



Hydrogeological Assessment Update

**Proposed Residential Development – Part
Lot 21 and 22, Concession 8 on Whitfield
Road in Scugog, Ontario**

Honey Heights Developments Ltd.

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1. Introduction

GHD Limited (GHD) was retained by Honey Heights Developments Ltd. (the Client) to conduct the following hydrogeological assessment of a proposed twenty-six (26) lot residential development to be located on Part Lot 21 and 22, Concession 8 on Whitfield Road in Scugog, Ontario (herein referred to as “the Site”). The location of the Site is provided on the **Site Location Plan, Figure 1**.

The Site encompasses an area of 20.4 hectares (i.e. 50.4 acres) that is to include the development of single-lot rural residential homes as well a detention pond, a maintenance road and drainage easement. The residential portion of the development will be about 17.6 hectares with future lot sizes anticipated to range from about 0.5 to 1.1 hectares. The Site and local area is privately serviced for well and septic. The draft plan of subdivision was completed by D.G.Biddle & Associates Limited and is dated May 1, 2016.

The purpose of the hydrogeological assessment was to obtain subsurface information regarding the soil and groundwater conditions across the Site. This hydrogeological report provides information regarding the groundwater depth, shallow soil conditions, aquifer performance testing for the use of groundwater in support of typical, single-family household usage, and a nitrate impact assessment based upon the provided concept plan.

The scope of work included a desktop review of available geological and groundwater mapping and a review of the Source Protection Information Atlas; a review of the Ministry of the Environment, Conservation and Parks (MECP) well records; the drilling of boreholes and excavation of test pits to investigate the subsurface conditions; installation of monitoring wells to facilitate water level measurements, a pumping test program of four (4) supply wells and calculations of predicted nitrate concentration based upon the concept plan. The test hole locations are shown on **Figure 2**. The work at this stage is investigative, this report does not include any applications for Permits to Take Water (PTTW), Environmental Activity and Sector Registry (EASR) permits for construction dewatering, sewer use by-law testing etc.

This report is organized into the following sections:

Section 1.0 – Introduction: Outlines the purpose, objectives and scope of work, and presents the report organization.

Section 2.0 – Background: Provides a description of the existing Site conditions, background information and surrounding land uses. The regional environmental setting including the physiography, topography, surface water features and the surficial geology is presented. This section of the report also reviews information from the Source Protection Information Atlas. The source protection information for the Site is based upon information current as of December 12, 2024. Highly vulnerable aquifers, significant groundwater recharge areas and wellhead protection areas are protected under the Clean Water Act (2006).

Section 3.0 – Methodology: Describes the field activities and methodologies used to assess the hydrogeological conditions and to evaluate potential impacts associated with the undertaking.

Section 4.0 – Field Investigation Results: Provides a detailed description of the Site geology, hydrogeology and hydraulic properties of the underlying stratigraphy.

Section 5.0 – Discussion and Recommendations: Discusses the hydrostatic units and aquifer performance testing results. This section also discusses the projected nitrate from the development based upon the provided concept plan.

Section 6.0 – Conclusions and Closure: Provides the overall conclusions and closure of the report based upon the assessment findings of the document. This section is followed by a Statement of Limitations.

2. Background

2.1 Site Description

The Site is located on Part Lots 21 and 22, Concession 8 on Whitfield Road in Scugog, Ontario (the Site) and encompasses an area of area of 20.4 hectares (i.e. 50.4 acres). At the time of GHD's field investigation, the Site consisted of agricultural pastureland, a storage area, and naturalized / treed areas located along the borders of the Site. The lands surrounding the Site consist of agricultural land and residential lots. Surrounding land is privately serviced for water and septic.

2.2 Regional Setting

The Site sits upon an elevated area at about 265 metres above sea level (masl). There is a drumlin feature on the eastern portion of the Site. The local topography on the Site varies by area. In the eastern portion of the Site, the lands slope toward the east and Lake Scugog. In the central area, due to a drumlin in the eastern area, the lands slope toward the west. In the western area, the topography slopes to the east toward a low-lying area. Topographic relief is on the order of about 5 to 7 metres at the Site. Regional topography is illustrated on **Figure 3**.

The Site is situated within the physiographic region known as the Schomberg Clay Plains (Chapman and Putnam, 1984) and the surrounding terrain is dominated by till plains to the north and clay plains further south. The Site itself is located within fine and coarse textured glaciolacustrine deposits and sandy silt to silty sand textured till with localized drumlin formations. The sand plains would be typically comprised of sandy soils with varying amounts of silt. The local physiography areas are illustrated on **Figure 4** with the drumlin feature on the east portion of the Site illustrated.

Surficial geology mapping is provided on **Figure 5** that indicates the Site is predominantly within a stone-poor, sandy silt to silty sand-textured till with glaciolacustrine deposits on Paleozoic terrain. The southernmost area of the Site is mapped as a fine-textured glaciolacustrine deposit that is silt and clay, minor sand and gravel and massive to well laminated. The Quaternary geology is presented on **Figure 6** and indicates the Site is underlain by glaciolacustrine deposits of sand, gravelly sand and gravel nearshore and beach deposits.

The bedrock of the area consists of limestone of Middle Ordovician age. Bedrock mapping is provided as **Figure 7**. Based upon MECP water well records, bedrock was encountered at depths ranging from 65 metres below ground surface (mbgs) to 81 mbgs in the Site area. **Figure 8** illustrates the locations of the MECP well records that are within 500 m of the Site and were reviewed by GHD. Bedrock was not encountered in any of the boreholes or test pits excavated at the Site.

Based on the information reviewed from the "Source Water Protection Atlas", the Site is within the Kawartha-Haliburton Source Protection Area. The Site is within a highly vulnerable aquifer (HVA) and a portion of the west end of the Site is within a significant groundwater recharge area (SGRA). The HVA areas and SGRA are illustrated on **Figure 9**. A SGRA is defined as an area where water seeps into an aquifer from rain and melting snow, supplying water to the underlying aquifer. An HVA aquifer occurs where the subsurface material offers limited protection from contamination resulting from surface activities. The Site is not within a Wellhead Protection Area.

The Site is not within a wellhead protection area Q1 or Q2. WHPA Q1/Q2 means that activities that take water without returning it to the same source may be a threat (Q1) and activities that reduce recharge may be a threat (Q2). This Site is not a WHPA Q1 or Q2 area. Activities that take water would include construction dewatering or other groundwater pumping. Pumping or dewatering activities may require appropriate permitting from the MECP but are not a concern from a source water protection perspective.

2.2.1 Existing Local Water Supplies

The Site and areas surrounding the Site utilize privately serviced water wells. The locations of water well records within 500 m of the Site are provided in **Appendix A**. Based on the review of the well records, there appear to be domestic water supply wells located within 500 m of the Site. The well record information indicates there are 99 well records within 500 m of the Site consisting of:

- Nine (9) dug / bored well records;
- Sixty-two (62) drilled overburden well records;
- Thirteen (13) bedrock well records;
- Two (2) monitoring well records;
- Two (2) well alteration records;
- Nine (9) abandonment records;
- One (1) unfinished well record; and
- One record with no details on well type.

A statistical summary of the well records is provided in **Table 1**. The data suggests that groundwater was encountered within dug / bored wells at an average depth of 7.7 m with an average yield of 13.0 L/min; within drilled overburden wells at an average depth of 36.9 m with an average yield of 30.0 L/min; and, within drilled bedrock wells at an average depth of 76.8 m with an average yield of 38.7 L/min.

Table 1 *MECP Well Record Data*

Well Use	Well Type/Unit	No. Wells	Well Depth Min – Max (Avg) (mbgs)	Water Encountered Depth Min – Max (Avg) (mbgs)	Static WL Min – Max (Avg) (mbgs)	Yield Min – Max (Avg) (L/min)
Water Supply	Overburden – Dug/Bored	9 (9.1%)	3.0 – 12.8 (8.4)	0.6 – 12.8 (7.7)	1.5 – 35.0 (7.6)	7.6 – 22.7 (13.0)
Water Supply	Overburden – Drilled	62 (62.6%)	4.0 – 125.3 (37.5)	4.0 – 125.3 (36.9)	0.6 – 35.0 (9.0)	1.2 – 75.6 (30.0)
Water Supply	Bedrock	13 (13.1%)	63.1 – 86.9 (76.8)	63.1 – 86.9 (76.8)	0.9 – 16.8 (11.3)	15.1 – 151.2 (38.7)
Total		84				
Monitoring Wells	Drilled	2 (2.0%)	12.8 – 13.4 (13.1)	NA	NA	NA
Well Alterations	Dug/Bored	2 (2.0%)	NA	NA	NA	NA
Abandonments	Unknown	9 (9.1%)	21.3 – 77.1 (37.6)	NA	NA	NA
Unfinished / No information	Unknown	2 (2.0%)	NA	NA	NA	NA

2.3 Previous Investigations

A Hydrogeological Investigation for Honey Heights Residential Subdivision – Phase II was completed by Groundwater Consulting Services and was reviewed by GHD. The report was completed for a 35-lot residential subdivision to the south of the Site. The report indicated that Gibson & Associates Limited also completed hydrogeological investigations for combined Phase I and Phase II lands in November 1989. Work completed for the hydrogeological investigations included excavation of test pits, grain-size analyses, review of MECP water well records within 1.5 km of this property, a door-to-door survey of wells within 1 km of the property, installation of seven (7) test wells, completion of five (5) pumping tests, and water quality analysis of test wells.

The report concluded that there are three (3) aquifer systems in the area:

- A shallow aquifer at approximately 10 m depth;
- An intermediate aquifer at approximately 17 m depth; and,
- A deep aquifer at approximately 75 m depth.

Approximately 75% of wells in the area were reported bored into the shallow and intermediate aquifers with well depths reported between 3 and 20 meters. Test wells were tested at rates between 18.2 and 52.6 L/min and the report concluded that adequate yields are available. Interference testing was completed during the pumping tests and indicated very minor impacts of seven (7) centimetres or less of interference.

Groundwater flow direction in the three (3) aquifer systems was reported to be toward Lake Scugog (i.e. to the east and south). Water quality indicated slightly elevated nitrate concentrations; however, no concentrations were reported in excess of 10 mg/L and averaged 0.6 mg/L. The nitrate concentrations were indicated to be related to farming practices and would decrease over time with farming practices no longer being completed. Water quality did not indicate any significant issues that could not be removed with conventional treatment systems (i.e., methane, DOC, manganese, colour and turbidity).

The report indicated that surficial soils were generally sandy, and had an annual recharge rate of approximately 200 millimetres per year.

3. Methodology

To achieve the purpose and objectives of this hydrogeological investigation, the following activities and tasks were undertaken:

- Preparation of a Site-specific Health and Safety Plan (HASP) and completed underground utility locate clearances including public and private locates;
- Conducted a walkover inspection of the Site;
- Advanced boreholes and test pits for obtaining hydrogeological parameters and installation of monitoring wells within select boreholes to facilitate future groundwater monitoring;
- Obtained groundwater levels from the drilled monitoring wells to evaluate depth to groundwater and flow direction;
- Surveyed ground elevations of the monitoring wells, boreholes, and test pit locations;
- Completed physical laboratory testing in accordance with the latest editions of the ASTM Standards;
- Completed pumping tests of four (4) drilled wells including monitoring to evaluate for interference; and,
- Prepared this hydrogeological assessment report providing factual data, analysis and recommendations.

3.1 Health and Safety

For projects that incorporate field activities, GHD conducts health and safety planning. For this project, a site-specific HASP was prepared and implemented during the field activities. The HASP presents the visually observed Site conditions to identify potential physical hazards to field personnel. Required personal protective equipment was also listed in the HASP. It is mandatory for GHD personnel involved in the field program, to read and have a copy of the HASP available at the Site.

3.2 Utility Clearance

GHD completed a pre-drilling Site visit to review the Site conditions and access restrictions. Based on the limits of approach, the boreholes and test pits were positioned appropriately to avoid potential obstructions. The test holes were placed in the field based on our understanding of the proposed development concept.

Prior to initiating the subsurface investigation activities, the applicable utility companies (gas, hydro, network cables, water, wastewater, etc.) were contacted, to demarcate the location of their respective underground utilities to ensure that service lines would not be damaged during the investigative works.

GHD also retained a specialist private services locator (Utility Marx) to locate any underground private utilities that could potentially be present at the Site within the areas of intrusive work. The proposed boreholes and test pits were positioned at appropriate locations to avoid existing service lines.

3.3 Test Pit and Borehole Advancement

The scope of work consisted of advancing nine (9) test pits on March 6, 2025, and five (5) boreholes on March 10, 2025. Four (4) boreholes (MW01-25, MW02-25, MW03-25, and MW04-25) were equipped as monitoring wells to facilitate groundwater level measurements and testing. The test pits and borehole locations are shown on **Figure 2**. Following their installation, the monitoring wells were documented with the MECP and became the property of the Site's owner. Test pit and borehole information is provided in **Table 2** with gradation testing results presented in **Table 3**. The completed monitoring well details are documented in **Table 4**. The logs of the test pits and boreholes / monitoring well details are presented in **Appendix B**.

The nine (9) test pits (TP01-25 through TP09-25) were excavated to depths ranging from about 3.1 to 3.7 mbgs by an excavator retained by the Client. The drilling work was carried out by a track-mounted drilling rig, supplied and operated by ACE Environmental Drilling (ACE), MECP-licensed well drillers, under the full-time supervision of a GHD technical representative. The boreholes were advanced to termination depths ranging between 3.1 to 6.7 mbgs. The monitoring wells were installed by ACE consistent with the requirements of Ontario Regulation (O. Reg.) 903 – Wells (R.R.O 1990).

The boreholes were advanced using continuous solid stem augers and soil samples were collected using a 50 millimetre (mm) outside diameter split spoon sampler in general accordance with the specifications of the Standard Penetration Test Method (ASTM D1586). The relative density or consistency of the subsurface soil layers were measured using the Standard Penetration Test (SPT) method, by counting the number of blows ('N') required to drive a conventional split barrel soil sampler 300 mm in depth. Groundwater level observations and measurements were made in the boreholes as drilling proceeded and upon completion of drilling.

Monitoring wells were constructed with 50 mm (2-inch) Schedule 40 PVC screen and casing. The well screens installed in MW01-25 and MW04-25 were 1.5 m (5 feet) in length and 3.05 m (10 feet) in MW02-25 and MW03-25. The well screens are pre-slotted (No. 10 slot). Silica sand pack was placed at the bottom of the monitoring well screen and typically extended 0.3 m above the screen. The remaining annular space was sealed with bentonite, and the wells were completed with protective monument style casings. The installation details for each monitoring well are provided in the respective borehole logs and summarized in **Table 4**. GHD notes that installed monitoring wells will need to be abandoned in accordance with O. Reg. 903 once no longer required.

