specify _____
 Not used Dewatering Monitoring Cooling & Air Conditioning

Construction Record - Casing

Inside Diameter (cm)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm)	Depth (m)	Status of Well
6"	Steel	188"	60'	Water Supply
578"	Open Hole		181'	Replacement Well

Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m)
			60' to 181'

Water Details

Water found at Depth (m)	Kind of Water (Fresh, Gas, Other, specify)	Hole Diameter (cm)
171'	Gas	6"
		60' 181' 578"

Well Contractor and Well Technician Information
 Business Name of Well Contractor: **Air Rock Drilling Co. Ltd.** Well Contractor's Licence No.: **1119**
 Business Address (Street Number/Name): **8859 Frankton Road, RR#1** Municipality: **Richmond**
 Province: **ON** Postal Code: **K0A2Z0** Business E-mail Address: **air-rock@sympatico.ca**
 Bus. Telephone No. (inc. area code): **6138382170** Name of Well Technician (Last Name, First Name): **Hanna Jeremy**
 Well Technician's Licence No.: **T3632** Signature of Technician and/or Contractor: _____ Date Submitted: **2012 05 31**

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: _____

Draw Down	Recovery		
Time (min)	Water Level (m)	Time (min)	Water Level (m)
Static Level	29.5'	29.7'	
1	29.6'	1	29.5'
2	29.6'	2	29.5'
3	29.6'	3	29.5'
4	29.6'	4	29.5'
5	29.6'	5	29.5'
10	29.6'	10	29.5'
15	29.7'	15	29.5'
20	29.7'	20	29.5'
25	29.7'	25	29.5'
30	29.7'	30	29.5'
40	29.7'	40	29.5'
50	29.7'	50	29.5'
60	29.7'	60	29.5'

Recommended pump depth (m): **100'** (3/4 HP 159pm)
 Recommended pump rate (l/min @ 20m): **20**
 Well production (l/min @ 20m): **20**
 Disinfected? Yes No

Map of Well Location
 Please provide a map below following instructions on the back.

Comments: **TEST WELL #3 (3/4 HP 159pm Set @ 100ft)**

Well owner's information package delivered: Yes No
 Date Package Delivered: **2012 05 14**
 Date Work Completed: **2012 05 09**
 Ministry Use Only: Audit No. **z 128554** Received: **JUN 29 2012**



Ministry of the Environment

Tag#: A128062

A128062

Print Below

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name, Last Name / Organization, E-mail Address, Mailing Address (Street Number/Name), Municipality, Province, Postal Code, Telephone No. (inc. area code)

Well Location, Address of Well Location (Street Number/Name), Township, Lot, Concession, County/District/Municipality, City/Town/Village, Province, Postal Code

UTM Coordinates, Zone, Easting, Northing, Municipal Plan and Sublot Number

Overburden and Bedrock Materials/Abandonment Sealing Record table with columns for General Colour, Most Common Material, Other Materials, General Description, Depth (m/ft) From, To

Annular Space table with columns for Depth Set at (m/ft) From, To, Type of Sealant Used, Volume Placed

Method of Construction, Well Use, Duration of pumping, Final water level end of pumping, If flowing give rate

Construction Record - Casing table with columns for Inside Diameter, Open Hole OR Material, Wall Thickness, Depth, Status of Well

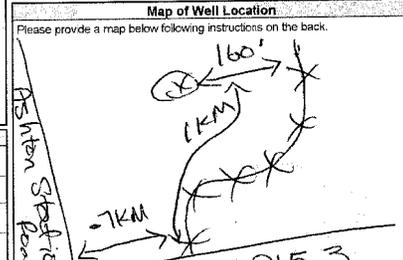
Construction Record - Screen table with columns for Outside Diameter, Material, Slot No., Depth

Water Details, Hole Diameter table with columns for Water found at Depth, Kind of Water, Depth, Diameter

Well Contractor and Well Technician Information, Business Name, Licence No., Business Address, Municipality, Province, Postal Code, Business E-mail Address, Bus. Telephone No., Name of Well Technician

Well owner's information package delivered, Date Package Delivered, Ministry Use Only, Audit No., Date Work Completed, Well Technician's Licence No., Signature of Technician and/or Contractor, Date Submitted

Results of Well Yield Testing table with columns for Draw Down, Recovery, Time, Water Level, Water Level



Comments, TEST WELL #6, handwritten notes: (3/4HP 15gpm set @ 100ft)



Ministry of the Environment

Tag#: A128066

A128066

Print Below

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name, Last Name / Organization, E-mail Address, Mailing Address (Street Number/Name), Municipality, Province, Postal Code, Telephone No. (inc. area code)

Well Location, Address of Well Location (Street Number/Name), Township, Lot, Concession, County/District/Municipality, City/Town/Village, Province, Postal Code

UTM Coordinates, Zone, Easting, Northing, Municipal Plan and Sublot Number

Overburden and Bedrock Materials/Abandonment Sealing Record table with columns for General Colour, Most Common Material, Other Materials, General Description, Depth (m/ft) From, To

Annular Space table with columns for Depth Set at (m/ft) From, To, Type of Sealant Used, Volume Placed

Method of Construction, Well Use, Duration of pumping, Final water level end of pumping, If flowing give rate

Construction Record - Casing table with columns for Inside Diameter, Open Hole OR Material, Wall Thickness, Depth, Status of Well

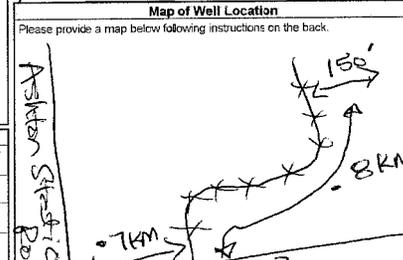
Construction Record - Screen table with columns for Outside Diameter, Material, Slot No., Depth

Water Details, Hole Diameter table with columns for Water found at Depth, Kind of Water, Depth, Diameter

Well Contractor and Well Technician Information, Business Name, Licence No., Business Address, Municipality, Province, Postal Code, Business E-mail Address, Bus. Telephone No., Name of Well Technician

Well owner's information package delivered, Date Package Delivered, Ministry Use Only, Audit No., Date Work Completed, Well Technician's Licence No., Signature of Technician and/or Contractor, Date Submitted

Results of Well Yield Testing table with columns for Draw Down, Recovery, Time, Water Level, Water Level



Comments, TEST WELL #5, handwritten notes: (3/4HP 15gpm set @ 100ft)

Well Tag No. (Place Sticker and/or Print Below)
A195941

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name Last Name / Organization TOMAR CUSTOM HOMES E-mail Address Well Constructed by Well Owner

Mailing Address (Street Number/Name) 54 BERT ARGUE DR. Municipality STITTSVILLE Province ONT. Postal Code K7S2H2 Telephone No. (inc. area code) 613 223 5184

Well Location
Address of Well Location (Street Number/Name) 162 RIDGEMONT DR. Township BECKWITH Lot 5 Concession

County/District/Municipality LANARK City/Town/Village ASHTON Province Ontario Postal Code

UTM Coordinates Zone 18 Easting 4151 Northing 415004020 Municipal Plan and Sublot Number

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
BROWN	CLAY		FILL	0	3
BROWN	SHALE			3	4
GREY	LIMESTONE	GREY SANDSTONE		4	100

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³)
0	63E BENTONITE GROUT	0.960

Method of Construction

<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input checked="" type="checkbox"/> Air percussion		<input type="checkbox"/> Industrial		
<input type="checkbox"/> Other, specify		<input type="checkbox"/> 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)	Status of Well
64	STEEL	0.188	0 to 63E	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify

Construction Record - Screen

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

Water Details

Water found at Depth (m/ft)	Kind of Water	Hole Diameter
89	Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/>	63E 100 6"
99	Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/>	

Well Contractor and Well Technician Information
Business Name of Well Contractor SAUNDERS WELL DRILLING LTD Well Contractor's Licence No. 4879
Business Address (Street Number/Name) 1680 SCHEEL DR Municipality BRAESIDE
Province ONT Postal Code K0A1G0 Business E-mail Address

Bus. Telephone No. (inc. area code) 613 623 5048 Name of Well Technician (Last Name, First Name) SAUNDERS TROY
Well Technician's Licence No. T517 Signature of Technician and/or Contractor Troy Saunders Date Submitted 20160720

Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
<input type="checkbox"/> Clear and sand free	<input type="checkbox"/> Other, specify	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
<input checked="" type="checkbox"/> Clearing					
		1	27.02	1	23.06
		2	27.23	2	22.35
		3	28.04	3	22.31
		4	28.56	4	
		5	28.87	5	
		10	29.45	10	
		15	29.60	15	
		20	29.60	20	
		25	29.76	25	
		30	29.80	30	
		40	29.95	40	
		50	30.0	50	
		60	30.05	60	

Pump intake set at (m/ft) 95

Pumping rate (l/min / GPM) 10

Duration of pumping 1 hrs + 0 min

Final water level end of pumping (m/ft) 30.05

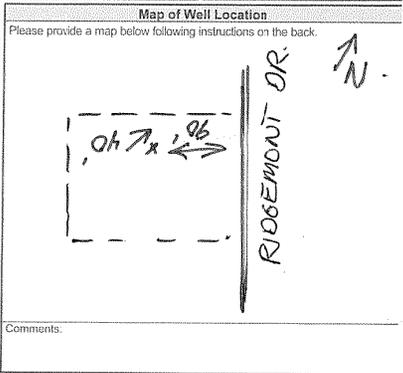
If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft) 90

Recommended pump rate (l/min / GPM) 12

Well production (l/min / GPM) 12

Disinfected? Yes No



Well owner's information package delivered Yes No Date 20160621

Date Package Delivered 20160621 Ministry Use Only Audit No. Z223094

Date Work Completed 20160621 Received AUG 12 2016

Well Tag No. (Place Sticker and/or Print Below)
A195938

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name Last Name / Organization TOMAR CUSTOM HOMES E-mail Address Well Constructed by Well Owner

Mailing Address (Street Number/Name) 54 BERT G ARGUE DR Municipality STITTSVILLE Province ONT. Postal Code K7S2H2 Telephone No. (inc. area code) 613 223 5184

Well Location
Address of Well Location (Street Number/Name) 154 RIDGEMONT DR. Township BECKWITH Lot 4 Concession

County/District/Municipality LANARK City/Town/Village ASHTON Province Ontario Postal Code

UTM Coordinates Zone 18 Easting 4151 Northing 4255004073 Municipal Plan and Sublot Number

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
BROWN	SAND	BROKEN ROCK	FILL	0	3E
GREY	LIMESTONE			3E	60
GREY	LIMESTONE	LAYERS OF GREY SANDSTONE		60	139

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³)
0	50 BENTONITE GROUT	0.576
50	60 CEMENT GROUT	0.110

Method of Construction

<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input checked="" type="checkbox"/> Air percussion		<input type="checkbox"/> Industrial		
<input type="checkbox"/> Other, specify		<input type="checkbox"/> 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)	Status of Well
64	STEEL	0.188	0 to 60	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify

Construction Record - Screen

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

Water Details

Water found at Depth (m/ft)	Kind of Water	Hole Diameter
91	Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/>	60 139 6"
12.5	Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/>	

Well Contractor and Well Technician Information
Business Name of Well Contractor SAUNDERS WELL DRILLING Well Contractor's Licence No. 4879
Business Address (Street Number/Name) 1680 SCHEEL DR Municipality BRAESIDE
Province ONT Postal Code K0A1G0 Business E-mail Address

Bus. Telephone No. (inc. area code) 613 623 5048 Name of Well Technician (Last Name, First Name) SAUNDERS TROY
Well Technician's Licence No. T517 Signature of Technician and/or Contractor Troy Saunders Date Submitted 20160720

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name Last Name / Organization E-mail Address Well Constructed by Well Owner
 TOMAR CUSTOM HOMES

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)
 54 BERT G. ARGUE DR. STITTSVILLE ONT K7S2H2 613 223 5184

Well Location
 Address of Well Location (Street Number/Name) Township Lot Concession
 219 RIDGEMOUNT DR. BECKWITH 14

County/District/Municipality City/Town/Village Province Postal Code
 LANARK ASHTON Ontario

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number
 NAD 83 184154185003883

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
GREY	LIMESTONE	GREY SANDSTONE		0 139

Annular Space			Results of Well Yield Testing			
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ / yd ³)	Craw Down		Recovery	
0 50	BENTONITE GROUT	0.576	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
50 60	CEMENT GROUT	0.130	1	39.67	1	38.40
			2	37.98	2	37.85
			3	40.27	3	37.75
			4	40.41	4	
			5	40.49	5	
			10	40.53	10	
			15	40.59	15	
			20	40.59	20	
			25	40.61	25	
			30	40.61	30	
			40	40.58	40	
			50	40.59	50	
			60	40.59	60	

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Other, specify	<input type="checkbox"/> Industrial	<input type="checkbox"/> Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	<input checked="" type="checkbox"/> Water Supply	<input type="checkbox"/> Replacement Well
64	STEEL	0.188	0 60	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Recharge Well
				<input type="checkbox"/> Dewatering Well	<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)	<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality	<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify	

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

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify HYDRO FRAC	Depth (m/ft) From To	Diameter (cm/in)
120-140		60 139	6"

Well Contractor and Well Technician Information
 Business Name of Well Contractor: SAUNDERS WELL DRILLING LTD
 Well Contractor's Licence No.: 4879
 Business Address (Street Number/Name): 1680 SCHEEL DR
 Municipality: BRASSIDE
 Province: ONT Postal Code: K0A1G0 Business E-mail Address:

Bus. Telephone No. (inc. area code): 613 623 5648 Name of Well Technician (Last Name, First Name): SAUNDERS TROY
 Well Technician's Licence No.: T517 Signature of Technician and/or Contractor: Troy Saunders Date Submitted: 20161006
 Date Package Delivered: 20160906 Date Work Completed: 20160906
 Ministry Use Only: Audit No. 2223096 Received: SEP 20 2016

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name Last Name / Organization E-mail Address Well Constructed by Well Owner
 TOMAR CUSTOM HOMES

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)
 54 BERT G. ARGUE DR. STITTSVILLE ONT K7S2H2 613 223 5184

Well Location
 Address of Well Location (Street Number/Name) Township Lot Concession
 613 RIDGEMOUNT DR. BECKWITH 15

County/District/Municipality City/Town/Village Province Postal Code
 LANARK ASHTON Ontario

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number
 NAD 83 184153865003913

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
BROWN GREY	LIMESTONE	BLACK LIMESTONE	RED-GREEN SHALE	0 83
		GREY SANDSTONE	RED SANDSTONE	83 139

Annular Space			Results of Well Yield Testing			
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ / yd ³)	Draw Down		Recovery	
0 50	BENTONITE GROUT	0.480	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
50 60	CEMENT GROUT	0.130	1	32.98	1	38.40
			2	36.30	2	34.12
			3	38.01	3	31.55
			4	39.02	4	29.43
			5	39.76	5	28.10
			10	42.42	10	26.0
			15	44.0	15	
			20	45.15	20	
			25	45.60	25	
			30	45.98	30	
			40	46.34	40	
			50	46.64	50	
			60	46.98	60	

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Other, specify	<input type="checkbox"/> Industrial	<input type="checkbox"/> Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	<input checked="" type="checkbox"/> Water Supply	<input type="checkbox"/> Replacement Well
64	STEEL	0.188	0 60	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Recharge Well
				<input type="checkbox"/> Dewatering Well	<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)	<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality	<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify	

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

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify HYDRO FRAC	Depth (m/ft) From To	Diameter (cm/in)
83-187		60 139	6"

Well Contractor and Well Technician Information
 Business Name of Well Contractor: SAUNDERS TROY
 Well Contractor's Licence No.: 4879
 Business Address (Street Number/Name): 1680 SCHEEL DR
 Municipality: BRASSIDE
 Province: ONT Postal Code: K0A1G0 Business E-mail Address:

Bus. Telephone No. (inc. area code): 613 623 5648 Name of Well Technician (Last Name, First Name): SAUNDERS TROY
 Well Technician's Licence No.: T517 Signature of Technician and/or Contractor: Troy Saunders Date Submitted: 20160723
 Date Package Delivered: 20160823 Date Work Completed: 20160623
 Ministry Use Only: Audit No. 2223096 Received: AUG 12 2016

A213224

Well Owner's Information

First Name: Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: Well Constructed by Well Owner

Mailing Address (Street Number/Name): **54 BERT GARGUE DR.** Municipality: **STITTSVILLE** Province: **ONT.** Postal Code: **K7S2H2** Telephone No. (inc. area code): **6152235184**

Well Location

Address of Well Location (Street Number/Name): **172 RIDGEMONT DR.** Township: **BECKWITH** Lot: Concession:

County/District/Municipality: **LANARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code:

UTM Coordinates: Zone: **18R** Easting: **415172** Northing: **500400** Municipal Plan and Sublot Number:

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
BROWN	CLAY	STONES		0 / 7
GREY	LIMESTONE	BLACK LIMESTONE		7 / 140

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (litres/gal)
From	To	
0	60 BENTONITE GROUT	640

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test hole
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Other, specify	<input type="checkbox"/> Industrial	<input type="checkbox"/> Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	From	To
64	STEEL	0.188	0" to 60"		

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

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Depth (m/ft)	Diameter (cm/in)
		From	To
177		60	140
			6"

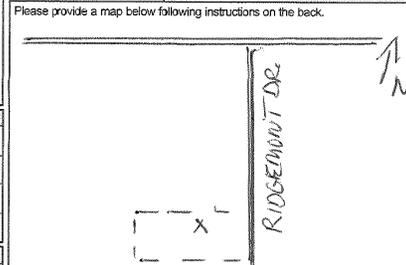
Well Contractor and Well Technician Information
 Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **4181719**
 Business Address (Street Number/Name): **1680 SCHEEL DR** Municipality: **BRAESIDE**
 Province: **ONT** Postal Code: **K0A1G0** Business E-mail Address:

Bus. Telephone No. (inc. area code): **6132291718** Name of Well Technician (Last Name, First Name): **SAUNDERS TROY**
 Well Technician's Licence No.: **175117** Signature of Technician and/or Contractor: *Troy Saunders* Date Submitted: **20170117**

Results of Well Yield Testing

After test of well yield, water was:			
<input type="checkbox"/> Clear and sand free			
<input checked="" type="checkbox"/> Other, specify: CLEARING			
If pumping discontinued, give reason:			
Static Level:	25.55		
Draw Down		Recovery	
Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
1	29.30	1	66.63
2	32.87	2	63.22
3	35.69	3	59.98
4	38.25	4	56.58
5	40.20	5	53.38
10	47.80	10	43.60
15	55.05	15	33.96
20	60.02	20	29.62
25	63.05	25	27.17
30	65.43	30	25.88
40	67.00	40	25.58
50	68.73	50	25.55
60	70.23	60	25.55

Map of Well Location



Comments:

Well owner's information package delivered: Yes No
 Date Package Delivered: **20170113**
 Date Work Completed: **20170113**
 Ministry Use Only: Audit No. **2243284**
 Received: **FEB 17 2017**

A195975

Well Owner's Information

First Name: Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: Well Constructed by Well Owner

Mailing Address (Street Number/Name): **54 BERT GARGUE DR.** Municipality: **STITTSVILLE** Province: **ONT.** Postal Code: **K7S2H2** Telephone No. (inc. area code): **6152235184**

Well Location

Address of Well Location (Street Number/Name): **163 RIDGEMONT DR** Township: **BECKWITH** Lot: Concession:

County/District/Municipality: **LANARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code:

UTM Coordinates: Zone: **18R** Easting: **415226** Northing: **5004090** Municipal Plan and Sublot Number:

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
GREY	LIMESTONE	LAYERS OF WHITE SANDSTONE		0 / 240

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (litres/gal)
From	To	
0	61 BENTONITE GROUT	896

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test hole
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Other, specify	<input type="checkbox"/> Industrial	<input type="checkbox"/> Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	From	To
64	STEEL	0.188	0" to 61"		

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

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Depth (m/ft)	Diameter (cm/in)
		From	To
127		61	240
			6"

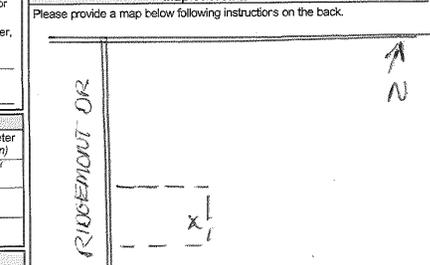
Well Contractor and Well Technician Information
 Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **4181719**
 Business Address (Street Number/Name): **1680 SCHEEL DR** Municipality: **BRAESIDE**
 Province: **ONT** Postal Code: **K0A1G0** Business E-mail Address:

Bus. Telephone No. (inc. area code): **6132291718** Name of Well Technician (Last Name, First Name): **SAUNDERS TROY**
 Well Technician's Licence No.: **175117** Signature of Technician and/or Contractor: *Troy Saunders* Date Submitted: **20170117**

Results of Well Yield Testing

After test of well yield, water was:			
<input checked="" type="checkbox"/> Clear and sand free			
<input type="checkbox"/> Other, specify			
If pumping discontinued, give reason:			
Static Level:	28.78		
Draw Down		Recovery	
Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
1	29.96	1	28.90
2	29.97	2	28.90
3	29.95	3	28.89
4	29.91	4	28.89
5	29.90	5	28.89
10	29.90	10	28.85
15	29.90	15	28.82
20	29.90	20	28.79
25	29.90	25	28.79
30	29.90	30	28.78
40	29.93	40	28.78
50	29.93	50	28.78
60	29.93	60	28.78

Map of Well Location



Comments:

Well owner's information package delivered: Yes No
 Date Package Delivered: **20170110**
 Date Work Completed: **20170110**
 Ministry Use Only: Audit No. **2243269**
 Received: **JAN 20 2017**

A 213245

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name _____ Last Name / Organization **TOMAR CUSTOM HOMES** E-mail Address _____ Well Constructed by Well Owner

Mailing Address (Street Number/Name) **54 BERT G. ARGUE DR. STITTVILLE ONT.** Municipality _____ Province _____ Postal Code _____ Telephone No. (inc. area code) _____

Well Location

Address of Well Location (Street Number/Name) **197 RIDGEMONT DR.** Township **BECKWITH** Lot **16** Concession _____

County/District/Municipality **LANARK** City/Town/Village **ASHTON** Province **Ontario** Postal Code _____

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number

NAD 83 | 8 | 18 | 415549 | 5003947

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			From To
			FILL	0 2
			BROWN & YELLOW CLAY	2 4
			GREY LIMESTONE	4 140

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³)
From	To	
0	60 BENTONITE GROUT	0.768

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Other, specify _____	<input type="checkbox"/> Industrial	<input type="checkbox"/> Other, specify _____

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Well Thickness (cm/in)	Depth (m/ft)	From	To
64	STEEL	0.188	0.75	0	60

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

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Depth (m/ft)	Diameter (cm/in)
From	To	From	To
129	Untested	60	140
			6"

Well Contractor and Well Technician Information

Business Name of Well Contractor **SAUNDERS WELL DRILLING** Well Contractor's Licence No. **4181719**

Business Address (Street Number/Name) **1680 SCHEEL DR** Municipality **BRASIDIE**

Province **ONT** Postal Code **K0A1G0** Business E-mail Address _____

Bus. Telephone No. (inc. area code) **6136623504** Name of Well Technician (Last Name, First Name) **SAUNDERS TROY**

Well Technician's Licence No. **115117** Signature of Technician and/or Contractor **Joy Seal** Date Submitted **20170612**

Results of Well Yield Testing				
After test of well yield, water was:	Draw Down	Recovery	Time (min)	Water Level (m/ft)
<input type="checkbox"/> Clear and sand free	Time (min)	Time (min)	Time (min)	Water Level (m/ft)
<input checked="" type="checkbox"/> Other, specify CLEARING	Static Level: 20.63			
If pumping discontinued, give reason: _____	1 26.40	1	56.35	
Pump intake set at (m/ft) 135	2 29.69	2	51.20	
Pumping rate (l/min / GPM) 10	3 31.62	3	46.70	
Duration of pumping 1 hrs + 0 min	4 33.36	4	42.50	
Final water level end of pumping (m/ft) 63.40	5 35.16	5	38.82	
If flowing give rate (l/min / GPM) _____	10 41.72	10	26.15	
	15 46.28	15	21.35	
	20 49.83	20	20.70	
	25 52.60	25	20.64	
	30 54.63	30	20.63	
	40 58.12	40	20.63	
	50 61.69	50	20.63	
	60 63.40	60	20.63	

Map of Well Location

Please provide a map below following instructions on the back.

Well owner's information package delivered Yes No

Date Package Delivered **20170512**

Ministry Use Only

Audit No. **Z260668**

Date Work Completed **20170512**

Received **JUN 15 2017**

A 213226

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name _____ Last Name / Organization **TOMAR CUSTOM HOMES** E-mail Address _____ Well Constructed by Well Owner

Mailing Address (Street Number/Name) **54 BERT G. ARGUE DR. STITTVILLE ONT.** Municipality _____ Province _____ Postal Code _____ Telephone No. (inc. area code) _____

Well Location

Address of Well Location (Street Number/Name) **234 RIDGEMONT DR.** Township **BECKWITH** Lot **12** Concession _____

County/District/Municipality **LANARK** City/Town/Village **ASHTON** Province **Ontario** Postal Code _____

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number

NAD 83 | 8 | 18 | 415549 | 5003768

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			From To
			FILL	0 1
			BROWN BROKEN ROCK	1 5
			YELLOW CLAY	5 9 1/2
			BLACK LIMESTONE	9 1/2 140
			GREY LIMESTONE	
			LAYERS OF BLACK LIMESTONE & GREEN SHALE	

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³)
From	To	
0	60 BENTONITE GROUT	0.650

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Other, specify _____	<input type="checkbox"/> Industrial	<input type="checkbox"/> Other, specify _____

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Well Thickness (cm/in)	Depth (m/ft)	From	To
64	STEEL	0.188	0.75	0	60

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

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Depth (m/ft)	Diameter (cm/in)
From	To	From	To
70	Untested	60	140
			6

Well Contractor and Well Technician Information

Business Name of Well Contractor **SAUNDERS WELL DRILLING** Well Contractor's Licence No. **4181719**

Business Address (Street Number/Name) **1680 SCHEEL DR** Municipality **BRASIDIE**

Province **ONT** Postal Code **K0A1G0** Business E-mail Address _____

Bus. Telephone No. (inc. area code) **6136623504** Name of Well Technician (Last Name, First Name) **SAUNDERS TROY**

Well Technician's Licence No. **115117** Signature of Technician and/or Contractor **Joy Seal** Date Submitted **20170616**

Results of Well Yield Testing				
After test of well yield, water was:	Draw Down	Recovery	Time (min)	Water Level (m/ft)
<input type="checkbox"/> Clear and sand free	Time (min)	Time (min)	Time (min)	Water Level (m/ft)
<input checked="" type="checkbox"/> Other, specify CLEARING	Static Level: 27.40			
If pumping discontinued, give reason: _____	1 33.30	1	38.12	
Pump intake set at (m/ft) 130	2 35.04	2	32.92	
Pumping rate (l/min / GPM) 8	3 36.50	3	29.51	
Duration of pumping 1 hrs + 0 min	4 38.03	4	28.32	
Final water level end of pumping (m/ft) 44.61	5 38.91	5	28.13	
If flowing give rate (l/min / GPM) _____	10 41.79	10	27.93	
	15 42.84	15	27.68	
	20 43.49	20	27.57	
	25 43.88	25	27.57	
	30 43.98	30	27.55	
	40 44.21	40	27.54	
	50 44.35	50	27.54	
	60 44.61	60	27.53	

Map of Well Location

Please provide a map below following instructions on the back.