The monitoring wells and test pit locations were surveyed with an EOS Arrow Gold Plus that streams to the Real Time Kinetic (RTK) Network connected to the NAD 83 datum. The ground elevations are provided for engineering analysis purposes related to this hydrogeological assessment only and should be confirmed by a licensed surveyor.

3.4 Physical Laboratory Testing

The physical laboratory testing was completed in accordance with the latest editions of the ASTM standards. A GHD representative logged the soil samples encountered in the test holes and examined the samples as they were obtained. The recovered samples were transferred to the GHD laboratory, where they were reviewed by GHD. The detailed results of the examination are recorded on the test hole logs.

Soil samples retrieved during the test pit and drilling programs were submitted for physical testing. Moisture content testing was completed upon all of the recovered soil samples. Grain size analyses, consisting of hydrometer testing, were carried out on six (6) selected samples collected from the test pits. The results of the moisture content and grain size distribution analyses results are recorded at their corresponding depths on the individual logs in **Appendix B**. The laboratory grain size distribution analyses are summarized in **Table 3** and the data is provided in **Appendix C**.

3.5 Groundwater Level Monitoring

Manually measured groundwater levels were collected using a Solinst water level meter. Groundwater levels were collected from the monitoring wells on March 17th and April 2nd, 2025. The water levels are summarized in **Table 5**.

3.6 Aquifer Performance Testing

GHD performed 6-hour pumping tests on two (2) test wells on the Site and two (2) test wells located off of the Site. The testing was completed in November 2021, March 2023, April 2023, and March 2025. The wells have been identified as TW-1 through TW-4 and are shown on **Figure 2**. The two (2) Site wells have well tags A310857 (TW-1) and A310856 (TW-2). The two (2) off-Site wells have well tags A231205 (TW-3) and A124742 (TW-4). All wells are drilled wells with the casing above grade. Well depths ranged from 11 m (36 feet) in TW-4 to 80.2 m (263 feet) in TW-2. The well records indicate that the test wells TW-1, TW-2 and TW-3 target the deeper overburden or the upper bedrock except for TW-4 which is situated within an overburden sand seam. The well records are provided in **Appendix A**.

The aquifer performance testing consisted of a constant rate pumping test performed for six (6) hours at each of the test supply wells in order to assess the underlying aquifer. The tests were performed by installing pumps within the Site wells and using the existing pumping equipment on the off-Site wells. Graphical representation of the aquifer performance testing data collected from the pumping tests is presented in **Appendix D**. Water samples were collected from each well during the testing and at the end of the pumping tests. The certificates of analysis are provided in **Appendix E**.

4. Field Investigation Results

The following sections provide a detailed description of the field activities completed including geology and hydrogeology of the Site based on the results of the investigation completed and on the available background information. Detailed stratigraphy is shown on the test hole logs.

It should be noted that the subsurface conditions are only confirmed at the test hole locations and may vary between and beyond the test hole locations. The boundaries between the various strata, as shown on the test hole logs are based on non-continuous sampling and drilling resistance noted and observed at the time of drilling. These boundaries represent an inferred transition between the various strata, rather than precise planes of geological change.

4.1 Summary of Test Hole Information

UTM coordinates and ground surface elevations for each borehole, monitoring well and test pit location were obtained by GHD during the subsurface exploration program in the approximate locations illustrated on **Figure 2**. The location of each test hole is referenced to UTM Zone 17, and ground elevations are based upon measurements obtained using EOS Arrow Gold Plus connected to the RTK network. The following table presents a summary of investigated depths, surface elevations, and UTM coordinates for the test hole locations:

Table 2 *Test Hole Information*

Test Hole ID	Location – UTM Coordinates System		Ground Surface Elevation (m)	Test Hole Termination Depth (mbgs)	Test Hole Termination Elevation (m)
	Northing	Easting			
MW01-25	4889608	664964	272.2	3.1	269.1
MW02-25	4889512	664658	266.4	5.2	261.2
MW03-25	4889408	664401	265.2	6.7	258.5
MW04-25	4889443	664388	265.1	5.2	259.9
BH05-25	4889427	664316	266.3	3.7	262.6
TP01-25	4889433	664267	266.1	3.4	262.7
TP02-25	4899329	664302	266.9	3.4	263.5
TP03-25	4889468	664412	264.4	3.7	260.7
TP04-25	4889544	664558	263.5	3.4	260.1
TP05-25	4889447	664585	265.2	3.4	261.8
TP06-25	4889576	664646	265.6	3.1	262.5
TP07-25	4889427	664699	267.1	3.4	263.7
TP08-25	4889547	664836	270.2	3.4	266.8
TP09-25	4889691	664944	270.2	3.1	267.1

It should be noted that the provided coordinates and elevations are approximate and should not be used for construction purposes. The ground elevations are provided for engineering analysis purposes only and should be confirmed by a licensed surveyor.

4.2 Local Geology and Subsurface Conditions

Based upon information obtained from this investigation, the following surficial materials and geologic deposits underlie the Site. Bedrock was not encountered within the investigation conducted by GHD. The test holes generally encountered a surficial layer of topsoil, over fill or native silty sand/ sandy silt / sand / silt / silty clay over stiff to very stiff / compact to dense glacial till. In the area of borehole MW03-25, a very soft layer of cohesive soil was encountered from 5.3 to 6.7 mbgs.

- **Surficial Soil** – Topsoil / fill
- **Native Deposit** – Sandy Silt / Silty Sand / Sand / Silt / Silty Gravel / Sand and Gravel
- **Native Deposit** – Silty Clay / Sandy Clayey Silt
- **Native Deposit** – Non-Cohesive Sandy Silt / Silty Sand Till
- **Native Deposit** – Cohesive Silty Clay Till

An overview of the soils is provided below. In-depth discussion of the soils is provided within GHD's Geotechnical Investigation report.

4.2.1 Topsoil

A layer of topsoil was encountered at the surface in all test holes. This topsoil layer ranged in thickness from 300 mm to 460 mm with an average of 400 mm based upon the fourteen (14) test holes. The topsoil was observed to be in a damp, loose state, with a silty, medium to high organic content.

4.2.2 Fill

A layer of fill material was encountered below the topsoil in boreholes MW04-25 and BH05-25 and extended to depths ranging between 0.7 to 2.3 mbgs. The fill material consisted of a sandy silt material containing varying amounts of gravel and clay and was indicated to be brown in colour.

The fill material was in a very loose to loose in-situ state of relative density. Samples of the fill material were visually described to be in a generally moist to wet condition. Measured moisture content was 13 to 24 percent by weight.

4.2.3 Sandy Silt / Silty Sand

Native sandy silt / silty sand was encountered within the majority of the test holes. The sandy silt / silty sand was initially encountered at depths ranging from approximately 0.3 to 3.1 mbgs and extended to depths ranging from approximately 0.6 to 3.7 mbgs. The sandy silt / silty sand layers was visually described as reddish-brown to brown to grey in colour.

The sandy silt / silty sand material was in a very loose to compact in-situ state of relative density. Samples of this material were visually described to be in a generally moist to wet condition. Measured moisture content was 9 to 27 percent by weight.

4.2.4 Sand

A layer of sand was encountered below the topsoil in test pit TP03-25 and beneath the fill material in borehole BH05-25. The sand material extended to depths ranging between 1.2 to 2.3 mbgs. The sand layer was described as reddish-brown to brown in colour.

The sand was in a compact in-situ state of relative density. Samples of the sand material were visually described to be in a generally moist to wet condition. Measured moisture content was 12 to 21 percent by weight.

4.2.5 Silt

A layer of silt was encountered in test pit TP09-25 initially at a depth of about 0.8 mbgs and extended to a depth of 3.1 mbgs. The silt layer was visually described as light brown in colour. Samples of the silt material were visually described to be in a generally moist to wet condition. Measured moisture content was 16 to 17 percent by weight.

4.2.6 Silty Clay / Clayey Silt

Layers of native silty clay / clayey silt were encountered within boreholes MW03-25 and test pits TP01-25, TP03-25, TP04-25, and TP05-25. The native silty clay / clayey silt was initially encountered at depths ranging between approximately 0.5 to 2.3 mbgs and extended to depths ranging from about 1.7 to 5.3 mbgs. The silty clay / clayey silt was brown to grey in colour.

The silty clay / clayey silt material was of very soft to very stiff consistency. Samples of this material were visually described to be in a generally moist to wet condition. Measured moisture content was 10 to 23 percent by weight.

4.2.7 Silty Gravel / Sand and Gravel

A layer of silty gravel / sand and gravel was encountered in test pits TP05-25 and TP07-25 initially at depths ranging from approximately 1.5 to 3.1 mbgs and extended to a depth of approximately 3.4 mbgs. The silty gravel / sand and gravel was visually described as light brown to brown in colour and generally moist to wet. Measured moisture content was 7 to 10 percent by weight.

4.2.8 Non-Cohesive Till

A layer of non-cohesive sandy silt / silty sand till was encountered below the native soils in test holes MW01-25, MW02-25, BH05-25, TP01-25, TP03-25, TP04-25, and TP05-25. The non-cohesive till deposit extended to depths of 3.1 to 5.2 mbgs. The non-cohesive till was indicated to be light brown to brown to grey in colour in a generally moist to wet condition.

The non-cohesive till material was in a compact to very dense state of relative density. The relative density of the till material generally increased with depth. Measured moisture content was 5 to 19 percent by weight.

4.2.9 Cohesive Till

A layer of cohesive silty clay till was encountered in boreholes MW03-25 and MW04-25 initially at depths ranging from approximately 4.9 to 5.3 mbgs and extended to the termination depth of the boreholes (5.2 to 6.7 mbgs). The cohesive till was indicated to be grey in colour in a generally moist to wet condition.

The cohesive till material was of a stiff to very stiff in-situ consistency. Measured moisture content was 19 to 22 percent by weight.

4.3 Physical Laboratory Testing Results

A total of six (6) samples collected from the soils encountered at the Site were selected for testing of grain size distribution analyses. The laboratory test results are summarized in the following table and detailed test results are presented in **Appendix C**.

Table 3 Physical Laboratory Testing Results

Test Hole ID	Sample Depth (mbgs)	Grain Size (%)				Soil Description
		Gravel	Sand	Fines		
				Silt	Clay-sized ⁽¹⁾	
MW01-25 / SS3	1.5 – 2.1	4	46	35	15	Silty Sand Till (SM)
MW02-25/SS6	4.6 – 5.2	29	59	8	14	Gravelly Sandy Till (SM)
MW03-25 / SS4	2.3 – 2.9	2	32	36	30	Sandy Clayey Silt (ML)
MW03-25 / SS8	5.3 – 5.9	1	10	36	53	Silty Clay Till (CL)
TP04-25 / GS1	0.3 – 0.6	0	51	36	13	Silty Sand (SM)
MW04-25 / SS2	0.8 – 1.4	19	21	38	22	Clayey Sandy Silt (SM)
⁽¹⁾ Soil particles <2 µm						

4.4 Groundwater Observations and Measurements

Groundwater observations and measurements were collected from the open test holes during and upon completion of drilling or excavating. Some groundwater seepage was observed during excavation activities in seven (7) of nine (9) test pits ranging in depths between approximately 0.9 to 3.1 mbgs. Upon completion, minimal groundwater accumulation was in each of the test pits except for TP08-25 and TP09-25 which were dry upon completion.

Monitoring wells were installed within the four (4) boreholes. A summary of the monitoring well details are provided in **Table 4**. The accumulation depth refers to the approximate measured depth to groundwater within the open borehole immediately upon completion of drilling. In general, soils become grey in colour at the depths where permanent groundwater may be encountered. The volume of groundwater from within the underlying deposits is generally expected to be minor; however, pockets of more permeable material may be encountered.

Table 4 Monitoring Well Information

Location	Ground Elevation (m)*	Well Pipe Stick up (m)	Screened Interval		Sandpack Interval (effective screen)		Screened Material	Groundwater Accumulation**	
			Depth (mbgs)	Elevation (m)	Depth (mbgs)	Elevation (m)		Depth (mbgs)	Elevation (m)
MW01-25	272.2	0.92	1.5 – 3.1	270.7 – 269.2	1.2 – 3.1	271.0 – 269.2	Till – Silt and Sand	Not Observed	
MW02-25	266.4	0.91	1.5 – 4.6	264.8 – 261.8	1.2 – 4.6	265.2 – 261.8	Till –Sandy Silt	3.7**	262.7
MW03-25	265.2	0.98	3.1 – 6.1	262.2 – 259.1	2.4 – 6.1	262.8 – 259.1	Till – Silty Clay & Sandy Clayey Silt	0.9**	264.3
MW04-25	265.1	0.99	3.1 – 4.6	262.1 – 260.5	2.8 – 4.6	262.3 – 260.5	Silty Sand	0.9**	264.2

Notes:

m = metres; mbgs = metres below ground surface

(*) Ground elevations were measured using an EOS Arrow Gold Plus GPS system and, are for the purposes of evaluating groundwater elevation and flow direction and should not be relied upon as a legal survey or topographic elevation survey. The ground elevations are not for construction purposes.

(**) Groundwater accumulation noted in open borehole upon completion of drilling.

GHD collected groundwater levels from the monitoring wells on March 17, 2025, April 2, 2025, December 11, 2025, January 27, 2026 and July 9, 2026. The water level data is summarized in **Table 5**.

Table 5 Groundwater Levels and Elevations

Location	Ground Surface Elevation (mASL)	March 17, 2025		April 2, 2025		December 11, 2025		January 27, 2026		July 9, 2026	
		WL (mbgs)	GWE (mASL)	WL (mbgs)	GWE (mASL)	WL (mbgs)	GWE (mASL)	WL (mbgs)	GWE (mASL)	WL (mbgs)	GWE (mASL)
MW01-25	272.2	Monitoring Well measured to be dry (269.2 m)						2.85	269.4	--	--
MW02-25	266.4	1.78	264.6	1.55	264.8	1.44	264.9	2.42	264.0	2.94	263.5
MW03-25	265.2	-0.13	265.3	0.18	265.0	0.32	264.8	0.38	264.8	0.98	264.2
MW04-25	265.1	0.13	264.9	0.40	264.7	1.02	264.1	0.81	264.3	1.21	263.9

Notes:

mbgs = metres below ground surface; mASL = metres above sea level; negative water level indicates water level is above ground surface; WL = Water Level; GWE = Groundwater Elevation.

Ground surface elevations are for the purposes of evaluating groundwater elevation and flow direction and should not be relied upon as a legal survey or topographic elevation survey. The ground elevations are not for construction purposes.

Monitoring well MW01-25 was reported as dry during the March, April, and December 2025 monitoring events. The groundwater levels ranged from -0.13 mbgs (i.e. potentiometric surface above grade) to about 2.94 mbgs. Shallow groundwater levels are expected to fluctuate seasonally, rising and declining in response to weather conditions, including extended wet and dry periods.