Well owner's information package delivered Yes No

Date Package Delivered **20170516**

Ministry Use Only

Audit No. **Z260669**

Date Work Completed **20170516**

Received **JUN 15 2017**

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: Well Constructed by Well Owner
 Mailing Address (Street Number/Name): **54 BERT G. ARGUE DR** Municipality: **STITTSVILLE** Province: **ONT** Postal Code: Telephone No. (inc. area code):

Well Location
 Address of Well Location (Street Number/Name): **182 RIDGEMOUNT DR** Township: **BECKWITH** Lot: **7** Concession:
 County/District/Municipality: **LANARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code:
 UTM Coordinates Zone: Easting: Northing: Municipal Plan and Sublot Number:
 NAD 83 **1841452205003968**

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BROWN	CLAY	SHALE		0	4 1/2
GREY	LIMESTONE	GREEN SHALE	LAYERS	4 1/2	140

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0	60	BENTONITE GROUT	0.768

Method of Construction

Method of Construction	Well Use
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Public
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Municipal
<input type="checkbox"/> Boring	<input type="checkbox"/> Livestock
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Other, specify	<input type="checkbox"/> Monitoring
	<input type="checkbox"/> Irrigation
	<input type="checkbox"/> Cooling & Air Conditioning
	<input type="checkbox"/> Industrial
	<input type="checkbox"/> 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	Status of Well
64	STEEL	0.188	0	60	<input checked="" type="checkbox"/> Water Supply

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To	Status of Well
					<input type="checkbox"/> Replacement Well
					<input type="checkbox"/> Test Hole
					<input type="checkbox"/> Recharge Well
					<input type="checkbox"/> Dewatering Well
					<input type="checkbox"/> Observation and/or Monitoring Hole
					<input type="checkbox"/> Alteration (Construction)
					<input type="checkbox"/> Abandoned, Insufficient Supply
					<input type="checkbox"/> Abandoned, Poor Water Quality
					<input type="checkbox"/> Abandoned, other, specify
					<input type="checkbox"/> Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Hole Diameter (cm/in) Depth (m/ft) From To Diameter (cm/in)
80	HYDRO FRAC	60 140 6

Well Contractor and Well Technician Information

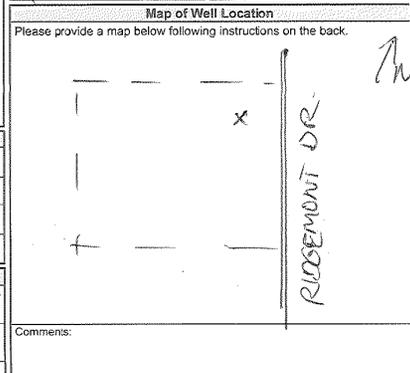
Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **418719**
 Business Address (Street Number/Name): **1680 SCHEEL DR** Municipality: **BRAESIDE**
 Province: **ONT** Postal Code: **K0A1G0** Business E-mail Address:

Bus. Telephone No. (inc. area code): **613-623-5048** Name of Well Technician (Last Name, First Name): **SAUNDERS TROY**
 Well Technician's Licence No.: **11517** Signature of Technician and/or Contractor: Date Submitted: **2017/10/10**

Results of Well Yield Testing

Draw Down	Recovery
Time (min) Water Level (m/ft)	Time (min) Water Level (m/ft)
Static Level: 27.94	
1 31.43 1 32.40	
2 32.40 2 30.0	
3 32.95 3 28.70	
4 33.25 4 28.0	
5 33.50 5 28.0	
10 34.40 10 27.95	
15 34.83 15 27.94	
20 35.02 20 27.94	
25 35.20 25 27.94	
30 35.32 30 27.94	
40 35.85 40 27.94	
50 35.92 50 27.94	
60 36.0 60 27.94	

After test of well yield, water was: Clear and sand free Other, specify **CLEARING**
 If pumping discontinued, give reason:
 Pump intake set at (m/ft): **130**
 Pumping rate (l/min / GPM): **6**
 Duration of pumping: **1** hrs + **0** min
 Final water level end of pumping (m/ft): **36.0**
 If flowing give rate (l/min / GPM):
 Recommended pump depth (m/ft): **130**
 Recommended pump rate (l/min / GPM): **7**
 Well production (l/min / GPM): **4**
 Disinfected? Yes No



Well owner's information package delivered: Yes No
 Date Package Delivered: **2017/10/10**
 Date Work Completed: **2017/10/10**

Ministry Use Only
 Audit No.: **Z260689**
 OCT 31 2017
 Received:

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: Well Constructed by Well Owner
 Mailing Address (Street Number/Name): **54 BERT G. ARGUE DR** Municipality: **STITTSVILLE** Province: **ONT** Postal Code: Telephone No. (inc. area code):

Well Location
 Address of Well Location (Street Number/Name): **191 RIDGEMOUNT DR** Township: **BECKWITH** Lot: **17** Concession:
 County/District/Municipality: **LANARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code:
 UTM Coordinates Zone: Easting: Northing: Municipal Plan and Sublot Number:
 NAD 83 **1841453285003971**

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BROWN	SHALE	LOAM		0	5 1/2
GREY	LIMESTONE	LAYERS OF RED GREEN SHALE		5 1/2	140

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0	60	BENTONITE GROUT	0.650

Method of Construction

Method of Construction	Well Use
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Public
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Municipal
<input type="checkbox"/> Boring	<input type="checkbox"/> Livestock
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Other, specify	<input type="checkbox"/> Monitoring
	<input type="checkbox"/> Irrigation
	<input type="checkbox"/> Cooling & Air Conditioning
	<input type="checkbox"/> Industrial
	<input type="checkbox"/> 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	Status of Well
64	STEEL	0.188	0	60	<input checked="" type="checkbox"/> Water Supply

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To	Status of Well
					<input type="checkbox"/> Replacement Well
					<input type="checkbox"/> Test Hole
					<input type="checkbox"/> Recharge Well
					<input type="checkbox"/> Dewatering Well
					<input type="checkbox"/> Observation and/or Monitoring Hole
					<input type="checkbox"/> Alteration (Construction)
					<input type="checkbox"/> Abandoned, Insufficient Supply
					<input type="checkbox"/> Abandoned, Poor Water Quality
					<input type="checkbox"/> Abandoned, other, specify
					<input type="checkbox"/> Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Hole Diameter (cm/in) Depth (m/ft) From To Diameter (cm/in)
82	HYDRO FRAC	60 140 6"
132	HYDRO FRAC	

Well Contractor and Well Technician Information

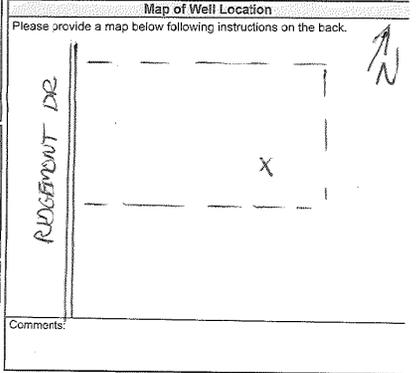
Business Name of Well Contractor: **SAUNDERS WELL DRILLING** Well Contractor's Licence No.: **418719**
 Business Address (Street Number/Name): **1680 SCHEEL DR** Municipality: **BRAESIDE**
 Province: **ONT** Postal Code: **K0A1G0** Business E-mail Address:

Bus. Telephone No. (inc. area code): **613-623-5048** Name of Well Technician (Last Name, First Name): **SAUNDERS TROY**
 Well Technician's Licence No.: **11517** Signature of Technician and/or Contractor: Date Submitted: **2017/06/13**

Results of Well Yield Testing

Draw Down	Recovery
Time (min) Water Level (m/ft)	Time (min) Water Level (m/ft)
Static Level: 23.44	
1 26.85 1 23.55	
2 27.10 2 23.44	
3 27.28 3 23.44	
4 27.36 4 23.44	
5 27.47 5 23.44	
10 27.55 10 23.44	
15 27.62 15 23.44	
20 27.66 20 23.44	
25 27.70 25 23.44	
30 27.71 30 23.44	
40 27.73 40 23.44	
50 27.75 50 23.44	
60 27.77 60 23.44	

After test of well yield, water was: Clear and sand free Other, specify **CLEARING**
 If pumping discontinued, give reason:
 Pump intake set at (m/ft): **130**
 Pumping rate (l/min / GPM): **8**
 Duration of pumping: **1** hrs + **0** min
 Final water level end of pumping (m/ft): **27.77**
 If flowing give rate (l/min / GPM):
 Recommended pump depth (m/ft): **130**
 Recommended pump rate (l/min / GPM): **10**
 Well production (l/min / GPM): **12**
 Disinfected? Yes No



Well owner's information package delivered: Yes No
 Date Package Delivered: **2017/05/13**
 Date Work Completed: **2017/05/13**

Ministry Use Only
 Audit No.: **Z260670**
 JUN 15 2017
 Received:

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: Well Constructed by Well Owner

Mailing Address (Street Number/Name): **54 BERT G. ARGUE DR STITTSVILLE ONT.** Municipality: Province: Postal Code: Telephone No. (inc. area code):

Well Location
 Address of Well Location (Street Number/Name): **179 RIDGEMONT DR** Township: **BECKWITH** Lot: **13** Concession:
 County/District/Municipality: **LANARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code:
 UTM Coordinates Zone, Easting, Northing, Municipal Plan and Sublot Number: **NAD 83 184152615004011**

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BROWN	CLAY	LOAM, STONES	FILL	0	1
YELLOW	CLAY			1	6 1/2
GREY	LIMESTONE	LAYERS OF GREEN + RED SHALE		6 1/2	120

Annular Space

Depth Set at (m/ft) From	Depth Set at (m/ft) To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0	50	BENTONITE GROUT	0.690
50	60	CEMENT GROUT	0.130

Method of Construction
 Cable Tool Rotary (Conventional) Rotary (Reverse) Boring Air percussion Other, specify

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

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To	Status of Well
64	STEEL	0.188	0 ⁺²	60	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <u> </u> <input type="checkbox"/> Other, specify <u> </u>

Construction Record - Screen

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

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify <u> </u>	Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
63		60	120	6
92				

Well Contractor and Well Technician Information
 Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **4879**
 Business Address (Street Number/Name): **1080 SCHEEL DR** Municipality: **BRAESIDE**
 Province: **ONT** Postal Code: **K0A1G0** Business E-mail Address:

Bus. Telephone No. (inc. area code): **6136235048** Name of Well Technician (Last Name, First Name): **SAUNDERS TRAY**
 Well Technician's Licence No.: **75117** Signature of Technician and/or Contractor: Tray Date Submitted: **20171018**

Date Package Delivered: **20170928** Date Work Completed: **20170928**
 Ministry Use Only: Audit No. **2260690** Received: **OCT 3 1 2017**

Measurements recorded in: Metric Imperial

Well Owner's Information
 First Name: Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: Well Constructed by Well Owner

Mailing Address (Street Number/Name): **54 BERT G. ARGUE DR STITTSVILLE ONT.** Municipality: Province: Postal Code: Telephone No. (inc. area code):

Well Location
 Address of Well Location (Street Number/Name): **222 RIDGEMONT** Township: **BECKWITH** Lot: **11** Concession:
 County/District/Municipality: **LANARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code:
 UTM Coordinates Zone, Easting, Northing, Municipal Plan and Sublot Number: **NAD 83 18415349150033017**

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BROWN	CLAY, LOAM, SHALE		FILL	0	3
SHALE	BROKEN LIMESTONE			3	5 1/2
GREY	LIMESTONE	GREEN + RED SHALE LAYERS		5 1/2	120

Annular Space

Depth Set at (m/ft) From	Depth Set at (m/ft) To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0	60	BENTONITE GROUT	0.768

Method of Construction
 Cable Tool Rotary (Conventional) Rotary (Reverse) Boring Air percussion Other, specify

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

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To	Status of Well
64	STEEL	0.188	0 ⁺²	60	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <u> </u> <input type="checkbox"/> Other, specify <u> </u>

Construction Record - Screen

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

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify <u> </u>	Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
83		60	120	6
108				

Well Contractor and Well Technician Information
 Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **4879**
 Business Address (Street Number/Name): **1680 SCHEEL DR** Municipality: **BRAESIDE**
 Province: **ONT** Postal Code: **K0A1G0** Business E-mail Address:

Bus. Telephone No. (inc. area code): **6136235048** Name of Well Technician (Last Name, First Name): **SAUNDERS TRAY**
 Well Technician's Licence No.: **75117** Signature of Technician and/or Contractor: Tray Date Submitted: **20171018**

Date Package Delivered: **20171018** Date Work Completed: **20171018**
 Ministry Use Only: Audit No. **2260700** Received: **OCT 3 1 2017**

A252424

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name: _____ Last Name / Organization: **TOMAR HOMES** E-mail Address: _____ Well Constructed by Well Owner:

Mailing Address (Street Number/Name): **54 BERT G. ARGUE DR.** Municipality: **STITTSVILLE** Province: **ONT.** Postal Code: **K2S2R4H2** Telephone No. (inc. area code): _____

Well Location

Address of Well Location (Street Number/Name): **151 RIDGEMONT DR.** Township: **BECKWITH** Lot: **21** Concession: _____

County/District/Municipality: **LAWARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code: _____

UTM Coordinates Zone: **18** Easting: **4151725** Northing: **009114** 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	Depth (m/ft) To
BROWN	SAND	STONES		0	1
GREY	LIMESTONE		FRACTURED	1	2
GREY	LIMESTONE	LAYERS OF GREY SANDSTONE		2	180