Based upon the groundwater level data collected, shallow groundwater elevations are depicted on the **Groundwater Elevations, Figure 9**. Groundwater flow through the till deposit would be expected to be slow; however, overall groundwater flow at the Site is expected to be driven by Lake Scugog located 200 m east of the Site with localized flow patterns toward the low-lying area in the western portion of the Site.

A shallow groundwater monitoring program is currently being completed using onsite monitoring wells to obtain seasonal water levels for a minimum of one year. Data loggers have been installed in MW02-25 and MW03-25.

4.5 Groundwater Quality

Groundwater samples were collected from the monitoring wells on December 11, 2025, and July 9, 2026, to assess background groundwater quality conditions at the Site. Analytical results are summarized in **Table 6**.

Table 6 Summary of Groundwater Analytical Results

Parameter	December 11, 2025			July 9, 2026			ODWS	
	MW02-25	MW03-25	MW04-25	MW02-25	MW03-25	MW04-25	MAC	AO/OG
Ammonia+Ammonium (NH ₃ +NH ₄)	<0.1	<0.1	0.2	< 0.1	< 0.1	0.4	-	-
Nitrite (NO ₂)	<0.03	<0.03	<0.03	< 0.03	< 0.03	< 0.03	1	-
Nitrate (NO ₃)	12.7	0.20	0.90	15.2	1.76	0.15	10	-
Total Dissolved Solids (TDS)	471	340	791	486	380	523	-	500
Total Kjeldahl Nitrogen (TKN)	<0.5	0.6	0.8	< 0.5	< 0.5	0.6	-	-
Total Nitrogen (TN)	13.1	0.8	1.6	14.6	1.8	0.8	-	-
Unionized NH ₃	<0.001	<0.001	0.002	<0.003	<0.005	0.010	-	-

Note: All units in mg/L

During both sampling events, nitrate concentrations exceeding the Ontario Drinking Water Standard of 10 mg/L were reported within MW02-25. Nitrate concentrations in MW02-25 increased from 12.7 mg/L in December 2025 to 15.2 mg/L in July 2026. In contrast, nitrate concentrations within MW03-25 and MW04-25 were significantly lower, ranging from 0.15 mg/L to 1.76 mg/L during the monitoring period. The elevated nitrate concentration was observed only within MW02-25, which is located adjacent to and downgradient of active agricultural lands.

The spatial distribution of nitrate concentrations indicates that the elevated concentration observed in MW02-25 is localized and is likely influenced by existing agricultural land use practices in the surrounding area. The substantially lower concentrations reported from MW03-25 and MW04-25 suggest that elevated nitrate concentrations are not representative of groundwater quality across the Site as a whole.

Nitrate concentrations within groundwater may fluctuate seasonally in response to agricultural practices, fertilizer application, precipitation patterns, groundwater recharge conditions, and dilution associated with seasonal groundwater level variations. The observed increase in nitrate concentration at MW02-25 between the December 2025 and July 2026 sampling events is considered consistent with the influence of surrounding agricultural activities.

4.6 Aquifer Performance Assessment

The following sections discuss the test wells, pumping test results and coefficients, well interference and water quality. In accordance with MECP Protocol D-5-5, four (4) wells were required for testing based upon the Site area of 20.4 hectares.

4.6.1 Test Well Information

The following sections discuss the test wells utilized for the aquifer performance testing. Two (2) drilled water wells were constructed on the Site (i.e. TW-1 and TW-3) and two (2) off-Site wells (i.e. TW-2 and TW-4) were used for the purpose of aquifer performance testing (i.e. pumping tests). The new drilled test wells on the Site were constructed by Wilson Water Wells Ltd. (MECP License No. 5459) and completed in March and April 2023. Each of the test wells are located on the **Test Hole Plan, Figure 2**. The corresponding MECP well tags are A310857 (TW-1), A231205 (TW-2), A310856 (TW-3), and A124742 (TW-4). As indicated previously, the MECP well records of the test wells including the off-Site wells are provided in **Appendix A**. Borehole logs prepared during construction of the test wells were not available to GHD; however, the available well records provide information regarding well construction, lithology, water-bearing zones, static water levels, and recommended pumping rates that were used to support this assessment. The following is a summary of the test well details:

Test Well TW-1 (Well Tag # A310857)

Test well TW-1 is located on the Site and has the following characteristics:

- Drilled to total depth of 72.2 m encountering overburden materials consisting predominantly of clay with varying amounts of silt, sand, gravel and cobbles. The well was terminated within a water-bearing gravel layer at 71 – 72.2 m. Bedrock was not encountered.
- Water was encountered at 72.2 m along with methane gas. The water was untested at that time. The static water level was reported at 15.6 m.
- Recommended for pumping at a rate of approximately 75.7 L/min (20 US gallons per minute or USgpm).
- Construction of the well was completed on March 15, 2023. It was constructed with 0.15 m outer diameter (OD) steel casing to 71.3 m, and 0.15 OD steel 16-slot well screen from 71.3 to 72.2 m. The annular space was sealed with bentonite slurry from grade to 6.1 m.

Test Well TW-2 (Well Tag # A231205)

Test well TW-2 is located off the Site at 20 Indian Way and has the following characteristics:

- Drilled to total depth of 80.8 m encountering overburden materials consisting predominantly of clay with varying amounts of silt, sand, gravel and cobbles. Limestone bedrock was encountered at 79.9 m. The well was terminated within water-bearing limestone bedrock.
- Water was encountered at 80.8 m along with methane gas. The water was untested at that time. The static water level was reported at 20.6 m.
- Recommended for pumping at a rate of approximately 56.8 L/min (15 USgpm).
- Construction of the well was completed on November 1, 2021. It was constructed with 0.15 m OD steel casing to 79.9 m, and open to 80.8 m within the bedrock. The annular space was sealed with bentonite slurry from grade to 6.1 m.

Test Well TW-3 (Well Tag # A310856)

Test well TW-3 is located on the Site and has the following characteristics:

- Drilled to total depth of 85.0 m encountering overburden materials consisting predominantly of clay and gravel with varying amounts of silt, sand and cobbles. Limestone bedrock was encountered at 81.7 m. The well was terminated within water-bearing limestone bedrock.

- Water was encountered at 85.0 m along with methane gas. The water was untested at that time. The static water level was reported at 19.2 m.
- Recommended for pumping at a rate of approximately 37.9 L/min (10 USgpm).
- Construction of the well was completed on April 4, 2023. It was constructed with 0.15 m OD steel casing to 81.7 m, and open to 85.0 m within the bedrock. The annular space was sealed with bentonite slurry from grade to 6.1 m.

Test Well TW-4 (Well Tag # A124742)

Test well TW-4 is located off of the Site and has the following characteristics:

- Drilled to total depth of 15.2 m encountering overburden materials consisting of sand, sand and gravel, clay, silt and sand at depth. Bedrock was not encountered. The well was terminated within a water-bearing sand unit.
- Water was encountered at 15.2 m and indicated as fresh. The static water level was reported at 1.7 m.
- Recommended for pumping at a rate of approximately 56.8 L/min (15 USgpm).
- Construction of the well was completed on April 4, 2013. It was constructed with 0.15 m OD steel casing to 12.8 m with a 8-slot stainless steel well screen to 15.2 m. The annular space was sealed with bentonite slurry from grade to 6.1 m.

4.6.2 Discussion of Pumping Tests

Pumping tests were conducted on each of the test wells between October 26, 2022 and March 17, 2025 to assess aquifer conditions and confirm the availability of a suitable groundwater resource for the proposed development of twenty-six (26) residential lots. Controlled constant rate pumping tests were conducted for a minimum of six (6) hours at each of the test wells. Recovery measurements were collected after the pumping was completed.

Submersible pumps were installed in each well to conduct the testing. Water levels in the test wells were monitored throughout the aquifer performance testing manually and through the use of data loggers to evaluate drawdown, recovery and the potential of mutual interference with adjacent wells. The discharge water was directed away from each pumped well a distance of about 30 m downgradient and was allowed to flow overland away from the test well and other observation wells. This practice safeguards against artificial recharge of the well from occurring during the pumping test.

Chlorine levels were confirmed in the field prior to bacteria sampling conducted at each of the test wells. The residual chlorine was non-detect prior to obtaining the bacteriological samples. Field measurements of methane, pH, temperature, free chlorine, turbidity, and conductivity were completed with a turbidity meter, Hach Pocket Pro+ Multi 2 and chlorine meter. Calibration of the instruments was completed prior to each pumping test.

The results of the constant rate pumping tests including field testing data are graphically presented in **Appendix D**. Pumping test information is summarized for each test well in **Table 6**. Water samples were collected and submitted to an accredited analytical laboratory for testing. The data is provided in **Appendix E**.

Test Well TW-1 (A310857)

The pumping test conducted at TW-1 was completed on May 15, 2023. The pumping test curves are graphically provided on **Figures D-1, D-2, D-3 and D-4** within **Appendix D**. The curves show the water level lowering rapidly during the initial commencement of the test then declining at a very slow and steady rate until the end of pumping when the water level initially begins recovering rapidly as well. At 105 minutes, 157 minutes and 230 minutes into the test, the pump experienced brief shutdowns due to methane gas lock. These shutdowns are visible as three (3) distinct recovery spikes. Once the pump resumed, drawdown continued at a steady rate. The well was pumped at a constant rate of about 38 L/min (10 USgpm). After seven (7) hours of pumping, the water level was about 5.5 metres below top of pipe (mbtp) with about 22.0 m of available drawdown above the pump remaining (53.5 m above the bottom of the well). A total volume of about 15,875 L was pumped during the testing. Typical domestic use is on the order of 1,000 L per day or less.

Recovery measurements were collected for up to ten (10) hours after pumping ceased during which time the well recovered 96%. The estimated transmissivity for TW-1 was 5.3 m²/day (357.6 gpd/ft) based on the drawdown and 9.6 m²/day (643.0 gpd/ft) based on the recovery period and represents a moderate transmissivity. The specific capacity for this well is calculated to be 8.2 L/min/m based upon the pumping test completed.

Based upon the pumping test completed, it is our opinion that the plotted data indicates this well can safely provide long-term quantities of groundwater at a pumping rate of about 38 L/min.

Test Well TW-2 (A124742)

The pumping test conducted at TW-2 was completed on October 26, 2023. The pumping test curves are graphically provided on **Figures D-5, D-6, D-7 and D-8** within **Appendix D**. The curves show the water level lowering moderately quickly during the initial commencement of the test then declining at a steady rate until the end of pumping when the water level initially begins recovering rapidly. The well was pumped at a constant rate of about 38 L/min (10 USgpm). After six (6) hours of pumping, the water level was about 41.1 mbtp with about 32.1 m of available drawdown above the pump remaining (39.7 m above the bottom of the well). A total volume of about 13,605 L was pumped during the testing. Typical domestic use is on the order of 1,000 L per day or less.

Recovery measurements were obtained after 360 minutes of pumping. The water level in the well recovered 95% after 1 hour and 43 minutes after pumping was stopped. The estimated transmissivity for TW-2 was 1.0 m²/day (70.4 gpd/ft) based on the drawdown and 0.6 m²/day (40.2 gpd/ft) based on the recovery period and represents low to moderate transmissivity. The specific capacity for this well is calculated to be 1.9 L/min/m based upon the pumping test completed.

Based upon the pumping test completed, it is our opinion that the plotted data indicates this well can safely provide long-term quantities of groundwater at a pumping rate of about 38 L/min.

Test Well TW-3 (A310856)

The pumping test conducted at TW-3 was completed on May 8, 2023. The pumping test curves are graphically provided on **Figures D-9, D-10, D-11 and D-12** within **Appendix D**. The curves show the water level lowering rapidly during the initial commencement of the test then declining at a very slow rate until the end of pumping when the water level initially begins recovering rapidly also. The well was pumped at a constant rate of about 38 L/min (10 USgpm). After six hours of pumping, the water level was about 17.4 mbtp with about 32.6 m of available drawdown above the pump remaining (54.4 m above the bottom of the well). A total volume of about 13,605 L was pumped during the testing. Typical domestic use is on the order of 1,000 L per day or less.

Recovery measurements were obtained after 360 minutes of pumping. The water level in the well recovered about 76% within 1 hour and 100% after 21 hours. The estimated transmissivity for TW-3 was 16.8 m²/day (1126.4 gpd/ft) based on the drawdown and 16.6 m²/day (11115.4 gpd/ft) based on the recovery period and represents a moderate to high transmissivity. The specific capacity for this well is calculated to be 17.9 L/min/m based upon the pumping test completed.

Based upon the pumping test completed, it is our opinion that the plotted data indicates this well can safely provide long-term quantities of groundwater at a pumping rate of about 38 L/min.

Test Well TW-4 (A124742)

The pumping test conducted at TW-4 was completed on March 17, 2025. The pumping test curves are graphically provided on **Figures D-13, D-14, D-15 and D-16** within **Appendix D**. The curves show the water level lowering rapidly during the initial commencement of the test then declining at a relatively slow rate until the end of pumping when the water level initially begins recovering rapidly. This pumping test was conducted using the existing water system. The test was completed through the existing water pressure tank, resulting in fluctuating water levels due to pressure changes; however, the flow remained relatively constant at about 58 L/min (15.3 USgpm) throughout the testing. Additional water usage was noted by GHD during testing and during the recovery period and are denoted on the curves.

After six hours of pumping, the water level was about 10 mbtp with about 0.9 m of available drawdown above the pump remaining (1.5 m above the bottom of the well). A total volume of about 20,820 L was pumped during the testing. The estimated transmissivity for TW-4 was 14.4 m²/day (965.6 gpd/ft) based on the drawdown and 4.2 m²/day (279.8 gpd/ft) based on the recovery period and represents a low to moderate transmissivity. The specific capacity for this well is calculated to be 7.3 L/min/m based upon the pumping test completed.

Based upon the pumping test completed, it is our opinion that the plotted data indicates this well can provide quantities of groundwater at a pumping rate of about 58 L/min; however, for a well like TW-4, it would be recommended that a flow restrictor be installed at about 38 L/min (10 USgpm) to safeguard against over pumping of the well since the water level was approaching the pump and the drawdown represented about 90% of the available drawdown.

4.6.3 Summary of Aquifer Performance

Table 6 summarizes the data and coefficients obtained from the pumping tests. The drawdown data from the pumped test wells was observed to be relatively low to moderate within TW-1 through TW-3. The drawdowns ranged from 2.1 m at TW-3 to 19.9 m at TW-2. At TW-4, the drawdown was about 90% of the available drawdown. The maximum drawdown percentages of the available drawdown at TW-1, TW-2 and TW-3 were 17%, 38% and 6%, respectively.

Table 7 Aquifer Performance Testing Summary

Well No.	Yield		Test Type	Time	Maximum Drawdown		Available Drawdown*		Specific Capacity		Estimated Transmissivity	
	gpm	L/min			minutes	feet	metres	feet	metres	gpm/ft	L/min/m	gpd/ft
TW-1 A310857	0	0	Static	0	--	--	87.3	26.6	--	--	--	--
	10	37.8	Const.	420	15.0	4.6	72.3	22.0	0.66	8.2	357.6	5.3
	0	0	Recvy	1440	75% after 1 hour. 96% after 10 hours						643.7	9.6
TW-2 A231205	0	0	Static	0	--	--	170.2	51.9	--	--	--	--
	10	37.8	Const.	360	64.9	19.8	105.3	32.1	0.11	1.9	70.4	1.0
	0	0	Recvy	177	95% recovery in 1.7 hours						40.2	0.6
TW-3 A310856	0	0	Static	0	--	--	113.9	34.7	--	--	--	--
	10	37.8	Const.	360	6.9	2.1	107.0	32.6	1.44	17.9	1609.3	24.0
	0	0	Recvy	1440	76% after 1 hour. 100% after 21 hours						1593.4	23.7
TW-4 A124742	0	0	Static	0	--	--	28.7	8.8	--	--	--	--
	15.3	58.0	Const.	360	25.7	7.9	3.0	0.9	0.59	7.3	965.6	14.4
	0	0	Recvy	155	100% after 8.6 hours						279.8	4.2
Notes: *Available drawdown above the pump.												

The pumping test results indicate that the tested aquifers are capable of supporting typical daily domestic usage. Transmissivity values obtained from the pumping tests ranged from approximately 0.6 to 24.0 m²/day, while specific capacities ranged from approximately 1.9 to 17.9 L/min/m.

4.6.4 Well Interference

During the pumping tests at TW-1 to TW-4, the other drilled test wells were monitored. None of the monitored test wells indicate any drawdown while the aquifer performance testing was being conducted.

4.6.5 Test Well Water Quality

Groundwater samples were collected from each test well during the pumping tests for the purpose of water quality analyses. The wells were sampled after a minimum period of one (1) hour into the constant rate test and at the end of the test. The water samples were delivered to SGS Environmental Laboratories, an accredited laboratory, for chemical analyses. Certificates of chemical analyses are presented in **Appendix E** (Note: analytical data for TW-4 A124742 was labelled in the field with a sample ID of A366696). The water quality data are summarized and compared with the Ontario Drinking Water Standards (ODWS) in **Table 7**:

Table 8 Test Well Water Quality Summary

Parameter	TW-1 (A310857)		TW-2 (A231205)		TW-3 (A310856)		TW-4 (A124742)		ODWS	
	2 Hours	EOT	1 Hour	EOT	2 Hours	6 Hours	1 Hour	End	MAC	AO/OG
	May 15, 2023		October 26, 2023		May 8, 2023		March 17, 2025			
Alkalinity (as CaCO ₃)	524	521	361	363	360	355	416	418	-	30 to 500
pH	8.23	8.09	8.10	8.19	8.02	7.91	8.11	8.07	-	6.5 to 8.5
Conductivity (µs/cm)	1160	1160	1080	1100	1010	1020	809	812	-	-
Colour (TCU)	19	18	13	7	11	10	5	4	-	5
Turbidity (NTU)	91.4	67.6	13	12	82.6	36.3	1.2	1.2	-	5
Fluoride	<0.1	<0.1	0.40	0.43	0.4	0.4	< 0.06	< 0.06	1.5	-
Chloride	93	92.1	180	180	131	132	10	11		250
Nitrate	<0.05	<0.05	<0.006	<0.006	<0.05	<0.05	1.23	1.33	10	-
Nitrite	<0.05	<0.05	<0.003	<0.003	<0.05	<0.05	<0.03	<0.03	1.0	-
Sulphate	<1	<1	0.04	0.08	<1	<1	46	46	-	500
Total Kjeldahl Nitrogen	5.4	5.7	2.43	2.32	3.1	3.4	< 0.05	0.14	-	-
Ammonia total (NH ₃ +NH ₄)	5.27	5.3	2.34	2.10	2.83	2.87	< 0.04	< 0.04	-	-
Organic Nitrogen	0.2	0.4	0.09	0.22	0.2	0.5	< 0.05	0.11	-	0.15
Dissolved Organic Carbon	7.4	6.2	6	6	3.8	3.3	2	3	-	-
Sulphide	<0.2	<0.2	-	-	<0.2	0.02			-	-
Phenolics	0.004	<0.001	-	-	<0.001	<0.001			-	-
Hardness (as CaCO ₃)	371	354	305	302	277	276	469	472	-	80 to 100
Calcium	83	76.8	58.9	57.7	59.6	59.4	153	155	-	-
Copper	<0.002	<0.002	0.0006	<0.0002	<0.002	<0.002	0.004	0.002	-	-
Iron	6.96	5.25	4.42	1.21	2.95	2.72	0.144	0.052	-	0.3
Magnesium	39.9	39.3	38.5	38.5	31.1	31	21.2	20.8	-	-
Manganese	0.157	0.1	0.0290	0.0173	0.083	0.069	0.0136	0.0133	-	0.05
Potassium	2.8	2.7	4.02	4.00	2.9	2.9	1.68	1.55	-	-
Silica	17	17	-	-	20	20			-	-
Sodium	110	110	126	127	107	107	10.8	10.9	-	(20**) 200
Zinc	0.005	<0.005	0.344	0.134	0.478	0.206	0.027	0.008	-	-
Methane (L/m ³)	43	-	-	-	-	54	0.06	0.09	-	3
Total Coliform (cfu/100ml)	-	0	-	0	-	0	-	0	0	-

Parameter	TW-1 (A310857)		TW-2 (A231205)		TW-3 (A310856)		TW-4 (A124742)		ODWS	
	2 Hours	EOT	1 Hour	EOT	2 Hours	6 Hours	1 Hour	End	MAC	AO/OG
	May 15, 2023		October 26, 2023		May 8, 2023		March 17, 2025			
E. Coli (cfu/100ml)	-	0	-	0	-	0	-	0	≤5	-
Fecal Coliform (cfu/100ml)	-	0	-	0	-	0	-	0	0	-
Notes: MAC = maximum acceptable concentration (health related); AO / OG = aesthetic objective / operational guideline (not health related); EOT indicates End of Test BOLD and <i>Italicized</i> concentration exceeds its respective ODWS. *The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L, so that this information may be passed on to local physicians										

In general, the majority of the parameters are within the ODWS. There were no health-related exceedances of the water tested. The results indicate the following exceedances of an aesthetic objective / operational guideline:

- Hardness in each of the test wells;
- Colour, turbidity, organic nitrogen and iron in TW-1, TW-2 and TW-3;
- Manganese and methane in TW-1 and TW-3;
- Alkalinity in TW-1;
- Although not exceeding its aesthetic objective, sodium was above 20 mg/L in TW-1, TW-2 and TW-3. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L;
- No health-related maximum allowable concentrations were exceeded.

Elevated hardness and iron are common traits of groundwater supplies in Southern Ontario and can be treated using commercially available equipment such as a water softener. The elevated colour and turbidity (in the laboratory results) can be attributed to the elevated iron. The iron precipitates out of solution over time, resulting in elevated concentrations in the laboratory samples.

Elevated turbidity measured at the well head may also be due to methane, which will also require treatment at TW-1 and TW-3 (and likely future wells tapping into this aquifer). The aesthetic objective for methane in drinking water is 3 litres per cubic metre (L/m³). Methane occurs naturally in groundwater and can act as a stimulant for organic fouling conditions in a distribution system. Methane at levels up to the 3 L/m³, can be controlled by chlorination, given a clean distribution system. Methane under pressure will come out of solution if the pressure is reduced, resulting in a cloudy appearance in freshly drawn water. During pumping, our well technician noted small bubbles in the discharge water suggesting the presence of methane and confirmed with the testing results. If methane is allowed to accumulate in confined areas, such as well pits or parts of distribution systems and plumbing, the potential for explosion exists. Systems can be designed to off-gas any potential methane accumulation

Nitrogen related compounds were low or at trace concentrations. The bacteriological parameters of total coliform, fecal coliform and E. Coli were all reported to be zero (0) colony forming units.

4.7 Water Supply

Where a planned residential development is to establish a private water supply, the MECP D-5-5 (Technical Guideline for Private Wells: Water Supply Assessment, 1996) is the provincial technical guideline that a proponent is generally required to adhere to. Per the D-5-5 guideline, the capability of the aquifer to supply a sufficient quantity of water must be demonstrated. Minimum well yield requirements are defined in the guideline with a per person requirement of 450 L per day. Ideally, the wells in the development should be capable of supplying water a peak demand rate of 3.75 L/min for each person for a period of two (2) hours with a rate of not less than 13.7 L/min.

For a three-bedroom (i.e. 4 persons), single detached home, a development of 26 dwellings would ideally supply a yield equivalent to a total flow of 46,800 L/day. This figure equates to a continuous flow of about 32.5 L/min over a 24-hour period. A typical household will use on the order of 1000 L/day (26,000 L/day for the 26 lots) or about 17.4 L/min.

Based upon the pumping tests, the test wells provided a combined yield of 171.4 L/min indicating that the aquifers tapped below the Site can produce enough groundwater to support the proposed development and not affect other local residents.

4.7.1 Production Well Requirements

Based on the results of this investigation, it is recommended that the proposed residential development be serviced by properly constructed drilled wells. Based on the pumping test results, the preferred groundwater source for future residential water supply wells is the deeper overburden aquifer with yields on the order of about 38 L/min (10 USgpm) anticipated. The pumping tests completed within this aquifer demonstrated adequate sustained yields and no observable interference between tested wells. Final well depths and construction details should be determined by a licensed well contractor based on site-specific conditions encountered during drilling. To reduce potential overpumping, flow restrictors may be considered for future production wells depending upon the subsurface conditions and the depths of the future wells.

Large diameter (300 mm or greater) wells are not considered suitable as a source of water supply. Water wells installed should be in accordance with Regulation 903 of the Ontario Water Resources Act and the following design specifics:

1. Each well must be developed by conventional techniques to obtain a minimum of 70% efficiency. It is recommended that a statement be provided that indicates the well is essentially sand-free (i.e. less than 5 mg/L sand). In addition, the statement should also include that the total drawdown in the well, comprising the pumping level plus the mutual interference from the other wells, is within a reasonable tolerance of the available drawdown.
2. A water sample must be collected from each new well and analyzed for general water quality parameters, at a minimum, test parameters to meet the ODWS:
3. It is recommended that each properly constructed well be pump tested by qualified hydrogeologic personnel prior to issuance of a building permit. The well should be pump tested to determine a safe long-term yield and short-term capacity to ensure uninterrupted water supply for the development and to ensure that adjacent properties will not be impacted. A report should be prepared by a Professional Engineer or Professional Geoscientist verifying individual pump testing data.

The use of properly constructed drilled wells that are adequately sealed and certified by qualified hydrogeological personnel should be sufficient to provide ample quantities of potable water while preserving the long-term water quality of the existing aquifer complexes. Based on the aforementioned water quality data, some aesthetic related exceedances were reported for the drilled test wells. Aesthetic objectives are not health related. In order to improve hardness and iron or other aesthetic parameters or safeguard against bacteriological concerns, the development may choose to install ultraviolet disinfection (UV), a water softener or other filters (at the discretion of the property owner).

Some of the wells were reported with the presence of methane. For the wells with methane it is recommended that water be passed through a vented, storage tank engineered to gas off the methane. Typically this includes an exterior storage tank with a vent stack tall enough to allow mixing with the air to avoid potential combustion situations. The well head should be outfitted with a vermin proof, vented well cap to minimize potential methane build up. From the storage tank, the water will then be pumped into the house.

The use of groundwater heat pumps that extract water from the aquifer is not recommended. Geothermal drilling is unregulated and there are no mandatory requirements to seal boreholes that are drilled through or into aquifers. Therefore, unsealed or improperly sealed boreholes into the aquifer could put the water supply at risk.

4.7.2 Target Aquifer and Construction Considerations

Based on the pumping test results, the preferred groundwater source for future residential supply wells is the deeper overburden aquifer. Pumping tests completed within this aquifer demonstrated adequate sustained yields and no observed interference between tested wells. The deeper overburden aquifer is also considered preferable as it is separated from surface influences by a substantial thickness of lower permeability overburden materials.

Prior to construction of individual water supply wells, available hydrogeological information, including nearby well records, test well construction information, and pumping test results, should be provided to the licensed well contractor to assist in targeting the preferred water-bearing zone. Final well depths, screen intervals, and construction details should be determined based on site-specific conditions encountered during drilling and in accordance with Ontario Regulation 903.

Where the preferred deeper overburden aquifer cannot be adequately developed at a specific lot, an alternative water-bearing zone may be considered, provided sufficient well yield, water quality, and regulatory requirements can be demonstrated.

4.7.3 Mitigation Measures

Based on the pumping test and groundwater quality results, mitigation measures may be required for individual private water supplies constructed as part of the proposed development. The following measures are recommended:

- Future wells should be pump tested to confirm sustainable yield and determine whether flow restriction devices are required to prevent over-pumping. Flow restrictors are specifically recommended for wells with limited available drawdown or where the pumping water level approaches the pump intake during testing.
- Future homeowners should be advised that aesthetic and operational water quality parameters may require treatment depending on the specific water quality characteristics of individual wells.
- Based on the water quality data collected from the test wells, some aesthetic or operational guideline exceedances were reported including hardness, iron, colour, turbidity, manganese, methane, alkalinity, organic nitrogen and sodium above 20 mg/L in some wells. These exceedances are not health-related maximum acceptable concentration exceedances; however, treatment may be required or desired to improve aesthetic water quality and address operational considerations. Water treatment systems, where required, should be selected, installed, operated and maintained by the property owner. Treatment systems may include, but are not limited to, water softeners, filtration systems, ultraviolet disinfection systems, iron removal systems and other treatment technologies as appropriate.
- Where methane is encountered at concentrations requiring mitigation, groundwater should be passed through a vented storage tank or equivalent engineered system designed to safely dissipate methane. The well head should also be equipped with a vermin-proof, vented well cap to minimize the potential for methane accumulation.
- Prospective purchasers should be provided with a warning that the development is serviced by private wells and that naturally occurring groundwater quality parameters may require ongoing monitoring, treatment, and maintenance at the homeowner's expense.
- Methane has been identified within some test wells completed in the deeper aquifer and mitigation measures may be required where future wells encounter similar groundwater conditions. Methane testing should be included in the individual lot water quality testing at the building permit stage.
- A clause is recommended within future purchase and sale agreements advising prospective purchasers of the potential need for groundwater treatment depending on the water quality testing for the individual lot.
- Where sodium concentrations exceed 20 mg/L, the local Medical Officer of Health should be notified in accordance with Ontario Drinking Water Standards guidance.