Annular Space			Results of Well Yield Testing			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Draw Down		Recovery	
0	60	BENTONITE GROUT	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
			Static Level	20.25		
			1	29.0	1	20.25
			2	24.5	2	20.25
			3	24.30	3	20.25
			4	24.25	4	20.25
			5	24.25	5	20.25
			10	24.30	10	20.25
			15	24.30	15	20.25
			20	24.35	20	20.25
			25	24.35	25	20.25
			30	24.35	30	20.25
			40	24.40	40	20.25
			50	24.40	50	20.25
			60	24.40	60	20.25

Method of Construction: Cable Tool, Rotary (Conventional), Rotary (Reverse), Boring, Air percussion, Other, specify _____

Well Use: Public, Commercial, Municipal, Industrial, Other, specify _____

Not used, Dewatering, Monitoring, Cooling & Air Conditioning

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To	
64	STEEL	0.188	0	60	<input checked="" type="checkbox"/> Water Supply, <input type="checkbox"/> Replacement Well, <input type="checkbox"/> Test Hole, <input type="checkbox"/> Recharge Well, <input type="checkbox"/> Dewatering Well, <input type="checkbox"/> Observation and/or Monitoring Hole, <input type="checkbox"/> Alteration (Construction), <input type="checkbox"/> Abandoned, Insufficient Supply, <input type="checkbox"/> Abandoned, Poor Water Quality, <input type="checkbox"/> Abandoned, other, specify _____, <input type="checkbox"/> Other, specify _____

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

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Depth (m/ft) From	To
83		60	180
120			
171			

Well Contractor and Well Technician Information

Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **4181719**

Business Address (Street Number/Name): **1680 SCHEEL DR** Municipality: **BRAESIDE**

Province: **ONT.** Postal Code: **K0A1G0** Business E-mail Address: _____

Bus. Telephone No. (inc. area code): **6136235648** Name of Well Technician (Last Name, First Name): **JOY SAUNDERS**

Well Technician's Licence No.: **115117** Signature of Technician and/or Contractor: *Joy Saunders* Date Submitted: **20180410**

Date Package Delivered: **20180210** Ministry Use Only: Audit No. **2292769** Date Work Completed: **JAN 07 2019**

A228006

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name: _____ Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: _____ Well Constructed by Well Owner:

Mailing Address (Street Number/Name): **54 BERT G. ARGUE DR.** Municipality: **STITTSVILLE** Province: **ONT** Postal Code: **K2S2R4H2** Telephone No. (inc. area code): _____

Well Location

Address of Well Location (Street Number/Name): **212 RIDGEMONT DR** Township: **BECKWITH** Lot: **10** Concession: _____

County/District/Municipality: **LAWARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code: _____

UTM Coordinates Zone: **NAD 18** Easting: **41515311** Northing: **15003849** 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	Depth (m/ft) To
BROWN	FILL			0	2
BROWN	LOAM	SHALE		2	4
GREY	LIMESTONE	BLACK LIMESTONE - GREY SANDSTONE - GREEN SHALE LAYERS		4	180

Annular Space			Results of Well Yield Testing			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Draw Down		Recovery	
0	60	BENTONITE GROUT	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
			Static Level	31.20		
			1	31.20	1	31.20
			2	31.40	2	31.20
			3	31.43	3	31.20
			4	31.43	4	31.20
			5	31.43	5	31.20
			10	31.45	10	31.20
			15	31.45	15	31.20
			20	31.45	20	31.20
			25	31.45	25	31.20
			30	31.45	30	31.20
			40	31.45	40	31.20
			50	31.45	50	31.20
			60	31.45	60	31.20

Method of Construction: Cable Tool, Rotary (Conventional), Rotary (Reverse), Boring, Air percussion, Other, specify _____

Well Use: Public, Commercial, Municipal, Industrial, Other, specify _____

Not used, Dewatering, Monitoring, Cooling & Air Conditioning

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To	
64	STEEL	0.188	0	60	<input checked="" type="checkbox"/> Water Supply, <input type="checkbox"/> Replacement Well, <input type="checkbox"/> Test Hole, <input type="checkbox"/> Recharge Well, <input type="checkbox"/> Dewatering Well, <input type="checkbox"/> Observation and/or Monitoring Hole, <input type="checkbox"/> Alteration (Construction), <input type="checkbox"/> Abandoned, Insufficient Supply, <input type="checkbox"/> Abandoned, Poor Water Quality, <input type="checkbox"/> Abandoned, other, specify _____, <input type="checkbox"/> Other, specify _____

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

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Depth (m/ft) From	To
128		60	180
171			

Well Contractor and Well Technician Information

Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **4181719**

Business Address (Street Number/Name): **1680 SCHEEL DR** Municipality: **BRAESIDE**

Province: **ONT.** Postal Code: **K0A1G0** Business E-mail Address: _____

Bus. Telephone No. (inc. area code): **6136235648** Name of Well Technician (Last Name, First Name): **JOY SAUNDERS**

Well Technician's Licence No.: **115117** Signature of Technician and/or Contractor: *Joy Saunders* Date Submitted: **20180410**

Date Package Delivered: **20180307** Ministry Use Only: Audit No. **2260717** Date Work Completed: **MAR 27 2018**

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name Last Name / Organization E-mail Address Well Constructed by Well Owner

TOMAR CUSTOM HOMES

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)

54 BERT G. ARGUE DR. STITTSVILLE ONT. K2S2H2

Well Location

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

241 RIDGEMONT DR. BECKWITH 18 PHASE 2

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

LANARK ASHTON Ontario

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number Other

NAD 83 18 18415461 5003808

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
GREY	LIMESTONE	LAYERS OF BLACK LIMESTONE		0	200

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0	60	BENTONITE GROUT	0.768

Results of Well Yield Testing

Time (min)	Draw Down		Recovery	
	Water Level (m/ft)	Time (min)	Water Level (m/ft)	Time (min)
Static Level	28.15			
1	30.10	1	28.40	
2	30.25	2	28.25	
3	30.40	3	28.25	
4	30.75	4	28.23	
5	30.75	5	28.23	
10	30.75	10	28.20	
15	30.80	15	28.20	
20	30.80	20	28.18	
25	30.85	25	28.15	
30	30.85	30	28.15	
40	30.90	40	28.15	
50	30.90	50	28.15	
60	30.90	60	28.15	

After test of well yield, water was:
 Clear and sand free
 Other, specify CLEARING
 If pumping discontinued, give reason:
 Pump intake set at (m/ft) 190
 Pumping rate (l/min / GPM) 7
 Duration of pumping 1 hrs + 0 min
 Final water level end of pumping (m/ft) 30.90
 If flowing give rate (l/min / GPM)
 Recommended pump depth (m/ft) 190
 Recommended pump rate (l/min / GPM) 8
 Well production (l/min / GPM)
 Disinfected? Yes No

Method of Construction Well Use

<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Other, specify	<input type="checkbox"/> Industrial		

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	Status of Well
64	STEEL	.188	0	60	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify

Construction Record - Screen

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

Water Details Hole Diameter

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Depth (m/ft) From	To	Diameter (cm/in)
7.8		60	200	68
18.4				

Well Contractor and Well Technician Information

Business Name of Well Contractor: SAUNDERS WELL DRILLING LTD 418 719
 Business Address (Street Number/Name) Municipality: 1680 SCHEEL DR BRAESIDE
 Province Postal Code Business E-mail Address: ONT K0A1G0

Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name): 613 623 5648 SAUNDERS TROY
 Well Technician's Licence No. Signature of Technician and/or Contractor Date Submitted: 15117 Troy Saunders 2019 0515

Well owner's information package delivered: Yes No
 Date Package Delivered: 2019 04 15
 Date Work Completed: MAY 07 2019
 Ministry Use Only: Audit No. 2292766
 Received: 2019 04 15

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name Last Name / Organization E-mail Address Well Constructed by Well Owner

TOMAR HOMES

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)

54 BERT G. ARGUE DR. STITTSVILLE ONT K2S2H2

Well Location

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

190 RIDGEMONT BECKWITH 8

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

LANARK ASHTON Ontario

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number Other

NAD 83 18 184152458 5003926

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BROWN	CLAY	LOAM		0	1 1/2
GREY	LIMESTONE	LAYERS OF GREEN SHALE		1 1/2	120

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0	60	BENTONITE GROUT	0.896

Method of Construction Well Use

<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Other, specify	<input type="checkbox"/> Industrial		

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	Status of Well
64	STEEL	.188	0	60	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify

Construction Record - Screen

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

Water Details Hole Diameter

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Depth (m/ft) From	To	Diameter (cm/in)
34		60	120	68
105				

Well Contractor and Well Technician Information

Business Name of Well Contractor: SAUNDERS WELL DRILLING LTD 418 719
 Business Address (Street Number/Name) Municipality: 1680 SCHEEL DR BRAESIDE
 Province Postal Code Business E-mail Address: ONT K0A1G0

Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name): 613 623 5648 SAUNDERS TROY
 Well Technician's Licence No. Signature of Technician and/or Contractor Date Submitted: 15117 Troy Saunders 2019 04 08

Results of Well Yield Testing

Time (min)	Draw Down		Recovery	
	Water Level (m/ft)	Time (min)	Water Level (m/ft)	Time (min)
Static Level	19.80			
1	22.80	1	20.70	
2	23.45	2	20.50	
3	23.65	3	20.50	
4	23.90	4	20.45	
5	24.0	5	20.40	
10	24.30	10	20.22	
15	24.40	15	20.05	
20	24.45	20	19.88	
25	24.50	25	19.85	
30	24.55	30	19.84	
40	24.60	40	19.84	
50	24.65	50	19.82	
60	24.65	60	19.82	

After test of well yield, water was:
 Clear and sand free
 Other, specify CLEARINGS
 If pumping discontinued, give reason:
 Pump intake set at (m/ft) 110
 Pumping rate (l/min / GPM) 12
 Duration of pumping 1 hrs + 0 min
 Final water level end of pumping (m/ft) 24.65
 If flowing give rate (l/min / GPM)
 Recommended pump depth (m/ft) 110
 Recommended pump rate (l/min / GPM) 12
 Well production (l/min / GPM) 12+
 Disinfected? Yes No

Map of Well Location

Please provide a map below following instructions on the back.

Comments:

Well owner's information package delivered: Yes No
 Date Package Delivered: 2018 02 08
 Date Work Completed: 2018 02 08
 Ministry Use Only: Audit No. 2292768
 Received: JAN 07 2019

Address of Well Location (Street Number/Name) 254 RIDGEMONT DR. Township BECKWITH Lot Concession
 County/District/Municipality LANARK City/Town/Village ASHTON Province Ontario Postal Code
 UTM Coordinates: Zone Easting Northing Municipal Plan and Sublot Number
 NAD 83 18 14154235003689

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)
BROWN	LOAM	SHALE, CLAY		0 4 1/2
GREY	LIMESTONE	LAYERS OF RED + GREEN SHALE		4 1/2 99

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0 60	BENTONITE GROUT	0.768

Results of Well Yield Testing

Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
1	35:10	1	34:50
2	36:0	2	34:30
3	36:02	3	34:25
4	36:0	4	34:25
5	36:05	5	34:25
10	36:02	10	34:25
15	36:05	15	34:25
20	36:05	20	34:25
25	36:10	25	34:25
30	36:10	30	34:25
40	36:10	40	34:25
50	36:10	50	34:25
60	36:10	60	34:25

Method of Construction

Well Use

Duration of pumping 1 hrs + 0 min

Final water level end of pumping (m/ft) 36.10

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	Status of Well
64	STEEL	0.188	0-2 60	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify
6	OPEN HOLE		60 99	

Map of Well Location

Please provide a map below following instructions on the back.

Construction Record - Screen

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

Water Details

Hole Diameter

Depth (m/ft)	Kind of Water	Depth (m/ft)	Diameter (cm/in)
87 (m/ft)	Fresh <input type="checkbox"/> Untested <input checked="" type="checkbox"/>	0 60	9 3/4
114 (m/ft)	Fresh <input type="checkbox"/> Untested <input checked="" type="checkbox"/>	60 99	6

Well Contractor and Well Technician Information

Business Name of Well Contractor SAUNDERS WELL DRILLING LTD
 Business Address (Street Number/Name) 1680 SCHEEL DR
 Province ONT Postal Code K0A1B0 Business E-mail Address
 Well Contractor's Licence No. 4879
 Municipality BRASIDIE

Well owner's information package delivered Yes No
 Date Package Delivered 2019/12/16
 Date Work Completed 2019/12/19
 Ministry Use Only
 Audit No. Z318991
 JAN 27 2020
 Received

Address of Well Location (Street Number/Name) 54 BERT G. ARGUE DR. Township BECKWITH Lot 10 Concession
 County/District/Municipality LANARK City/Town/Village ASHTON PHASE 2 Province Ontario Postal Code
 UTM Coordinates: Zone Easting Northing Municipal Plan and Sublot Number
 NAD 83 18 14157005003454

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)
BROWN	CLAY	SAND + STONES	FILL	0 4
BROWN	HUMUS			4 6
BROWN	CLAY			6 8
GREY	LIMESTONE	LAYERS OF GREY SANDSTONE		8 124
		LAYERS OF GREEN + RED SHALE		

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0 60	BENTONITE GROUT	0.768

Results of Well Yield Testing

Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
1	39:02	1	35:16
2	39:23	2	34:35
3	40:08	3	34:31
4	40:58	4	34:30
5	40:85	5	34:30
10	41:43	10	34:30
15	41:62	15	34:30
20	41:63	20	34:30
25	41:78	25	34:30
30	41:80	30	34:30
40	41:92	40	34:30
50	42:0	50	34:30
60	42:10	60	34:30

Method of Construction

Well Use

Duration of pumping 1 hrs + 0 min

Final water level end of pumping (m/ft) 42.10

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	Status of Well
64	STEEL	0.188	0-2 60	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify
6	OPEN HOLE		60 124	

Map of Well Location

Please provide a map below following instructions on the back.

Construction Record - Screen

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

Water Details

Hole Diameter

Depth (m/ft)	Kind of Water	Depth (m/ft)	Diameter (cm/in)
87 (m/ft)	Fresh <input type="checkbox"/> Untested <input checked="" type="checkbox"/>	0 60	9 3/4
114 (m/ft)	Fresh <input type="checkbox"/> Untested <input checked="" type="checkbox"/>	60 124	6

Well Contractor and Well Technician Information

Business Name of Well Contractor SAUNDERS WELL DRILLING LTD
 Business Address (Street Number/Name) 1680 SCHEEL DR
 Province ONT Postal Code K0A1B0 Business E-mail Address
 Well Contractor's Licence No. 4879
 Municipality BRASIDIE

A276753

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name Last Name / Organization E-mail Address Well Constructed by Well Owner
 TOMAR CUSTOM HOMES

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)
 54 BERT G. ARGUE DR. STITTSVILLE ONT. K7S2H2

Well Location Address of Well Location (Street Number/Name) Township Lot Concession
 310 RIDGEMONT DR BECKWITH 8

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

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number Other
 NAD 83 18 415590 500 3470

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)
BROWN	SHALE		FILL	0 1 1/2
YELLOW	CLAY			1 1/2 4
GREY	LIMESTONE			4 160

Annular Space			Results of Well Yield Testing			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
0 60	BENTONITE GROUT	0.896	29.05		1	47.35
			32.50		2	43.75
			35.04		3	40.63
			38.30		4	37.90
			39.27		5	35.55
			40.16		10	29.54
			48.47		15	29.05
			45.70		20	29.05
			47.90		25	29.05
			48.40		30	29.05
			49.03		40	29.05
			50.15		50	29.05
			50.90		60	29.05
			51.46			

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Municipal	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input type="checkbox"/> Other, specify	<input type="checkbox"/> Other, specify	<input type="checkbox"/> Industrial	<input type="checkbox"/> Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	<input type="checkbox"/> Water Supply	<input type="checkbox"/> Replacement Well
6 1/4	STEEL	0.188	0 60	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Recharge Well
6	OPEN HOLE		60 160	<input type="checkbox"/> Dewatering Well	<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)	<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality	<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify	

Construction Record - Screen				Map of Well Location	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	Please provide a map below following instructions on the back.	

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft) From To	Diameter (cm/in)
68 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	0 60	9 3/4
109 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	60 160	6
148 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		

Well Contractor and Well Technician Information
 Business Name of Well Contractor: SAUNDERS WELL DRILLING
 Business Address (Street Number/Name): 1680 SCHEEL DR
 Province: ONT Postal Code: K0A1G0 Business E-mail Address: [blank]
 Well Contractor's Licence No.: 4879 Municipality: BRAESIDE

Well owner's information package delivered: Yes No
 Date Package Delivered: 2019/12/16
 Date Work Completed: 2019/12/10
 Ministry Use Only: Audit No: 2318978
 Received: JAN 2 8 2020

A276739

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name Last Name / Organization E-mail Address Well Constructed by Well Owner
 TOMAR CUSTOM HOMES

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)
 54 BERT G. ARGUE DR. STITTSVILLE ONT. K7S2H2

Well Location Address of Well Location (Street Number/Name) Township Lot Concession
 255 RIDGEMONT DR BECKWITH 17

County/District/Municipality City/Town/Village Province Postal Code
 LANARK ASHTON Ontario

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number Other
 NAD 83 18 415503 500 037511

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)
GREY	BROKEN ROCK		FILL	0 1
BROWN	CLAY	STONES		1 3
GREY	LIMESTONE	LAYERS OF GREY SANDSTONE		3 180

Annular Space			Results of Well Yield Testing			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
0 60	BENTONITE GROUT	0.896	44.90		1	68.50
			49.0		2	60.40
			50.70		3	55.75
			53.70		4	53.30
			54.85		5	51.10
			60.35		10	45.30
			63.75		15	45.05
			66.0		20	44.95
			67.60		25	44.90
			68.40		30	44.90
			69.75		40	44.90
			70.20		50	44.90
			70.75		60	44.90

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Municipal	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input type="checkbox"/> Other, specify	<input type="checkbox"/> Other, specify	<input type="checkbox"/> Industrial	<input type="checkbox"/> Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	<input checked="" type="checkbox"/> Water Supply	<input type="checkbox"/> Replacement Well
6 1/4	STEEL	0.188	0 60	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Recharge Well
6	OPEN HOLE		60 180	<input type="checkbox"/> Dewatering Well	<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)	<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality	<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify	

Construction Record - Screen				Map of Well Location	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	Please provide a map below following instructions on the back.	

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft) From To	Diameter (cm/in)
80 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	0 60	9 3/4
109 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	60 180	6
148 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		

Well Contractor and Well Technician Information
 Business Name of Well Contractor: SAUNDERS WELL DRILLING
 Business Address (Street Number/Name): 1680 SCHEEL DR
 Province: ONT Postal Code: K0A1G0 Business E-mail Address: [blank]
 Well Contractor's Licence No.: 4879 Municipality: BRAESIDE

Well owner's information package delivered: Yes No
 Date Package Delivered: 2019/12/16
 Date Work Completed: 2019/11/16
 Ministry Use Only: Audit No: 2318976
 Received: JAN 27 2020

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL	30.55 ft		
1	31 ft	1	30.5 ft
2	31 ft	2	30.45 ft
3	31.05 ft	3	30.43 ft
4	31.05 ft	4	30.42 ft
5	31.05 ft	5	30.41 ft
10	31.08 ft	10	30.4 ft
15	31.1 ft	15	30.38 ft
20	31.1 ft	20	30.37 ft
25	31.1 ft	25	30.37 ft
30	31.12 ft	30	30.35 ft
40	31.12 ft	40	30.35 ft
45		45	
50	31.13 ft	50	30.35 ft
60	31.15 ft	60	30.35 ft

Water Details

Water Found at Depth	Kind
79 ft	Untested
93 ft	Untested

Hole Diameter

Depth From	Depth To	Diameter
0 ft	60.5 ft	9.75 inch
60.5 ft	120 ft	6.125 inch

Audit Number: 2394321

Date Well Completed: March 12, 2020

Date Well Record Received by MOE: March 31, 2020

Well ID

Well ID Number: 7396155
Well Audit Number: 2394321
Well Tag Number: A276724

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	277 Ridgemans Dr
Township	BECKWITH TOWNSHIP
Lot	
Concession	
County/District/Municipality	LANARK
City/Town/Village	ASHTON
Province	ON
Postal Code	R5A
UTM Coordinates	NAD83 — Zone 18 Easting: 415585.00 Northing: 5003664.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
GREY	LMSN	SHDS	SHLE	0 ft	120 ft

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 ft	60.5 ft	BENTONITE GROUT	

Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	
	DOMESTIC

Status of Well

Water Supply

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
6.25 inch	STEEL	~583 ft	60.5 ft
6.125 inch	OPEN HOLE	60.5 ft	120 ft

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 4879

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 4879

Results of Well Yield Testing

After test of well yield, water was	OTHER
If pumping discontinued, give reason	
Pump intake set at	110 ft
Pumping Rate	14 GPM
Duration of Pumping	1 H 0 m
Final water level	31.15 ft
If flowing give rate	
Recommended pump depth	10 ft
Recommended pump rate	14 GPM
Well Production	
Disinfected?	Y

Well Owner's Information
 First Name: Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: Well Constructed by Well Owner
 Mailing Address (Street Number/Name): **BERT G ARGUE DR** Municipality: **STITTVILLE** Province: **ONT** Postal Code: Telephone No. (inc. area code):
Well Location
 Address of Well Location (Street Number/Name): **295 RIDGEMOUNT DR.** Township: **BECKWITH** Lot: **12** Concession:
 County/District/Municipality: **LAMARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code:
 JTM Coordinates: Zone: Easting: Northing: Municipal Plan and Sublot Number:
 NAD 83 **1841564515003570**

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
GREY	ROCK		FILL	0	2 1/2
BROWN	CLAY	SHALE		2 1/2	4
GREY	LIMESTONE	GREY SANDSTONE		4	160

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0 60	BENTONITE GROUT	0.768

Method of Construction

<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input checked="" type="checkbox"/> Air percussion		<input type="checkbox"/> Industrial		
<input type="checkbox"/> Other, specify		<input type="checkbox"/> 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)	Water Supply
			From	To
5 1/4	STEEL	0.188	0 to 60	<input checked="" type="checkbox"/> Water Supply
5 1/8	OPEN HOLE		60 to 160	<input type="checkbox"/> Replacement Well

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	Status of Well
			From	To
				<input type="checkbox"/> Test Hole
				<input type="checkbox"/> Recharge Well
				<input type="checkbox"/> Dewatering Well
				<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)
				<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water	Hole Diameter (cm/in)
		Depth (m/ft)
		From
77 (m/ft)	<input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	0 60
77 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	9 3/4
8 (m/ft)	<input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	60 160
8 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	68
38 (m/ft)	<input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	
38 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	

Well Contractor and Well Technician Information
 Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **4 8 7 9**
 Business Address (Street Number/Name): **1680 SCHEEL DR.** Municipality: **BRAESIDE**
 Province: **ONT** Postal Code: **K0A1A0** Business E-mail Address:

Well owner's information package delivered: Yes No
 Date Package Delivered: **20200702**
 Date Work Completed: **20200702**
 Well Technician's Licence No.: **1136235648** Name of Well Technician (Last Name, First Name): **SAUNDERS TRIP**
 Signature of Technician and/or Contractor: **Troy Saul** Date Submitted: **20200802**

Well Owner's Information
 First Name: Last Name / Organization: **TOMAR CUSTOM HOMES** E-mail Address: Well Constructed by Well Owner
 Mailing Address (Street Number/Name): **BERT G ARGUE DR** Municipality: **STITTVILLE** Province: **ONT** Postal Code: Telephone No. (inc. area code):
Well Location
 Address of Well Location (Street Number/Name): **259 RIDGEMOUNT DR** Township: **BECKWITH** Lot: **16** Concession:
 County/District/Municipality: **LAMARK** City/Town/Village: **ASHTON** Province: **Ontario** Postal Code:
 JTM Coordinates: Zone: Easting: Northing: Municipal Plan and Sublot Number:
 NAD 83 **1841553615003747**

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
GREY	GRAVEL		FILL	0	1
BROWN	LOAM	CLAY + SHALE		1	3
GREY	LIMESTONE	LAYERS OF GREY SANDSTONE		3	91
GREY	SANDSTONE	LAYERS OF RED + GREEN SHALE		91	160

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /yd ³)
0 60	BENTONITE GROUT	0.640

Method of Construction

<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input checked="" type="checkbox"/> Air percussion		<input type="checkbox"/> Industrial		
<input type="checkbox"/> Other, specify		<input type="checkbox"/> 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)	Water Supply
			From	To
5 1/4	STEEL	0.188	0 to 60	<input checked="" type="checkbox"/> Water Supply
5 1/8	OPEN HOLE		60 to 160	<input type="checkbox"/> Replacement Well

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	Status of Well
			From	To
				<input type="checkbox"/> Test Hole
				<input type="checkbox"/> Recharge Well
				<input type="checkbox"/> Dewatering Well
				<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)
				<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water	Hole Diameter (cm/in)
		Depth (m/ft)
		From
112 (m/ft)	<input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	0 60
112 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	9 3/4
53 (m/ft)	<input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	60 160
53 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	68
	<input type="checkbox"/> Fresh <input type="checkbox"/> Untested	
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	

Well Contractor and Well Technician Information
 Business Name of Well Contractor: **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No.: **4 8 7 9**
 Business Address (Street Number/Name): **1680 SCHEEL DR.** Municipality: **BRAESIDE**
 Province: **ONT** Postal Code: **K0A1A0** Business E-mail Address:

Well owner's information package delivered: Yes No
 Date Package Delivered: **20200702**
 Date Work Completed: **20200702**
 Well Technician's Licence No.: **1136235648** Name of Well Technician (Last Name, First Name): **SAUNDERS TRIP**
 Signature of Technician and/or Contractor: **Troy Saul** Date Submitted: **20200801**

A309683

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name: TOMAR CUSTOM HOMES
 Last Name/Organization: TOMAR CUSTOM HOMES
 E-mail Address: _____
 Mailing Address (Street Number/Name): 54 BERT G ARGUE DR
 Municipality: STITTSVILLE
 Province: ONT.
 Postal Code: _____
 Telephone No. (inc. area code): _____

Well Location

Address of Well Location (Street Number/Name): 244 RIDGEMONT DR
 Township: BECKWITH
 Lot: _____
 Concession: _____
 County/District/Municipality: LANARK
 City/Town/Village: ASHTON
 Province: Ontario
 Postal Code: _____
 UTM Coordinates: Zone: 18N, Easting: 415389, Northing: 5003754
 Municipal Plan and Sublot Number: _____

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BROWN	LOAM	SHALE		0	4
GREY	LIMESTONE	LAYERS OF GREEN SHALE		4	140
		4 GREY SANDSTONE			

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0	60	BENTONITE GROUT	0.640

Method of Construction

Method of Construction	Well Use
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Public
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Reverse)	<input checked="" type="checkbox"/> Domestic
<input type="checkbox"/> Boring	<input type="checkbox"/> Municipal
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Other, specify _____	<input type="checkbox"/> Dewatering
	<input type="checkbox"/> Monitoring
	<input type="checkbox"/> Irrigation
	<input type="checkbox"/> Cooling & Air Conditioning

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	Status of Well
67	STEEL	0.188	0	60	<input checked="" type="checkbox"/> Water Supply
6 7/8	OPEN HOLE		60	140	<input type="checkbox"/> Replacement Well