4.8 Septic Waste Disposal

4.8.1 General

An assessment of the suitability of the Site for septic systems was completed. The Site is not considered to be hydrogeologically sensitive (Procedure D-5-4, MOE, 1996). The MOE dilution model was used to assess the suitability of the Site and evaluate if the projected post-development nitrate concentration meets the drinking water standard of 10 mg/L for nitrate.

The overburden materials were investigated during the advancement of nine (9) test pits and five (5) boreholes. The test holes generally encountered a surficial layer of topsoil, over fill or native silty sand / sandy silt / sand / silt / silty clay over stiff to very stiff / compact to dense glacial till. Based on our field observations and infiltration testing conducted of the shallow soils at TP05-25 and TP08-25, a percolation rate (T-time) of 8 to 20 min / cm for the shallow soils is estimated. The permeability of these soils is indicated to be of medium to low permeability. Based upon field observations, the deeper silty clay / clayey silt and tills are estimated to have a T-time of over 50 min / cm depending upon the clay content. The permeability of these soils is expected to be of unacceptable permeability.

Percolation rates presented within this assessment represent estimates based on the observed subsurface conditions and field investigations completed at the Site. Final septic system design, including site-specific percolation testing and sizing requirements, should be completed at the time of detailed design in accordance with Ontario Building Code requirements and requirements outlined in Region of Durham document Drilled Wells and Lot Sizing Policies as Applied to Consents (Severances) and Draft Plans of Subdivision.

Based on our review none of the lots have constraints that would include:

- Soil with a percolation time greater than 50 minutes per cm, or less than 1 minute per cm.
- Lands that are subject to flooding in the proposed sewage system areas.
- A high-water table in the proposed sewage system areas or where the hydraulic loading of the sewage system may cause a saturated soil condition within 0.9 m of the bottom of the leaching bed.
- The topography of the lot or other deficiencies that may not be suitable for the installation of private sewage systems. (i.e. an area that has an average slope that exceeds one unit vertically to four units horizontally (> 25%).

At the time of lot development, and for building permit application, the following should be developed:

- A site plan indicating the proposed location of all structures, drilled wells and sub-surface sewage disposal system envelopes including a separate replacement area for the sewage systems.
- Results of a soil sampling program comprised of a sufficient number of two (2) metre deep test holes. Representative soils samples should be analysed for:
 - Grain size distribution.
 - Permeability coefficient including an estimated percolation time in min / cm.
 - Soil classification.
- An existing and final grading plan indicating final lot drainage patterns.

Based upon our observations of the subsurface soils, the septic systems will be partially or fully raised beds constructed with imported materials; however, should be designed on a lot-by-lot basis depending upon the subsurface soils encountered and below the tile beds. Shallow groundwater seepage was observed within seven (7) of the nine (9) the test pits at depths of 1.2 to 3 mbgs and is likely seasonally controlled and not representative of a stabilized shallow groundwater table. Bedrock was not encountered within any of the test pits or boreholes.

Based upon the information assessed, it is our professional opinion that the Site will be suitable for the construction of septic waste disposal systems using conventional beds and likely will be fully raised bed systems. A detailed review of the expected waste disposal impacts and recommendations are presented in the following sections.

4.8.2 Developmental Impact

For the purposes of calculating the potential impact of the planned residential development, 1,000 L/day/household is considered to be an acceptable septic effluent loading rate. Therefore, a proposed development of 26 lots is expected to generate about 26,000 L/day (26 m³/day) of septic effluent. While most constituents in septic effluent are usually removed within a short distance of movement within soil, mobile constituents such as chlorides and nitrates will require sustained dilution to meet the drinking water standards of 10 mg/L for nitrate.

The MECP normally considers sewage from a Class 4 waste disposal system will contain 40 mg/L of nitrate. For the purpose of assessing the impact of projected nitrate loading, the dilution requirement of 4:1 was utilized in the impact computations for a conventional septic system.

A summary of the applicable parameters that were considered in the waste disposal evaluation and the computation of the projected nitrate concentration are provided in **Appendix F**. The calculations used a recharge rate of 170 mm/year based on the post-development water balance calculations and incorporating infiltration-focused mitigation measures. The recharge rate assumes an intermediate downspout infiltration efficiency of 37.5%, which is considered reasonable given the sandy surficial soils and relatively large lot sizes proposed for the development. The average analytical concentration of nitrate from the monitoring well data collected to date is 0.75 mg/L (refer to **Appendix E** for the certificate of analysis). The nitrate concentration from MW02-25 (12.7-15.2mg/L) was not included in the averaging as it is in a low-lying area of the Site that is expected to act as a collection area for historical agricultural practices on the site. Nitrate concentrations at this location are expected to decline after agricultural practices cease and development occurs. Nitrate concentrations are not additive (i.e. existing nitrate concentrations and the expected future nitrate from septic effluent are not additive); however, for conservative purposes the background nitrate was considered to be additive. Using dilution only, the nitrate concentration generated from sewage at the Site is calculated to be 9.34 mg/L.

It is expected that the actual nitrate concentration will be lower than projected based upon using the additive nitrate concentration from the monitoring wells, and if nitrate attenuation and other naturally occurring nitrate reduction are factored. Our evaluation assumes that the septic systems are constructed properly. Wells should also be properly located in relation to the septic systems to minimize cross-contamination.

4.8.3 Waste Disposal Requirements

Based on the results of this assessment, it is our professional opinion that the Site is suitable for a private septic waste disposal system using conventional septic systems. Fill will be required, and drainage patterns and storm drainage will be re-directed and controlled as part of the grading plan. Based upon the lot sizes, there is sufficient space to locate the homes and septic systems. As indicated, this development will be serviced by privately serviced potable water wells, and as such set back distances from water wells will be required.

The proposed development is intended to utilize individual Class 4 sewage disposal systems in accordance with the Ontario Building Code. The preliminary assessment completed for this development indicates that the Site is generally suitable for the installation of Class 4 sewage disposal systems. Final septic system design and sizing should be completed on a lot-specific basis during detailed design and permitting. Should site-specific investigations identify areas of elevated groundwater levels, reduced separation distances, topographic constraints, or other site limitations, engineered mitigation measures may be required. Such measures may include, but are not limited to, raised treatment beds, imported septic sand, revised grading, localized fill placement, advanced treatment (class IV) or other measures acceptable to the approval authority.

It is recommended that the conventional septic systems use fully raised absorption trench leaching beds depending upon the conditions at each lot and septic location. The waste disposal systems should meet Ontario Regulation 350/06 made under the Building Code Act, 1992 and incorporate the following design features:

1. Organics should be stripped from the area of the leaching beds and downgradient mantle.
2. The exposed subgrade below the tile beds should be trimmed and scarified and provided with a gentle slope of 0.5% in the direction of the mantle.
3. The tile beds should be constructed as fully raised leaching type beds (unless subsurface conditions can be shown to support in-ground or partially raised beds) to the full height of at least 1 m above existing grade. The raised beds should consist of clean, granular fill capable of providing an in-place percolation rate (T-time) of 4 to 8 min/cm.
4. The mantle should be constructed along the downgradient margin of the raised beds. Each mantle should extend along the full width of the bed and for a minimum of 15 m downgradient from the bed. The mantle should consist of similar granular fill raised to a minimum of 250 mm above the surrounding grade. Surface runoff should be diverted away from the leaching beds by means of proper site drainage.
5. The waste disposal systems should be kept clear of surface drainage swales, roof leader drains, and other sources of surface water.
6. The tile beds should be kept away from shade trees and a healthy cover of vegetation should be developed and maintained over the beds to promote evapotranspiration.
7. When sighting tile beds on sloping ground, it is recommended that procedures outlined in the Building Code be followed closely.
8. Minimum set back distances from septic tank (plus 2 times height raised):

a) Building – 1.5 m	b) Property line – 3 m
c) If applicable, drilled Well – 15 m	d) Open water course – 15 m
9. Minimum set back distances from septic tile bed (plus 2 times height raised):

a) Building – 5 m	b) Property line – 3 m
c) If applicable, drilled well, properly sealed – 15 m	d) Shallow well – 30 m
e) Open water course – 15 m	
10. The layout, design and construction of the waste disposal bed should be subject to inspection by experienced hydrogeologic personnel.

GHD can provide a conceptual figure that outlines the proposed locations of the septic tile bed and house envelope once more information becomes available. It is our opinion that there is sufficient area within the proposed lots to support the tile beds, water wells and domestic structures. New technologies are available that can reduce the size of the footprint of the conventional septic system; however, require approval of the local building authority. If other new technology septic systems are incorporated into the design, it is recommended that the systems be installed as per the Ontario Building Code.

5. Conclusions and Closure

An assessment was conducted to assess the suitability of a Site located on Whitfield Road in Scugog, Ontario for a proposed 26-lot subdivision. The proposed development will consist of single-family dwellings that will be served by individual water wells and Class IV sewage disposal systems.

Supporting data upon which our recommendations are based have been presented in the foregoing sections of this report and are governed by the physical properties of the subsurface materials that were encountered at the Site and assume that they are representative of the overall site conditions. Four (4) pumping tests were conducted with very good water quantity with no interference observed. The water quality was generally good with no health-related parameter issues; however, the water will require treatment of some aesthetic parameters. The nitrate impact assessment shows that the 26-lot development can be supported.

Based on the available hydrogeological and geotechnical information, no site-wide constraints have been identified that would preclude the use of individual Class 4 sewage disposal systems. Should site-specific constraints be encountered during detailed design or permitting, mitigation measures such as raised treatment beds, imported septic sand, localized grading modifications, or other engineered solutions may be implemented, as required and acceptable to the approval authority.

It is our opinion that the results of this hydrogeological support the proposed residential development to be constructed upon a 20.4 ha area with a concept plan showing 26 single-detached homes serviced on private water wells and individual septic systems. Provided that the waste disposal systems are properly constructed, no significant impact is anticipated on downgradient baseline water quality functions or to the existing water bearing aquifers. The use of properly constructed drilled wells that are certified and adequately sealed, should be sufficient to provide ample quantities of potable groundwater while preserving the long-term water quality of the aquifer complexes. It is GHD's opinion that the results of this hydrogeological assessment support the approval of the proposed residential subdivision at this Site.

The following Statement of Limitations should be read carefully and is an integral part of this report. We trust this report meets your immediate needs. Should any questions arise regarding any aspect of our report, please contact our office.

All of Which is Respectfully Submitted,

GHD

Steven Gagné, H.B.Sc.
Project Manager

Robert Neck, P.Geo. (Limited)
Senior Geoscientist, Project Director

6. References

Chapman and Putnam, 1966. The Physiography of Southern Ontario, 2nd Edition. University of Toronto Press.

Chapman and Putnam, 1984. The Physiography of Southern Ontario, 3rd Edition. Ministry of Natural Resources.

Chapman, L.J. and Putnam, D.F. 2007. Physiography of Southern Ontario; Ontario Geological Survey, Miscellaneous Release – Data.

Credit Valley Conservation and Toronto and Region Conservation Authority. Low Impact Development Stormwater Management Planning and Design Guide. Version 1.0. 2010.

Freeze, R. Allan and Cherry, John A. 1979. Groundwater.

Ministry of the Environment, Conservation and Parks, December 12, 2024. Source Protection Information Atlas, available online at www.ontario.ca.

Statement of Limitations

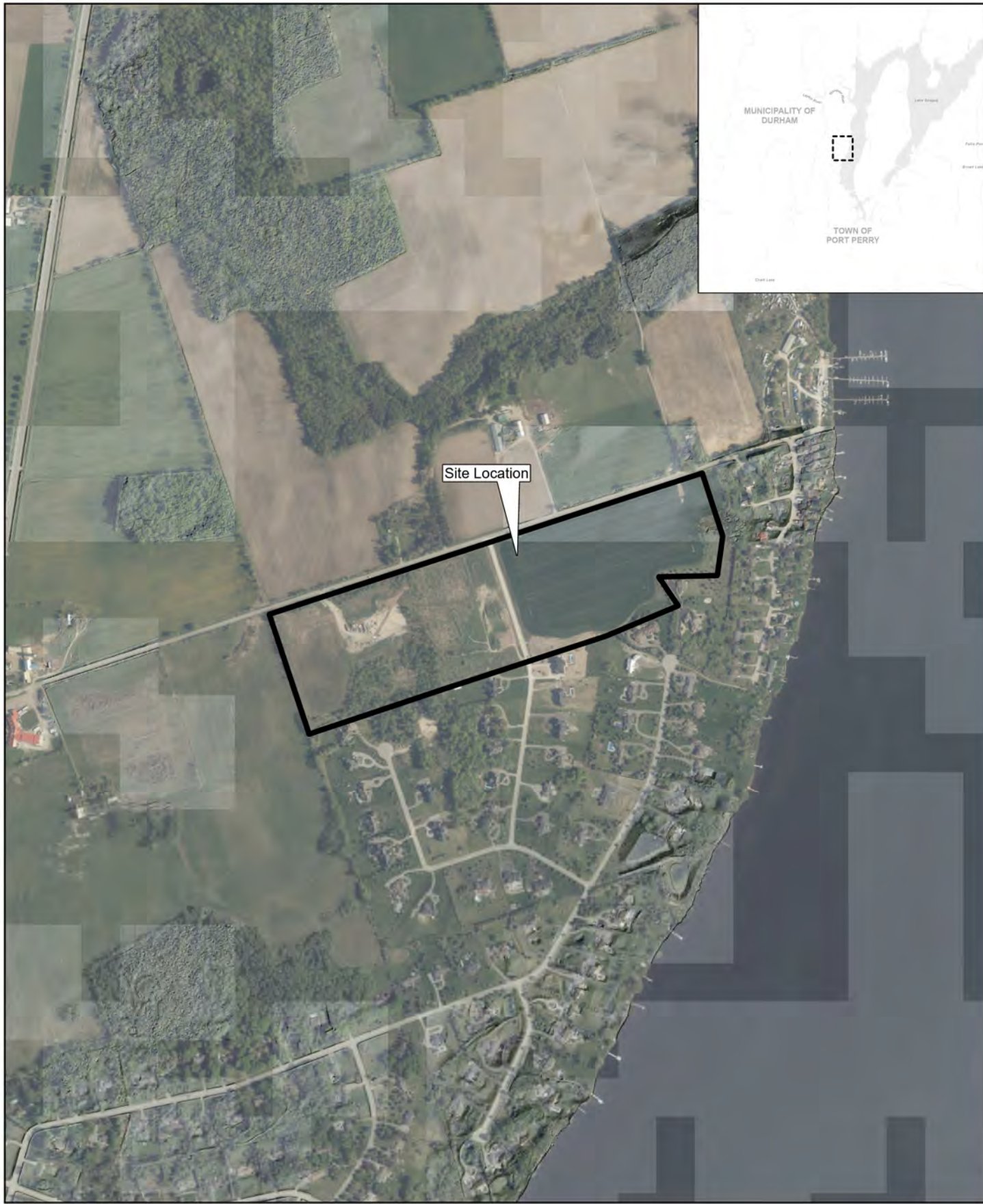
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The recommendations made in this report are in accordance with our present understanding of the project, the current site use, ground surface elevation and conditions, and are based on the work scope approved by the Client and described in the report. The services were performed in a manner consistent with that level of care and skill ordinarily exercised by members of geotechnical engineering professions currently practicing under similar conditions in the same locality. No other representations, and no warranties or representations of any kind, either expressed or implied, are made. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.