Construction Record - Screen

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

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft) From	To	Diameter (cm/in)
77	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	0	60	9 3/4
84	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	60	140	6 7/8
120	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____			

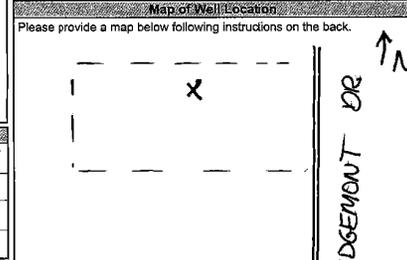
Well Contractor and Well Technician Information

Business Name of Well Contractor: SAUNDERS WELL DRILLING LTD
 Well Contractor's Licence No.: 418719
 Business Address (Street Number/Name): 1680 SCHEEL DR
 Municipality: BRAESIDE
 Province: ONT.
 Postal Code: K0A1G0
 Business E-mail Address: _____

Bus. Telephone No. (inc. area code): 613-623-5648
 Name of Well Technician (Last Name, First Name): SAUNDERS TROY
 Well Technician's Licence No.: T5117
 Signature of Technician and/or Contractor: Troy Saunders
 Date Submitted: 20210430

Results of Well Yield Testing

Draw Down	Recovery		
Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
Static Level:	29.35		
1	35.0	1	44.40
2	37.5	2	46.0
3	38.80	3	36.75
4	39.70	4	34.20
5	40.50	5	31.96
10	43.0	10	30.50
15	45.10	15	29.40
20	46.31	20	29.35
25	46.90	25	29.35
30	47.10	30	29.35
40	47.75	40	29.35
50	48.15	50	29.35
60	48.35	60	29.35



Comments:

Well owner's information package delivered: Yes No
 Date Package Delivered: 20210331
 Date Work Completed: 20210331
 Ministry Use Only: Audit No. 2349898, APR 12 2021

A296837

Measurements recorded in: Metric Imperial

Well Owner's Information

First Name: TOMAR CUSTOM HOMES
 Last Name/Organization: TOMAR CUSTOM HOMES
 E-mail Address: _____
 Mailing Address (Street Number/Name): 54 BERT G ARGUE DR
 Municipality: STITTSVILLE
 Province: ONT.
 Postal Code: _____
 Telephone No. (inc. area code): _____

Well Location

Address of Well Location (Street Number/Name): 309 RIDGEMONT DR
 Township: BECKWITH
 Lot: 11
 Concession: 2
 County/District/Municipality: LANARK
 City/Town/Village: ASHTON
 Province: Ontario
 Postal Code: _____
 UTM Coordinates: Zone: 18N, Easting: 415665, Northing: 5003531
 Municipal Plan and Sublot Number: _____

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
BROWN	SAND	CLAY		0	6
GREY	SHALE			6	9
GREY	LIMESTONE			9	180

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0	60	BENTONITE GROUT	0.704

Method of Construction

Method of Construction	Well Use
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Public
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Reverse)	<input checked="" type="checkbox"/> Domestic
<input type="checkbox"/> Boring	<input type="checkbox"/> Municipal
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Other, specify _____	<input type="checkbox"/> Dewatering
	<input type="checkbox"/> Monitoring
	<input type="checkbox"/> Irrigation
	<input type="checkbox"/> Cooling & Air Conditioning

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	Status of Well
67	STEEL	0.188	0	60	<input checked="" type="checkbox"/> Water Supply
6 7/8	OPEN HOLE		60	180	<input type="checkbox"/> Replacement Well

Construction Record - Screen

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

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft) From	To	Diameter (cm/in)
84	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	0	60	9 3/4
160	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	60	180	6 7/8

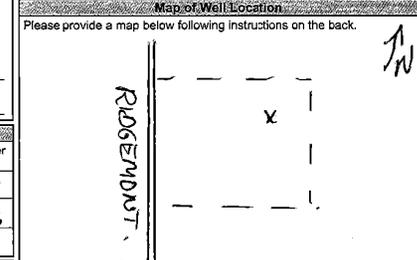
Well Contractor and Well Technician Information

Business Name of Well Contractor: SAUNDERS WELL DRILLING LTD
 Well Contractor's Licence No.: 418719
 Business Address (Street Number/Name): 1680 SCHEEL DR
 Municipality: BRAESIDE
 Province: ONT.
 Postal Code: K0A1G0
 Business E-mail Address: _____

Bus. Telephone No. (inc. area code): 613-623-5648
 Name of Well Technician (Last Name, First Name): SAUNDERS TROY
 Well Technician's Licence No.: T5117
 Signature of Technician and/or Contractor: Troy Saunders
 Date Submitted: 20210430

Results of Well Yield Testing

Draw Down	Recovery		
Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
Static Level:	35.40		
1	42.70	1	52.10
2	45.70	2	48.10
3	47.60	3	43.30
4	48.40	4	40.60
5	49.60	5	38.15
10	53.0	10	35.80
15	55.0	15	35.65
20	55.90	20	35.58
25	56.40	25	35.52
30	56.65	30	35.48
40	56.90	40	35.45
50	57.0	50	35.45
60	57.25	60	35.44



Comments:

Well owner's information package delivered: Yes No
 Date Package Delivered: 20200930
 Date Work Completed: 20200930
 Ministry Use Only: Audit No. 2349864, Received: OCT 27 2020

A309702

Measurements recorded in: Metric Imperial

Page _____ of _____

Well Owner's Information

First Name _____ Last Name/Organization **TOMAR CUSTOM HOMES** E-mail Address _____ Well Constructed by Well Owner

Mailing Address (Street Number/Name) **54 BERT GARGUE** Municipality **STITTSVILLE** Province **ONT** Postal Code _____ Telephone No. (inc. area code) _____

Well Location

Address of Well Location (Street Number/Name) **145 RIDGEMONT DR.** Township **BECKWITH** Lot **22** Concession _____

County/District/Municipality **LANARK** City/Town/Village **ASHTON** Province **Ontario** Postal Code _____

UTM Coordinates Zone, Easting, Northing **NAD 83 1894151 6315004 149** 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	Depth (m/ft) To
BROWN	LOAM			0	6"
GREY	SHALE			6"	1 1/2
GREY	LIMESTONE	LAYERS OF GREEN SHALE		1 1/2	120

Annular Space

Depth Set at (m/ft) From **0** To **60 1/2** Type of Sealant Used (Material and Type) **BENTONITE GROUT** Volume Placed (m³/ft³) **0.650**

Results of Well Yield Testing

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

If pumping discontinued, give reason: _____

Static Level	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
1	27.50	1	27.25	23.90
2	27.30	2	23.90	
3	27.25	3	23.90	
4	27.30	4	23.90	
5	27.30	5	23.90	
10	27.35	10	23.90	
15	27.37	15	23.90	
20	27.40	20	23.90	
25	27.40	25	23.90	
30	27.40	30	23.90	
40	27.45	40	23.90	
50	27.45	50	23.90	
60	27.50	60	23.90	

Pump intake set at (m/ft) **110**

Pumping rate (l/min / GPM) **10**

Duration of pumping **1** hrs + **0** min

Final water level end of pumping (m/ft) **27.50**

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

Recommended pump depth (m/ft) **110**

Recommended pump rate (l/min/GPM) **10**

Well production (l/min/GPM) **12**

Disinfected? Yes No

Method of Construction

Cable Tool Diamond Public Commercial Not used

Rotary (Conventional) Jetting Domestic Municipal Dewatering

Rotary (Reverse) Driving Livestock Test Hole Monitoring

Boring Digging Irrigation Cooling & Air Conditioning

Air percussion Industrial Other, specify _____

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)		Status of Well
			From	To	
6 7/8	STEEL	0.188	0	60 1/2	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify _____ <input type="checkbox"/> Other, specify _____
6	OPEN HOLE		60 1/2	120	

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		Status of Well
			From	To	
					<input type="checkbox"/> Other, specify _____

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Hole Diameter	
		Depth (m/ft) From	To Diameter (cm/in)
61		0	60 1/2 9 3/4
98-110		60 1/2	120 6

Well Contractor and Well Technician Information

Business Name of Well Contractor **SAUNDERS WELL DRILLING LTD** Well Contractor's Licence No. **4 8 7 9**

Business Address (Street Number/Name) **1680 SCHEEL DR** Municipality **BROESIDE**

Province **ONT** Postal Code **K0A1G0** Business E-mail Address _____

Bus. Telephone No. (inc. area code) **6136235048** Name of Well Technician (Last Name, First Name) **SAUNDERS TROY**

Well Technician's Licence No. **T5117** Signature of Technician and/or Contractor **Troy Saunders** Date Submitted **2021/07/05**

Map of Well Location

Please provide a map below following instructions on the back.

Comments: _____

Well owner's Information package delivered	Date Package Delivered	Ministry/Use Only
<input checked="" type="checkbox"/> Yes	2021/06/05	Audit No. 2361794
<input type="checkbox"/> No	2021/06/05	Date Work Completed _____

Received **2021/07/05**

APPENDIX IV
Laboratory Certificates

C.O.C.: G 130347

REPORT No: 24-032854 - Rev. 0

Report To:

Pinchin Ltd. - Kingston
 1456 Centennial Dr, Suite 2
 Kingston, ON K7P 0K4

CADUCEON Environmental Laboratories

285 Dalton Ave
 Kingston, ON K7K 6Z1

Attention: Phil Tibble

DATE RECEIVED: 2024-Oct-21
 DATE REPORTED: 2024-Oct-25
 SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: 283258001
 P.O. NUMBER:

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	1	OTTAWA	PCURIEL	2024-Oct-23	A-IC-01	SM 4110B
Colour (Liquid)	1	OTTAWA	STAILLON	2024-Oct-23	A-COL-01	SM 2120C
Cond/pH/Alk Auto (Liquid)	1	OTTAWA	SBOUDREAU	2024-Oct-23	COND-02/PH-02/A LK-02	SM 2510B/4500H/ 2320B
Coliforms - DC Media (Liquid)	1	KINGSTON	BBURTCH	2024-Oct-21	ECTC-001	MECP E3407
DOC/DIC (Liquid)	1	OTTAWA	MMACMILLAN	2024-Oct-25	C-OC-01	EPA 415.2
Fecal Coliforms (Liquid)	1	KINGSTON	BBURTCH	2024-Oct-21	FC-001	SM 9222D
Ion Balance (Calc)	1	OTTAWA	ASCHNEIDER		CP-028	MECP E3196
ICP/OES (Liquid)	1	OTTAWA	APRUDYVUS	2024-Oct-22	D-ICP-01	SM 3120B
Ammonia (Liquid)	1	KINGSTON	JYEARWOOD	2024-Oct-22	NH3-001	SM 4500NH3
Turbidity (Liquid)	1	OTTAWA	PLUSSIER	2024-Oct-23	A-TURB-01	SM 2130B

R.L. = Reporting Limit

NC = Not Calculated

Test methods may be modified from specified reference method unless indicated by an *



Michelle Dubien
Data Specialist

CADUCEON Environmental Laboratories Certificate of Analysis

Final Report
 REPORT No: 24-032854 - Rev. 0

Parameter	Units	R.L.	Limits	DWG	Client I.D.
					A360959
					Sample I.D.
					24-032854-1
					Date Collected
					2024-Oct-21
Parameter	Units	R.L.	Limits	DWG	
Total Coliform (DC Media)	CFU/100mL	1	0	MAC	0
E coli (DC Media)	CFU/100mL	1	0	MAC	0
Background (DC Media)	CFU/100mL	1			7
Fecal Coliform	CFU/100mL	1	0	MAC	0
Alkalinity(CaCO3) to pH4.5	mg/L	5	500	OG	279
TDS (Calc. from Cond.)	mg/L	3	500	AO	409
Conductivity @25°C	uS/cm	1			781
pH @25°C	pH units	-	8.5	OG	8.14
Colour	TCU	2	5	AO	<2
Turbidity	NTU	0.1	5	AO	0.5
Fluoride	mg/L	0.1	1.5	MAC	<0.1
Chloride	mg/L	0.5	250	AO	49.8
Nitrate (N)	mg/L	0.05	10.0	MAC	1.08
Nitrite (N)	mg/L	0.05	1.0	MAC	<0.05
Sulphate	mg/L	1	500	AO	64
Ammonia (N)-Total (NH3+NH4)	mg/L	0.05			<0.05
Dissolved Organic Carbon	mg/L	0.2	5	AO	1.5
Hardness (as CaCO3)	mg/L as CaCO3	0.02	100, 500	OG, D55	385
Calcium	mg/L	0.02			94.4
Iron	mg/L	0.005	0.3	AO	0.027
Magnesium	mg/L	0.02			36.2



Michelle Dubien
 Data Specialist

The analytical results reported herein refer to the samples as received and relate only to the items tested. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.