All details of design and construction are rarely known at the time of completion of a hydrogeological assessment. The recommendations and comments made in the study report are based on our subsurface investigation and resulting understanding of the project, as defined at the time of the study. We should be retained to review our recommendations when the drawings and specifications are complete. Without this review, GHD will not be liable for any misunderstanding of our recommendations or their application and adaptation into the final design.

It is important to emphasize that a soil investigation is, in fact, a random sampling of a site and the comments included in this report are based on the results obtained at the test locations only. The subsurface conditions confirmed at the test locations may vary at other locations. The subsurface conditions can also be significantly modified by the construction activities on site (e.g., excavation, dewatering and drainage, blasting, pile driving, etc.). These conditions can also be modified by exposure of soils or bedrock to humidity, dry periods or frost. Soil and groundwater conditions between and beyond the test locations may differ both horizontally and vertically from those encountered at the test locations and conditions may become apparent during construction which could not be detected or anticipated at the time of our investigation. Should any conditions at the site be encountered which differ from those found at the test locations, we request that we be notified immediately in order to permit a reassessment of our recommendations. If changed conditions are identified during construction, no matter how minor, the recommendations in this report shall be considered invalid until sufficient review and written assessment of said conditions by GHD is completed.

Figures



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Metres

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 17N

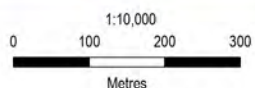
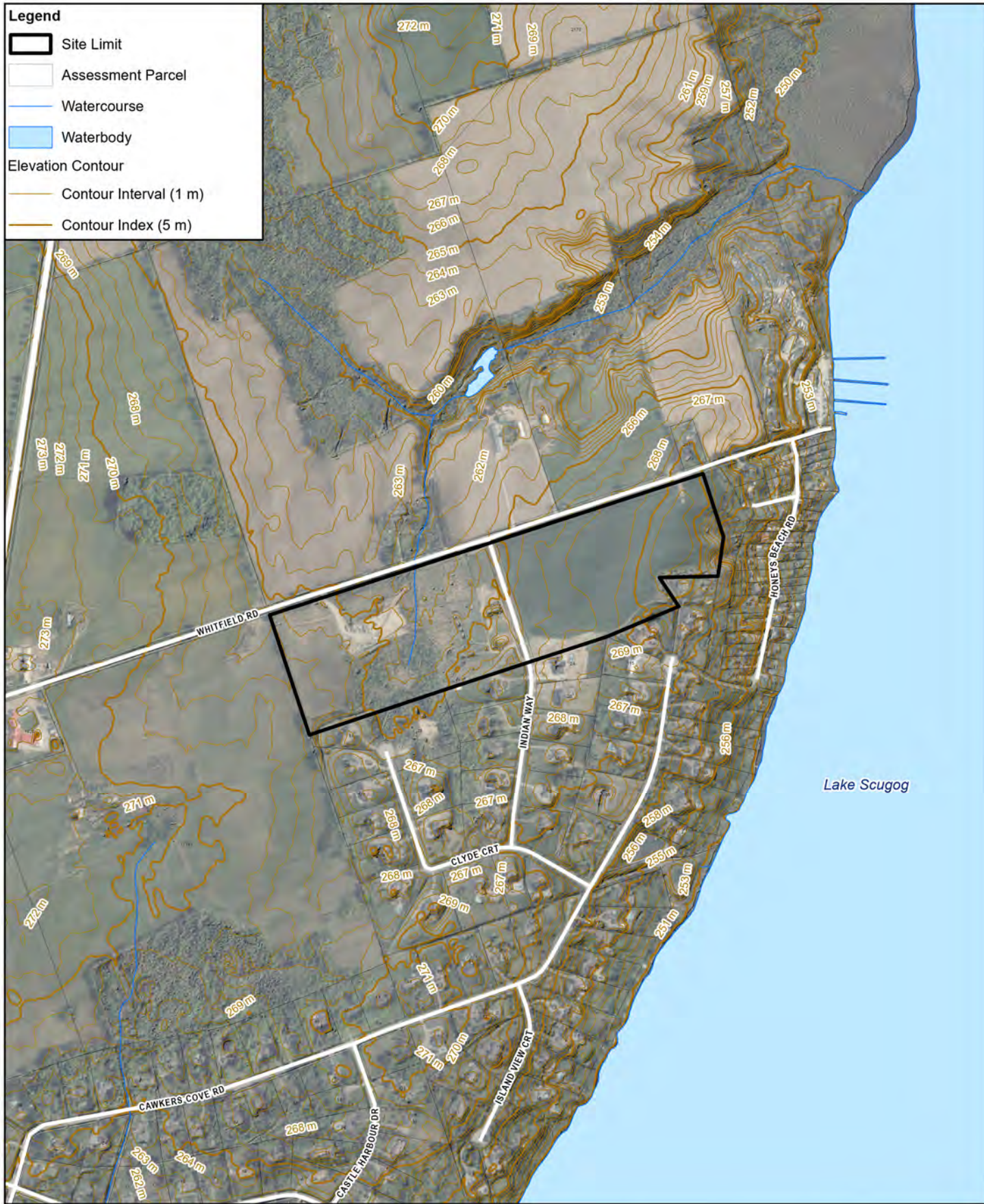


Honey Heights Developments Ltd
Whitfield Road, Scugog, Ontario
Municipality of Durham

Hydrogeological Assessment Site Location Plan

Project No. 12656921
Revision No.
Date Apr 3, 2025

Figure 1



Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 17N

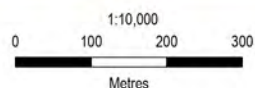
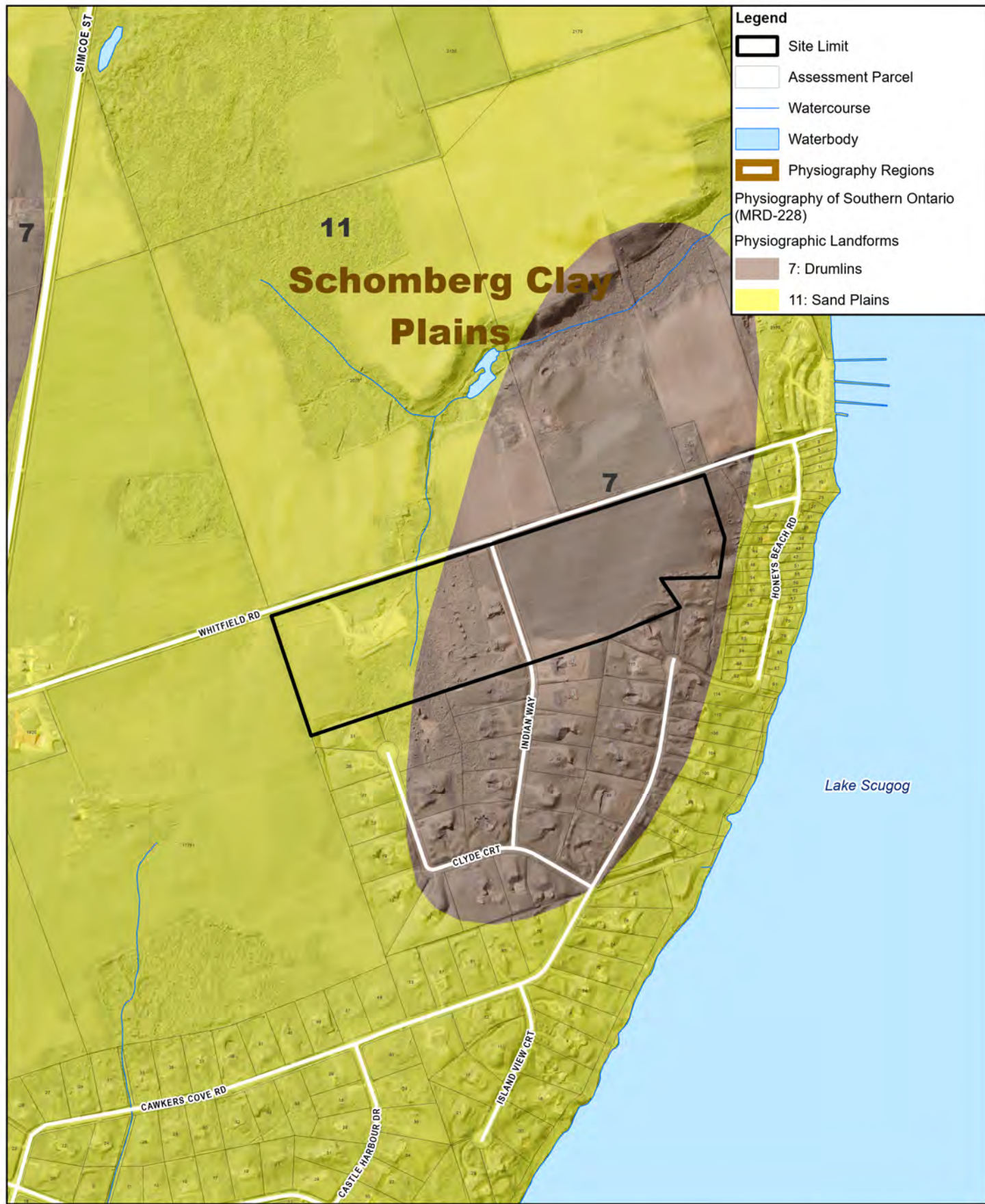


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Municipality of Durham

Project No. 12656921
Revision No.
Date Apr 3, 2025

Hydrogeological Assessment Regional Topography

Figure 3



Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 17N



Honey Heights Developments Ltd
Whitfield Road, Scugog, Ontario
Municipality of Durham

Hydrogeological Investigation
Physiography

Project No. 12656921
Revision No.
Date Apr 3, 2025

Figure 4

Legend

-  Site Limit
-  Assessment Parcel
-  Watercourse
-  Waterbody

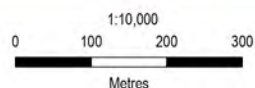
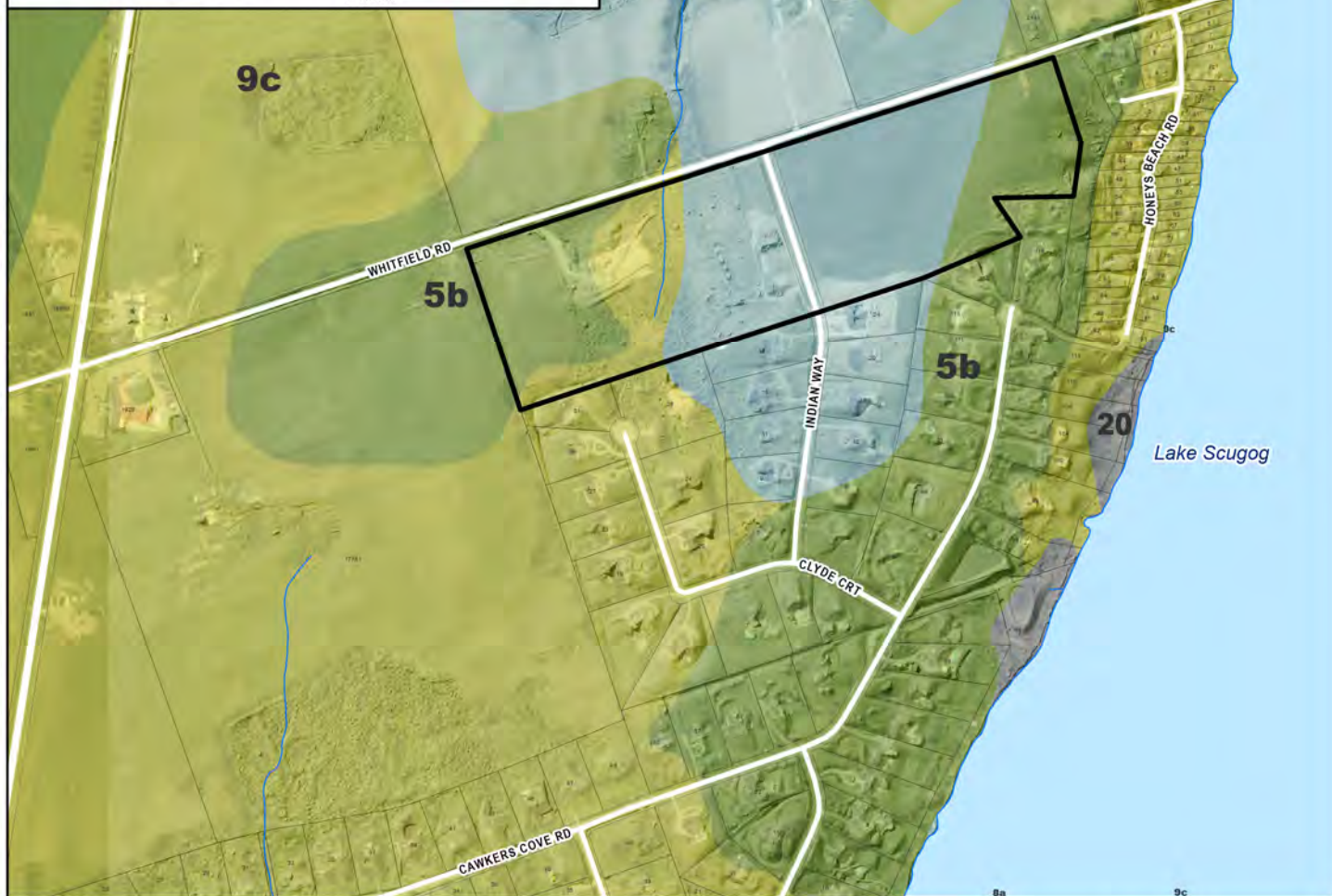
Surficial Geology of Southern Ontario (MRD128-REV)

RECENT

-  20: Organic deposits: Peat, muck, marl
-  19: Modern alluvial deposits: Clay, silt, sand, gravel, may contain organic remains

PLEISTOCENE

-  9: Coarse-textured glaciolacustrine deposits:
 - 9a Deltaic deposits
 - 9b Littoral deposits
 - 9c Foreshore and basinal deposits
-  8: Fine-textured glaciolacustrine deposits:
 - Silt and clay, minor sand and gravel
 - 8a Massive to well laminated
 - 8b Interbedded silt and clay and gritty, pebbly flow till and rainout deposits
-  5b: Stone-poor, sandy silt to silty sand-textured till
 - Stone-poor, sandy silt to silty sand-textured till on Paleozoic terrain



Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 17N



Honey Heights Developments Ltd
Whitfield Road, Scugog, Ontario
Municipality of Durham

Hydrogeological Assessment
Surficial Geology

Project No. 12656921
Revision No.
Date Apr 3, 2025

Figure 5

Legend

-  Site Limit
-  Assessment Parcel
-  Watercourse
-  Waterbody
-  Quaternary Sediment Thickness Contour (1 m)

Quaternary Geology of Southern Ontario (EDS014-REV)

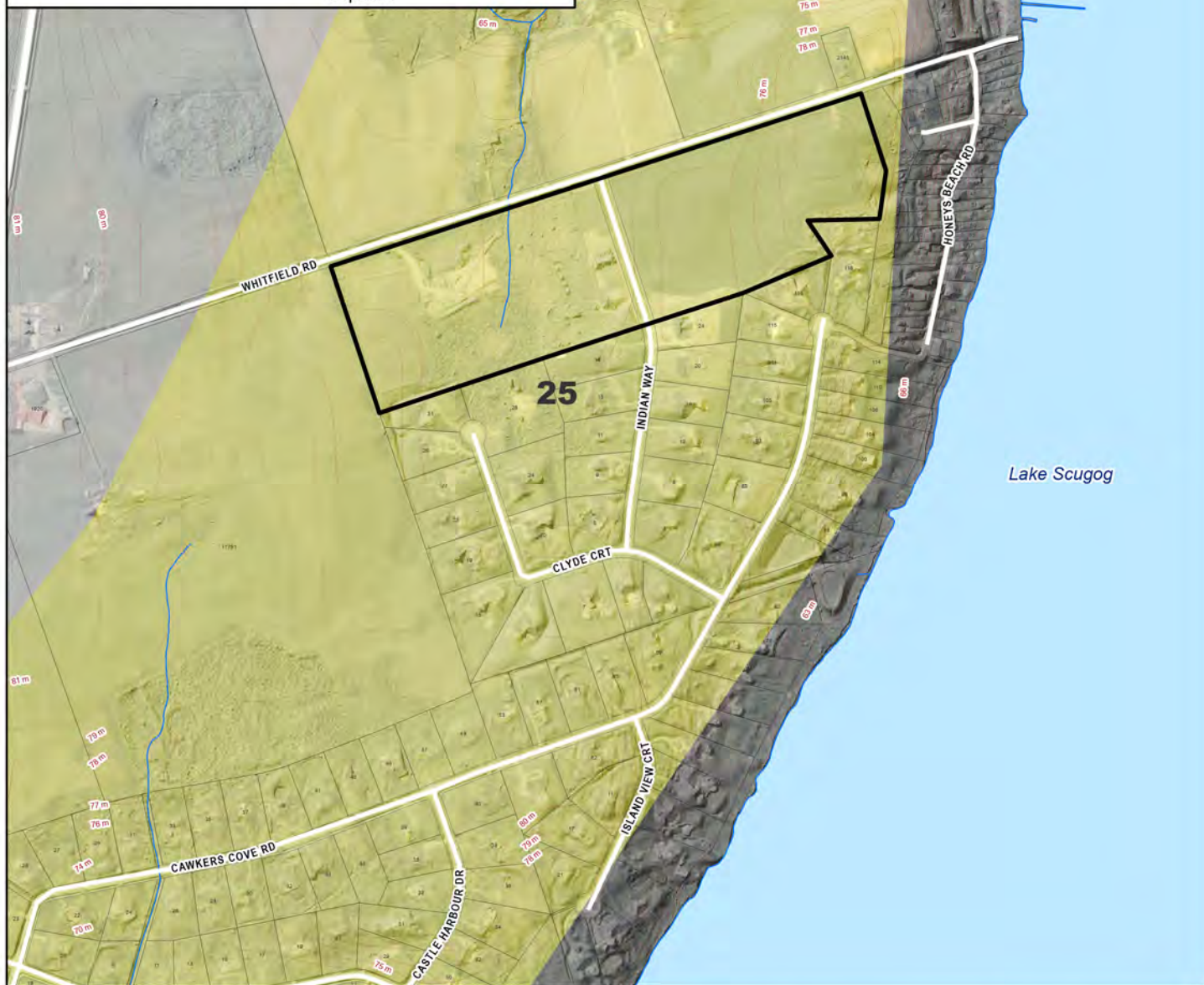
 33: Lakes

RECENT

 32: Organic deposits: Organic deposits: peat, muck and marl

PLEISTOCENE

 25: Glaciolacustrine deposits: Sand, gravelly sand and gravel nearshore and beach deposits

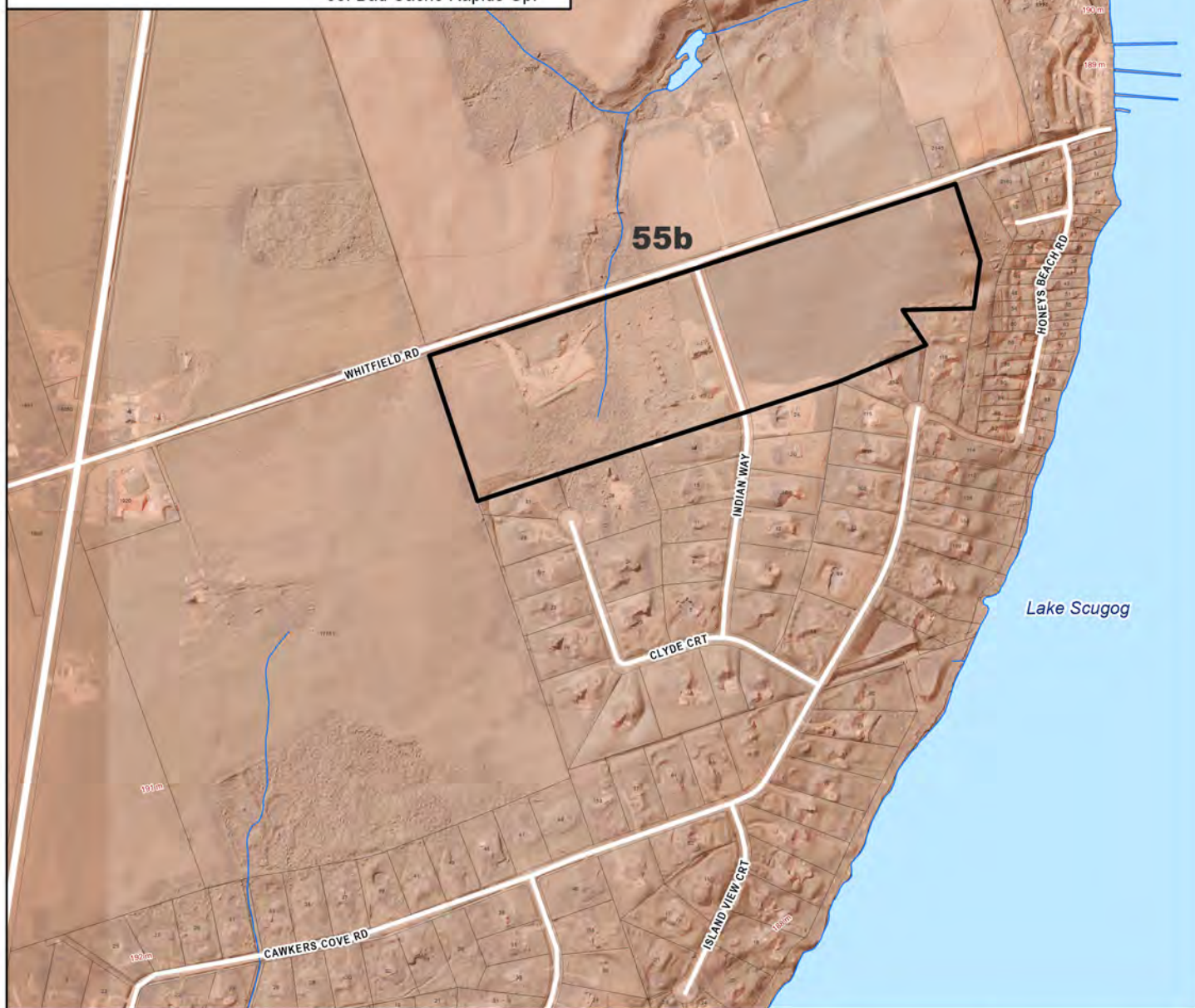


Legend

-  Site Limit
-  Assessment Parcel
-  Watercourse
-  Waterbody
-  Bedrock Topography Contour (1 m)

Bedrock Geology of Southern Ontario (MRD-126)

- 55a Queenston Fm.
 - 55b Georgian Bay Fm.; Blue Mountain Fm.; Billings Fm.; Collingwood Mb.; Eastview Mb.
 - 55c Liskeard Gp.
 - 55d Red Head Rapids Fm.
 - 55e Churchill River Gp.
 - 55f Bad Cache Rapids Gp.
- 55: Shale, limestone, dolostone, siltstone:



0 100 200 300
Metres

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 17N

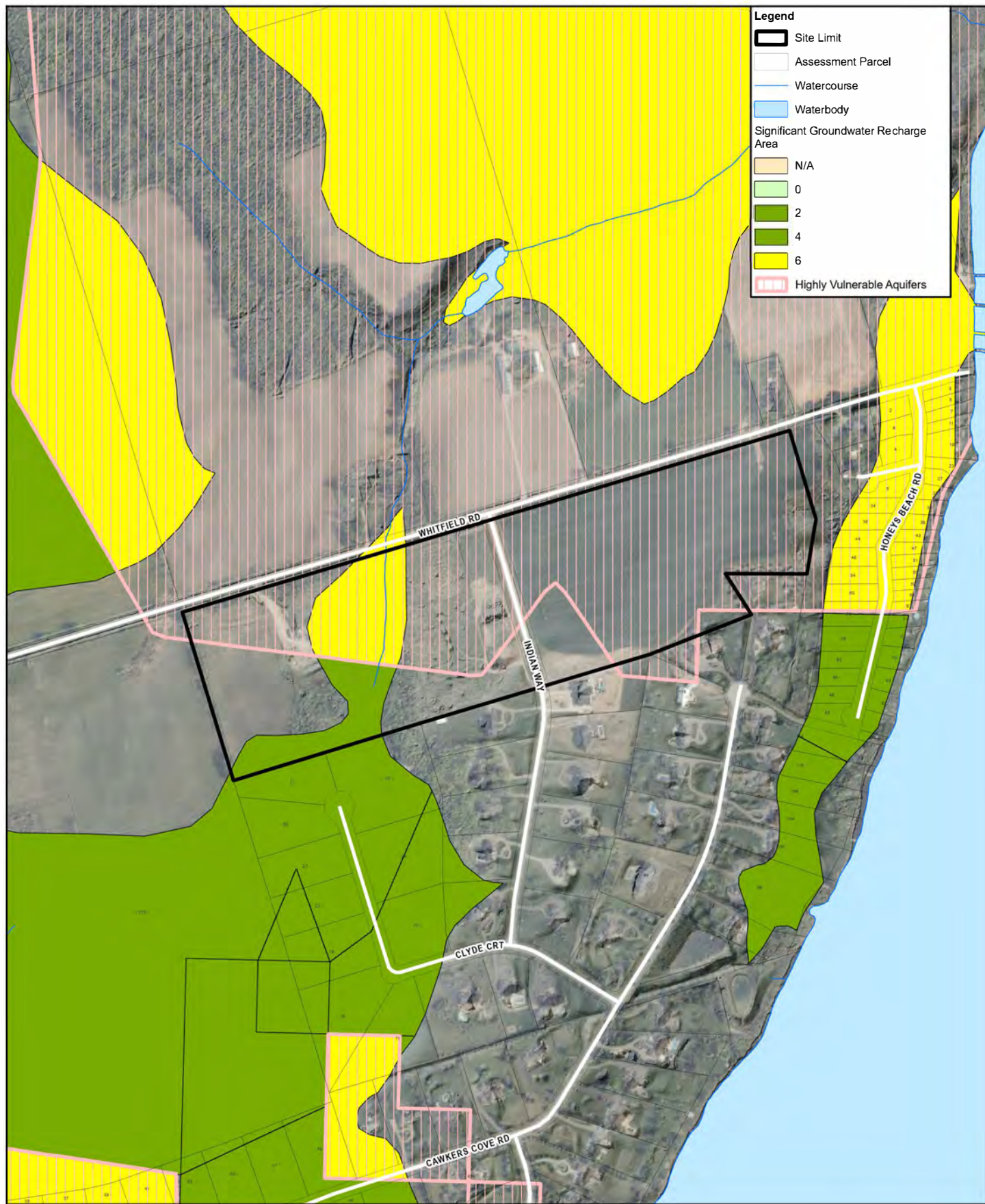


Honey Heights Developments Ltd
Whitfield Road, Scugog, Ontario
Municipality of Durham

Hydrogeological Assessment
Bedrock Geology

Project No. 12659349
Revision No.
Date Apr 3, 2025

Figure 7



0 100 200 300
Metres

Map Projection: Mercator Auxiliary Sphere
Horizontal Datum: WGS 1984
Grid: WGS 1984 Web Mercator Auxiliary Sphere