Parameter	Units	R.L.	Limits	DWG	Client I.D.
					A360959
					Sample I.D.
					24-032854-1
					Date Collected
					2024-Oct-21
Parameter	Units	R.L.	Limits	DWG	
Manganese	mg/L	0.001	0.05	AO	0.007
Potassium	mg/L	0.1			3.1
Sodium	mg/L	0.2	200, 20	AO, MAC	15.0
Anion Sum	meq/L	-			8.39
Cation Sum	meq/L	-			8.42
% Difference	%	-			0.215
TDS (Ion Sum Calc)	mg/L	1	500	AO	435
Conductivity Calc	µmho/cm	-			789

DWG - Drinking Water Guidelines

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

Summary of Exceedances		
Operational Guidelines		
A360959	Found Value	Limit
Hardness (as CaCO3)	385	100



Michelle Dubien
 Data Specialist

C.O.C.: G 130350

REPORT No: 24-033331 - Rev. 0

Report To:

Pinchin Ltd. - Kingston
 1456 Centennial Dr, Suite 2
 Kingston, ON K7P 0K4

CADUCEON Environmental Laboratories

285 Dalton Ave
 Kingston, ON K7K 6Z1

Attention: Phil Tibble

DATE RECEIVED: 2024-Oct-23
 DATE REPORTED: 2024-Oct-29
 SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: 283258001
 P.O. NUMBER:

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	1	OTTAWA	PCURIEL	2024-Oct-25	A-IC-01	SM 4110B
Colour (Liquid)	1	OTTAWA	STAILLON	2024-Oct-25	A-COL-01	SM 2120C
Cond/pH/Alk Auto (Liquid)	1	OTTAWA	SBOUDREAU	2024-Oct-25	COND-02/PH-02/A LK-02	SM 2510B/4500H/ 2320B
Coliforms - DC Media (Liquid)	1	KINGSTON	BBURTCH	2024-Oct-23	ECTC-001	MECP E3407
DOC/DIC (Liquid)	1	OTTAWA	SLOZO	2024-Oct-28	C-OC-01	EPA 415.2
Fecal Coliforms (Liquid)	1	KINGSTON	BBURTCH	2024-Oct-23	FC-001	SM 9222D
Ion Balance (Calc)	1	OTTAWA	ASCHNEIDER		CP-028	MECP E3196
ICP/OES (Liquid)	1	OTTAWA	APRUDYVUS	2024-Oct-25	D-ICP-01	SM 3120B
Ammonia (Liquid)	1	KINGSTON	JYEARWOOD	2024-Oct-24	NH3-001	SM 4500NH3
Turbidity (Liquid)	1	OTTAWA	STAILLON	2024-Oct-24	A-TURB-01	SM 2130B

R.L. = Reporting Limit

NC = Not Calculated

Test methods may be modified from specified reference method unless indicated by an *



Michelle Dubien
Data Specialist

CADUCEON Environmental Laboratories Certificate of Analysis

Final Report
REPORT No: 24-033331 - Rev. 0

Parameter	Units	R.L.	Client I.D.
			A360960
			Sample I.D.
			24-033331-1
			Date Collected
			2024-10-23
			-
Total Coliform (DC Media)	CFU/100mL	1	0
E coli (DC Media)	CFU/100mL	1	0
Background (DC Media)	CFU/100mL	1	0
Fecal Coliform	CFU/100mL	1	0
Alkalinity(CaCO3) to pH4.5	mg/L	5	277
TDS (Calc. from Cond.)	mg/L	3	385
Conductivity @25°C	uS/cm	1	737
pH @25°C	pH units	-	7.99
Colour	TCU	2	<2
Turbidity	NTU	0.1	1.2
Fluoride	mg/L	0.1	<0.1
Chloride	mg/L	0.5	39.3
Nitrate (N)	mg/L	0.05	<0.05
Nitrite (N)	mg/L	0.05	<0.05
Sulphate	mg/L	1	58
Ammonia (N)-Total (NH3+NH4)	mg/L	0.05	0.13
Dissolved Organic Carbon	mg/L	0.2	2.4
Hardness (as CaCO3)	mg/L	0.02	357
Calcium	mg/L	0.02	84.0
Iron	mg/L	0.005	0.100
Magnesium	mg/L	0.02	35.7



Michelle Dubien
Data Specialist

The analytical results reported herein refer to the samples as received and relate only to the items tested. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.

			Client I.D.	A360960
			Sample I.D.	24-033331-1
			Date Collected	2024-10-23
Parameter	Units	R.L.		-
Manganese	mg/L	0.001		0.008
Potassium	mg/L	0.1		3.9
Sodium	mg/L	0.2		11.3
Anion Sum	meq/L	-		7.83
Cation Sum	meq/L	-		7.74
% Difference	%	-		0.612
TDS (Ion Sum Calc)	mg/L	1		398
Conductivity Calc	µmho/cm	-		727



Michelle Dubien
Data Specialist

C.O.C.: G 130362

REPORT No: 24-033470 - Rev. 0

Report To:

Pinchin Ltd. - Kingston
 1456 Centennial Dr, Suite 2
 Kingston, ON K7P 0K4

CADUCEON Environmental Laboratories

285 Dalton Ave
 Kingston, ON K7K 6Z1

Attention: Phil Tibble

DATE RECEIVED: 2024-Oct-24
 DATE REPORTED: 2024-Nov-04
 SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: 283258001
 P.O. NUMBER:

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	1	OTTAWA	LMACGREGOR	2024-Oct-28	A-IC-01	SM 4110B
Colour (Liquid)	1	OTTAWA	STAILLON	2024-Oct-30	A-COL-01	SM 2120C
Cond/pH/Alk Auto (Liquid)	1	OTTAWA	SBOUDREAU	2024-Oct-28	COND-02/PH-02/A LK-02	SM 2510B/4500H/ 2320B
Coliforms - DC Media (Liquid)	1	KINGSTON	BBURTCH	2024-Oct-24	ECTC-001	MECP E3407
DOC/DIC (Liquid)	1	OTTAWA	MMACMILLAN	2024-Nov-01	C-OC-01	EPA 415.2
Fecal Coliforms (Liquid)	1	KINGSTON	BBURTCH	2024-Oct-24	FC-001	SM 9222D
Ion Balance (Calc)	1	OTTAWA	TPRICE		CP-028	MECP E3196
ICP/OES (Liquid)	1	OTTAWA	NHOGAN	2024-Oct-28	D-ICP-01	SM 3120B
Ammonia (Liquid)	1	KINGSTON	JYEARWOOD	2024-Nov-01	NH3-001	SM 4500NH3
Turbidity (Liquid)	1	OTTAWA	PLUSSIER	2024-Oct-28	A-TURB-01	SM 2130B

R.L. = Reporting Limit

NC = Not Calculated

Test methods may be modified from specified reference method unless indicated by an *



Michelle Dubien
Data Specialist

CADUCEON Environmental Laboratories Certificate of Analysis

Final Report
REPORT No: 24-033470 - Rev. 0

Parameter	Units	R.L.	Client I.D.
			A360957
			Sample I.D.
			24-033470-1
			Date Collected
			2024-10-24
			-
Total Coliform (DC Media)	CFU/100mL	1	0
E coli (DC Media)	CFU/100mL	1	0
Background (DC Media)	CFU/100mL	1	0
Fecal Coliform	CFU/100mL	1	0
Alkalinity(CaCO3) to pH4.5	mg/L	5	262
TDS (Calc. from Cond.)	mg/L	3	330
Conductivity @25°C	uS/cm	1	636
pH @25°C	pH units	-	8.08
Colour	TCU	2	<2
Turbidity	NTU	0.1	2.5
Fluoride	mg/L	0.1	<0.1
Chloride	mg/L	0.5	23.3
Nitrate (N)	mg/L	0.05	0.05
Nitrite (N)	mg/L	0.05	<0.05
Sulphate	mg/L	1	38
Ammonia (N)-Total (NH3+NH4)	mg/L	0.05	0.20
Dissolved Organic Carbon	mg/L	0.2	1.7
Hardness (as CaCO3)	mg/L	0.02	311
Calcium	mg/L	0.02	74.8
Iron	mg/L	0.005	0.214
Magnesium	mg/L	0.02	30.1



Michelle Dubien
Data Specialist

The analytical results reported herein refer to the samples as received and relate only to the items tested. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.

			Client I.D.	A360957
			Sample I.D.	24-033470-1
			Date Collected	2024-10-24
Parameter	Units	R.L.		-
Manganese	mg/L	0.001		0.009
Potassium	mg/L	0.1		4.2
Sodium	mg/L	0.2		8.0
Anion Sum	meq/L	-		6.68
Cation Sum	meq/L	-		6.67
% Difference	%	-		0.0348
TDS (Ion Sum Calc)	mg/L	1		336
Conductivity Calc	µmho/cm	-		620



Michelle Dubien
Data Specialist

C.O.C.: G 131064

REPORT No: 24-033583 - Rev. 0

Report To:

Pinchin Ltd. - Kingston
 1456 Centennial Dr, Suite 2
 Kingston, ON K7P 0K4

CADUCEON Environmental Laboratories

285 Dalton Ave
 Kingston, ON K7K 6Z1

Attention: Phil Tibble

DATE RECEIVED: 2024-Oct-25
 DATE REPORTED: 2024-Nov-01
 SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: 283258001
 P.O. NUMBER:

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	1	OTTAWA	PCURIEL	2024-Oct-28	A-IC-01	SM 4110B
Colour (Liquid)	1	OTTAWA	STAILLON	2024-Oct-31	A-COL-01	SM 2120C
Cond/pH/Alk Auto (Liquid)	1	OTTAWA	SBOUDREAU	2024-Oct-29	COND-02/PH-02/A LK-02	SM 2510B/4500H/ 2320B
Coliforms - DC Media (Liquid)	1	KINGSTON	BBURTCH	2024-Oct-25	ECTC-001	MECP E3407
DOC/DIC (Liquid)	1	OTTAWA	MMACMILLAN	2024-Oct-31	C-OC-01	EPA 415.2
Fecal Coliforms (Liquid)	1	KINGSTON	BBURTCH	2024-Oct-25	FC-001	SM 9222D
Ion Balance (Calc)	1	OTTAWA	ASCHNEIDER		CP-028	MECP E3196
ICP/OES (Liquid)	1	OTTAWA	APRUDYVUS	2024-Oct-31	D-ICP-01	SM 3120B
Ammonia (Liquid)	1	KINGSTON	KDIBBITS	2024-Oct-31	NH3-001	SM 4500NH3
Turbidity (Liquid)	1	OTTAWA	PLUSSIER	2024-Oct-29	A-TURB-01	SM 2130B

R.L. = Reporting Limit

NC = Not Calculated

Test methods may be modified from specified reference method unless indicated by an *



Michelle Dubien
Data Specialist

CADUCEON Environmental Laboratories Certificate of Analysis

Final Report
REPORT No: 24-033583 - Rev. 0

Parameter	Units	R.L.	Client I.D.
			A360958
			Sample I.D.
			24-033583-1
			Date Collected
			2024-10-25
			-
Total Coliform (DC Media)	CFU/100mL	1	0
E coli (DC Media)	CFU/100mL	1	0
Background (DC Media)	CFU/100mL	1	6
Fecal Coliform	CFU/100mL	1	0
Alkalinity(CaCO3) to pH4.5	mg/L	5	260
TDS (Calc. from Cond.)	mg/L	3	349
Conductivity @25°C	uS/cm	1	672
pH @25°C	pH units	-	8.17
Colour	TCU	2	3
Turbidity	NTU	0.1	2.0
Fluoride	mg/L	0.1	<0.1
Chloride	mg/L	0.5	19.9
Nitrate (N)	mg/L	0.05	<0.05
Nitrite (N)	mg/L	0.05	<0.05
Sulphate	mg/L	1	61
Ammonia (N)-Total (NH3+NH4)	mg/L	0.05	0.20
Dissolved Organic Carbon	mg/L	0.2	1.8
Hardness (as CaCO3)	mg/L	0.02	343
Calcium	mg/L	0.02	90.8
Iron	mg/L	0.005	0.131
Magnesium	mg/L	0.02	28.2



Michelle Dubien
Data Specialist

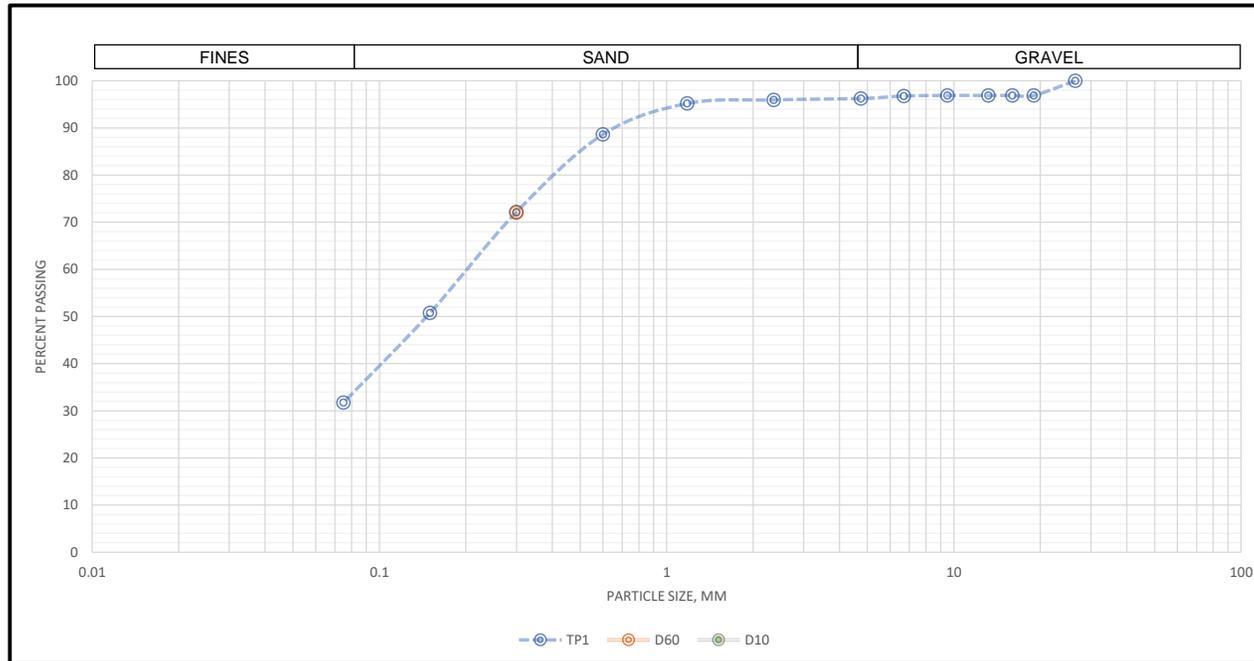
The analytical results reported herein refer to the samples as received and relate only to the items tested. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.

Parameter	Units	R.L.	Client I.D.
			A360958
			Sample I.D.
			24-033583-1
			Date Collected
			2024-10-25
Manganese	mg/L	0.001	0.144
Potassium	mg/L	0.1	8.0
Sodium	mg/L	0.2	39.8
Anion Sum	meq/L	-	7.02
Cation Sum	meq/L	-	8.80
% Difference	%	-	11.3
TDS (Ion Sum Calc)	mg/L	1	404
Conductivity Calc	µmho/cm	-	732



Michelle Dubien
Data Specialist

Sieve Analysis (LS-602)



Sieve Opening	% Passing
63.0 mm	100
53.0 mm	100
37.5 mm	100
26.5 mm	100
19.0 mm	97
16.0 mm	97
13.2 mm	97
9.5 mm	97
6.7 mm	97
4.75 mm	96
2.36 mm	96
1.18 mm	95
600 µm	89
300 µm	72
150 µm	51
75 µm	32

Silt and Clay (%)	Sand (%)	Gravel (%)
32	64	4
silty SAND, trace gravel		

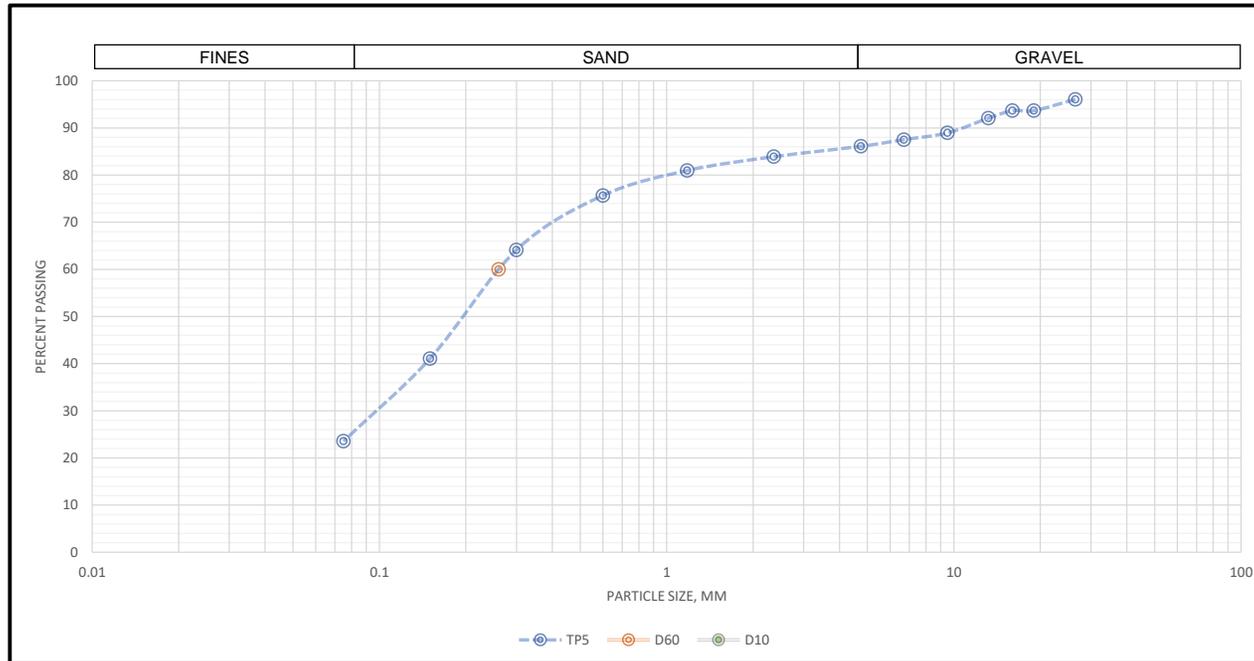
Lab No: SA24-097
 Client: Pinchin
 Project No: 1812
 Sample ID: TP1
 Location: -
 Coefficient of Uniformity, Cu: n/a
 Effective size, D10 (mm): n/a

Tested: TB
 Date: 2024-12-10
 Validated: *Matt Stans*
 Date: 12/12/2024

Notes: Estimated T-time: 8 - 20 mins/cm

T-time is estimated from grain size data only, in comparison to OBC 2012 SB-6, and based solely on the sample as received.

Sieve Analysis (LS-602)



Sieve Opening	% Passing
63.0 mm	100
53.0 mm	100
37.5 mm	100
26.5 mm	96
19.0 mm	94
16.0 mm	94
13.2 mm	92
9.5 mm	89
6.7 mm	88
4.75 mm	86
2.36 mm	84
1.18 mm	81
600 µm	76
300 µm	64
150 µm	41
75 µm	24

Silt and Clay (%)	Sand (%)	Gravel (%)
24	63	14
silty, clayey SAND, some gravel		

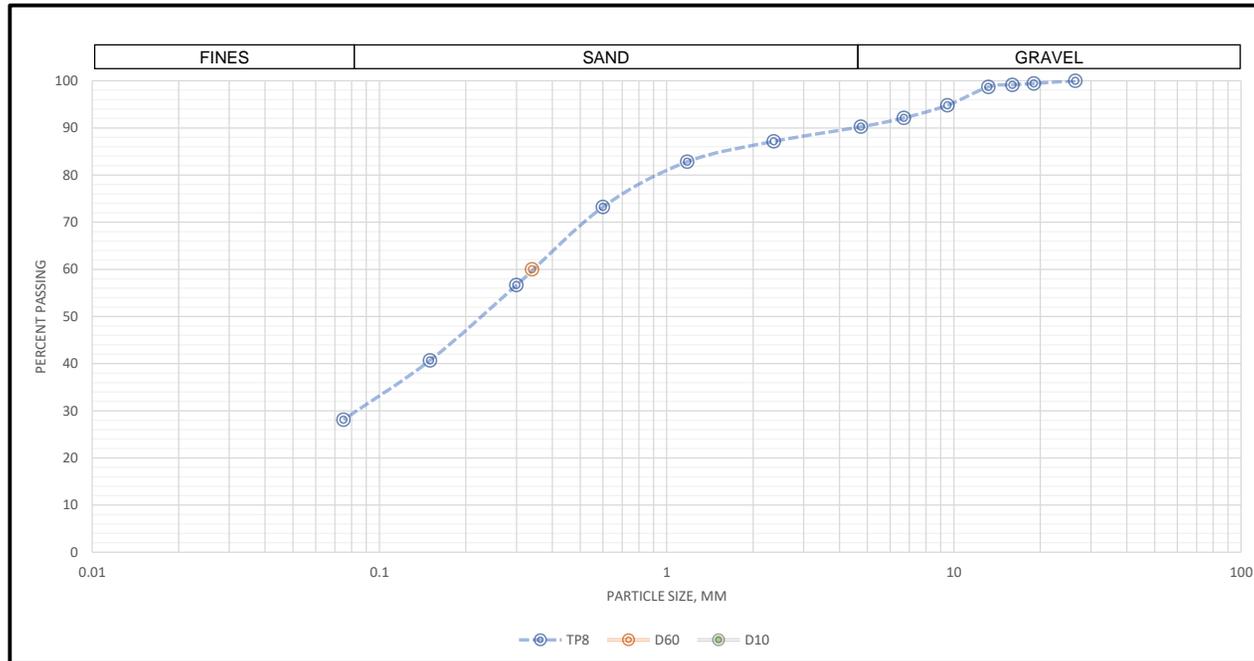
Lab No: SA24-097A
 Client: Pinchin
 Project No: 1812
 Sample ID: TP5
 Location: -
 Coefficient of Uniformity, Cu: n/a
 Effective size, D10 (mm): n/a

Tested: TB
 Date: 2024-12-10
 Validated: *Mark Starn*
 Date: 12/12/2024

Notes: Estimated T-time: 8 - 20 mins/cm

T-time is estimated from grain size data only, in comparison to OBC 2012 SB-6, and based solely on the sample as received.

Sieve Analysis (LS-602)



Sieve Opening	% Passing
63.0 mm	100
53.0 mm	100
37.5 mm	100
26.5 mm	100
19.0 mm	99
16.0 mm	99
13.2 mm	99
9.5 mm	95
6.7 mm	92
4.75 mm	90
2.36 mm	87
1.18 mm	83
600 µm	73
300 µm	57
150 µm	41
75 µm	28

Silt and Clay (%)	Sand (%)	Gravel (%)
28	62	10
silty, clayey SAND, some gravel		

Lab No: SA24-097C
 Client: Pinchin
 Project No: 1812
 Sample ID: TP8
 Location: -
 Coefficient of Uniformity, Cu: n/a
 Effective size, D10 (mm): n/a

Tested: TB
 Date: 2024-12-10
 Validated: *Matt Stams*
 Date: 12/12/2024

Notes: Estimated T-time: 8 - 20 mins/cm

T-time is estimated from grain size data only, in comparison to OBC 2012 SB-6, and based solely on the sample as received.



Log of Borehole: BH1

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE					SAMPLE										
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value □ 20 40 60 □	Shear Strength △ kPa △ 100 200	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
0		Ground Surface	0.00	No Monitoring Well Installed ↑ ↓											
		Organics ~ 50 mm	0.05												
		Glacial Till Silty sand, some gravel, some clay, brown, damp, compact				SS	1	20	20	□					
		End of Borehole	0.30												
		Borehole terminated at 0.30 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.													
1															

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH2

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE				SAMPLE												
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength Δ kPa Δ	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis
									20 _□	40	60 _□					
0		Ground Surface														
		Organics ~ 50 mm	0.00	↑ No Monitoring Well Installed ↓												
		Glacial Till Silty sand, some gravel, some clay, brown, damp, loose	0.05													
					SS	1	30	7	□			13.7				Hyd.
		End of Borehole	0.61													
		Borehole terminated at 0.61 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.														
1																

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH3

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE				SAMPLE													
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength △ kPa △	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
									20	40	60						
0		Ground Surface	0.00	↑ No Monitoring Well Installed ↓													
		Organics ~ 75 mm	0.00														
		Glacial Till Silty sand, some gravel, some clay, brown, moist, loose	0.08			SS	1	20	7	□							
		End of Borehole	0.46														
		Borehole terminated at 0.46 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.															
1																	

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH4

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE				SAMPLE													
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
									20 [□]	40	60 [□]	△ kPa △					
0		Ground Surface	0.00	No Monitoring Well Installed ↑ ↓													
		Organics ~ 75 mm	0.00														
		Glacial Till Silty sand, some gravel, some clay, brown, damp, compact	0.08		SS	1	30	22	□								
		End of Borehole	0.30														
		Borehole terminated at 0.30 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.															
1																	

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH5

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE				SAMPLE													
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength △ kPa △	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
									20 _□	40	60 _□						
0		Ground Surface	0.00	↑ No Monitoring Well Installed ↓													
		Organics ~ 50 mm	0.05														
		Glacial Till Silty sand, some gravel, some clay, brown, damp, compact				SS	1	50	26	□							
		End of Borehole	0.61														
		Borehole terminated at 0.61 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.															
1																	

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH6

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE				SAMPLE													
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength △ kPa △	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
									20 _□	40	60 _□						
0		Ground Surface		↑ No Monitoring Well Installed ↓													
		Organics ~ 75 mm	0.00														
		Glacial Till Gravelly, silty sand, trace clay, brown, damp, compact	0.08			SS	1	30	15	□			12.0				Hyd.
		End of Borehole	0.46														
		Borehole terminated at 0.46 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.															
1																	

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH7

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE				SAMPLE													
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength △ kPa △	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
									20 _□	40	60 _□						
0		Ground Surface		↑ No Monitoring Well Installed ↓													
		Organics ~ 75 mm	0.00														
		Glacial Till Gravelly, silty sand, trace clay, brown, damp, compact	0.08			SS	1	40	15	□							
		End of Borehole	0.46														
		Borehole terminated at 0.46 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.															
1																	

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH8

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE					SAMPLE												
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength Δ kPa Δ	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
									20 _□	40	60 _□						
0		Ground Surface	0.00	↑ No Monitoring Well Installed ↓													
		Organics ~ 150 mm	0.00														
		Glacial Till Silty sandy gravel, trace clay, brown, damp, very dense	0.15			SS	1	80	95								
		End of Borehole	0.61														
		Borehole terminated at 0.61 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.															
1																	

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH9

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE					SAMPLE												
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength Δ kPa Δ	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
									20	40	60						
0		Ground Surface	0.00	▶No MW Installed◀													
		Organics ~ 75 mm	0.00														
		Glacial Till Silty sandy gravel, trace clay, brown, damp, loose	0.08		SS	1	10	5					7.2				Hyd.
		End of Borehole	0.15														
		Borehole terminated at 0.15 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.															
1																	

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1



Log of Borehole: BH10

Project #: 283258.002

Logged By: MK

Project: Geotechnical Investigation

Client: 1503948 Ontario Inc.

Location: 9243 McArton Road, Almonte, ON

Drill Date: September 15, 2022

Project Manager: WT

SUBSURFACE PROFILE				SAMPLE													
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-Value	Standard Penetration N-Value			Shear Strength	Water Content (%)	Sample ID	Soil Vapour Concentration (ppm)	Laboratory Analysis	
									20	40	60	Δ kPa Δ					
0		Ground Surface	0.00	↑ No Monitoring Well Installed ↓													
		Organics ~ 150 mm	0.00														
		Glacial Till Silty sandy gravel, trace clay, brown, damp, dense	0.15		SS	1	60	31									
		End of Borehole	0.46														
		Borehole terminated at 0.46 mbgs due to auger refusal on probable bedrock. At drilling completion, groundwater was not encountered.															
1																	

Contractor: Canadian Environmental Drilling and Contractors Inc.

Grade Elevation: N/A

Drilling Method: Solid Stem Auger/Split Spoon

Top of Casing Elevation: N/A

Well Casing Size: N/A

Sheet: 1 of 1