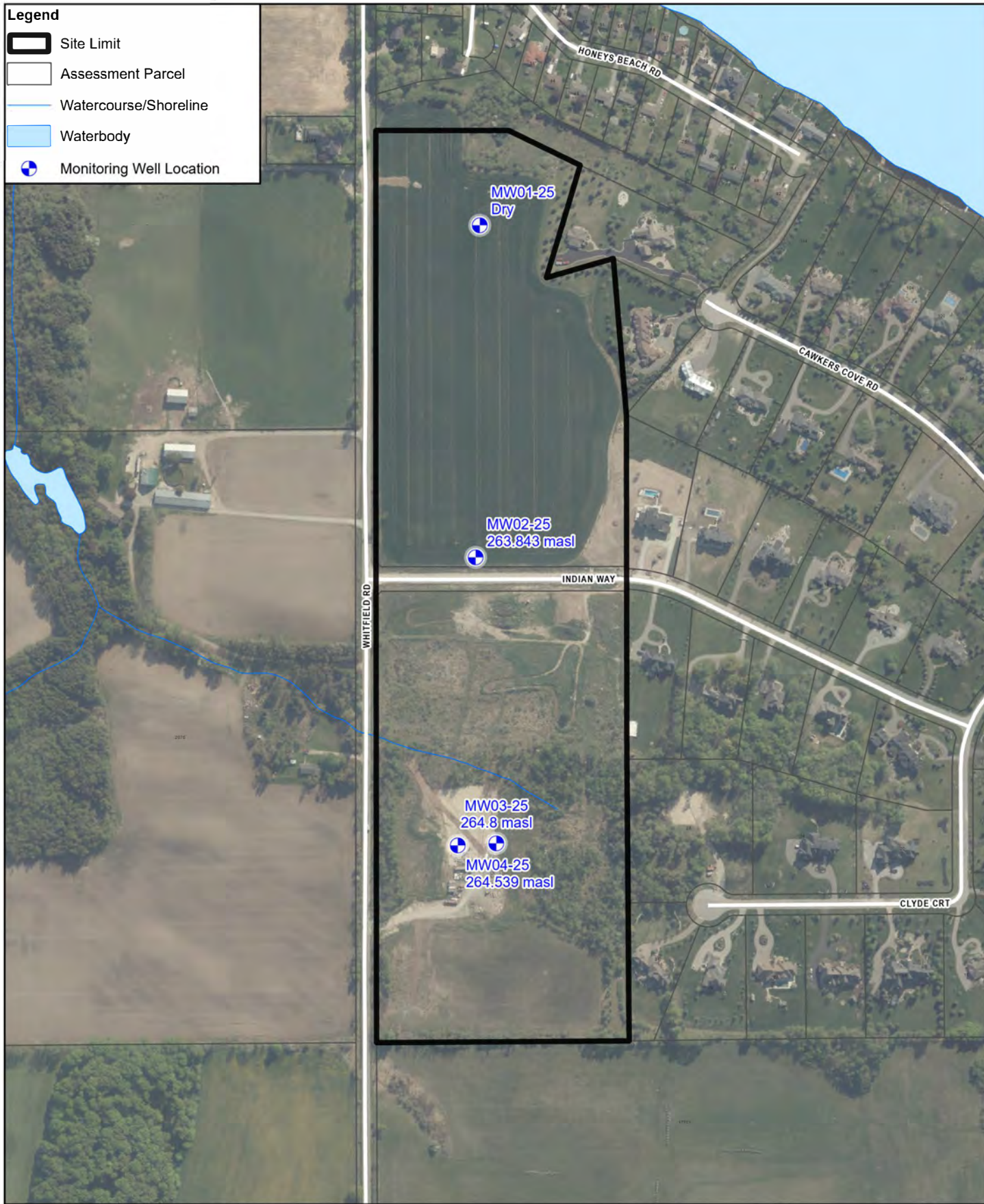


Honey Heights Developments Ltd
Whitfield Road, Scugog, Ontario
Municipality of Durham

Hydrogeological Assessment
**Significant Groundwater Recharge
Areas and Highly Vulnerable Aquifers**

Project No. 12656921
Revision No.
Date Apr 4, 2025

Figure 9



Honey Heights Developments Ltd
 Whitfield Road, Scugog, Ontario
 Municipality of Durham

Hydrogeological Assessment
Groundwater Elevations

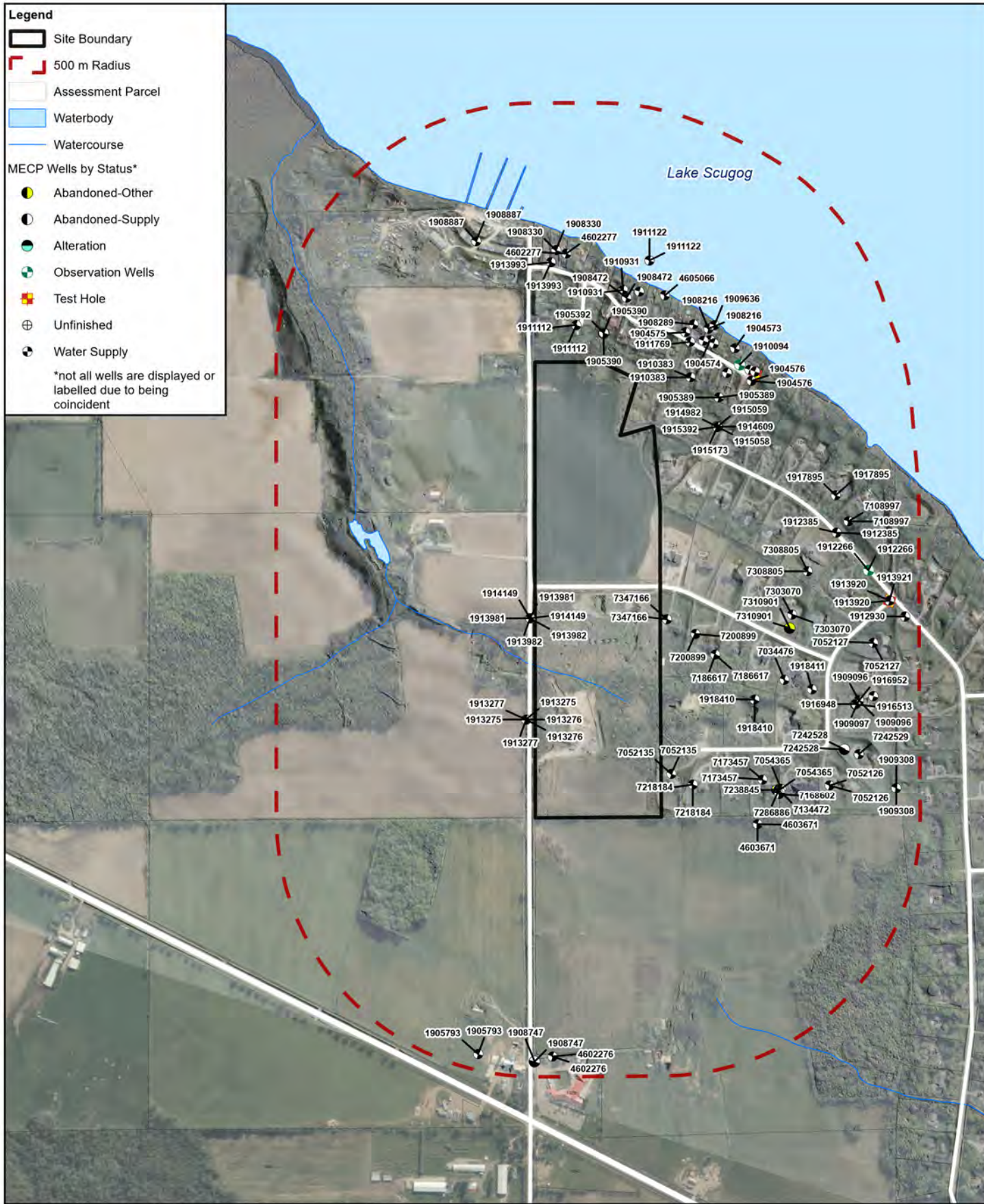
Project No. 12639057
 Revision No.
 Date May 13, 2025

Figure 10

Appendices

Appendix A

MECP Well Records



MECP WELL RECORD LISTINGS

Ministry of the Environment, Conservation & Parks (MECP)

© Water Well Information System (WWIS). Ministry of the Environment, Conservation, and Parks. 2021.

Powered by Location Intelligence



DISCLAIMER: All effort has been taken to ensure the accuracy of the data is the same as the source. There are instances where the original PDF document is different and in those cases, the PDF should be used instead.

17	Easting:	665164.90	Latitude: 44.138896 Longitude: -78.935113	Well ID: 1904573
	Northing:	4889373.00		
	Elev (masl):	250.87		
LOCATION	Lot:	022	Tag: Audit No: Contractor License: 5207 Well Completion Date: 09-16-1976 Received Date: 04-27-1977	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 8.2296 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Cable Tool		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10622089 Pump Test ID: 991904573 Flowing: N Pump Duration (hr): 3 Pump Duration (m): 0	
	Pump Set (m):	n/a		
	SWL (ft)	20		
	Final Level:	26 ft		
	Pump Rate:	6 GPM		
	Recom. Rate:	5 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930131193	36	inch	CONCRETE	n/a	27 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	CLAY	n/a	BLACK	0	1 ft
2	CLAY	HARD	n/a	BROWN	1	9 ft
3	SAND	GRAVEL	LAYERED	BROWN	9	27 ft

End of Record

17	Easting:	665164.90	Latitude: 44.139346 Longitude: -78.935097	Well ID: 1904574
	Northing:	4889423.00		
	Elev (masl):	252.08		
LOCATION	Lot:	022	Tag: Audit No: Contractor License: 5207 Well Completion Date: 09-21-1976 Received Date: 04-27-1977	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 9.7536 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Cable Tool		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10622090 Pump Test ID: 991904574 Flowing: N Pump Duration (hr): 4 Pump Duration (m): 0	
	Pump Set (m):	n/a		
	SWL (ft)	26		
	Final Level:	31 ft		
	Pump Rate:	7 GPM		
	Recom. Rate:	n/a GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930131194	36	inch	CONCRETE	n/a	32 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	CLAY	n/a	BLACK	0	1 ft
2	CLAY	HARD	n/a	BROWN	1	10 ft
3	SAND	n/a	n/a	BROWN	10	26 ft
4	GRAVEL	n/a	n/a	BROWN	26	32 ft

End of Record

17	Easting:	665164.90	Latitude: 44.139796 Longitude: -78.935082	Well ID: 1904575
	Northing:	4889473.00		
	Elev (masl):	253.69		
LOCATION	Lot:	022	Tag: Audit No: Contractor License: 5207 Well Completion Date: 12-03-1976 Received Date: 04-27-1977	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
WELL	Street:		Well Depth (m): 8.5344 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	City:	n/a		
	Well Status:	Water Supply		
	Prim. Use:	n/a		
PUMP TEST	Sec. Use:	n/a	Pipe ID: 10622091 Pump Test ID: 991904575 Flowing: N Pump Duration (hr): 3 Pump Duration (m): 0	
	Boring Method:	Cable Tool		
	Test Method:	CLEAR		
	Pump Set (m):	n/a		
	SWL (ft)	22		
	Final Level:	27 ft		
	Pump Rate:	6 GPM		
	Recom. Rate:	5 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930131195	36	inch	CONCRETE	n/a	28 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	CLAY	n/a	BLACK	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	15 ft
3	SAND	GRAVEL	LAYERED	BROWN	15	28 ft

End of Record

17	Easting:	665114.90	Latitude: 44.138458 Longitude: -78.935754	Well ID: 1904576
	Northing:	4889323.00		
	Elev (masl):	253.32		
LOCATION	Lot:	022	Tag: Audit No: Contractor License: 5207 Well Completion Date: 12-08-1976 Received Date: 04-27-1977	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
WELL	Street:		Well Depth (m): 11.2776 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	City:	n/a		
	Well Status:	Water Supply		
	Prim. Use:	n/a		
PUMP TEST	Sec. Use:	n/a	Pipe ID: 10622092 Pump Test ID: 991904576 Flowing: N	
	Boring Method:	Cable Tool		
	Test Method:	CLEAR		
	Pump Set (m):	n/a		
	SWL (ft)			

PUMP

Final Level: 38 ft
 Pump Rate: 7 GPM
 Recom. Rate: 6 GPM

Pump Duration (hr): 4
 Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930131196	36	inch	CONCRETE	n/a	37 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	CLAY	n/a	BLACK	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	12 ft
3	SAND	GRAVEL	LAYERED	BROWN	12	37 ft

End of Record

17

Easting:	665114.90
Northing:	4889373.00
Elev (masl):	255.30

Latitude: 44.138907
Longitude: -78.935738

Well ID: **1905059**

LOCATION

Lot: 022
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street:
 City: n/a

Tag:
 Audit No:
 Contractor License: 2104
 Well Completion Date: 06-30-1978
 Received Date: 07-10-1978

WELL

Well Status: Water Supply
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Cable Tool

Well Depth (m): 68.8848
 Depth to Bedrock (m): n/a
 Depth to Water: ft
 Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
 Pump Set (m): n/a
 SWL (ft): 30
 Final Level: 200 ft
 Pump Rate: 10 GPM
 Recom. Rate: 10 GPM

Pipe ID: 10622480
 Pump Test ID: 991905059
 Flowing: N
 Pump Duration (hr): 8
 Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930131609	6	inch	STEEL	n/a	222 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	DENSE	BROWN	0	30 ft
2	SAND	DENSE	n/a	BROWN	30	100 ft
3	CLAY	DENSE	n/a	BLUE	100	224 ft
4	GRAVEL	SAND	LOOSE	BLACK	224	226 ft
5	CLAY	GRAVEL	DENSE	GREY	226	226 ft

End of Record

17

Easting:	665064.90
Northing:	4889373.00
Elev (masl):	260.49

Latitude: 44.138919
Longitude: -78.936363

Well ID: **1905389**

LOCATION

Lot: 022
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street:
 City: n/a

Tag:
 Audit No:
 Contractor License: 3129
 Well Completion Date: 06-18-1979
 Received Date: 07-22-1979

WELL

Well Status: Water Supply
 Prim. Use: n/a
 Sec. Use:

Well Depth (m): 8.5344
 Depth to Bedrock (m): n/a
 Depth to Water: ft

PUMP TEST	Boring Method:	Boring	Water Kind:	FRESH
	Test Method:	CLEAR	Pipe ID:	10622800
	Pump Set (m):	n/a	Pump Test ID	991905389
	SWL (ft)	18	Flowing:	N
	Final Level:	26 ft	Pump Duration (hr):	1
	Pump Rate:	8 GPM	Pump Duration (m):	0
	Recom. Rate:	6 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930131951	30	inch	GALVANIZED	n/a	23 ft
2	930131952	30	inch	CONCRETE	n/a	28 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	HARDPAN	CLAY	n/a	n/a	1	10 ft
3	CLAY	n/a	n/a	GREY	10	21 ft
4	COARSE SAND	n/a	n/a	n/a	21	28 ft

End of Record

17	Easting:	665114.90	Latitude: 44.141157 Longitude: -78.935659	Well ID: 1905390
	Northing:	4889623.00		
	Elev (masl):	261.66		
LOCATION	Lot:	022	Tag: Audit No: Contractor License: 3129 Well Completion Date: 06-16-1979 Received Date: 07-22-1979	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 8.8392 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Cable Tool		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10622801 Pump Test ID 991905390 Flowing: N Pump Duration (hr): 1 Pump Duration (m): 0	
	Pump Set (m):	n/a		
	SWL (ft)	18		
	Final Level:	27 ft		
	Pump Rate:	8 GPM		
	Recom. Rate:	6 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930131953	30	inch	GALVANIZED	n/a	20 ft
2	930131954	30	inch	CONCRETE	n/a	29 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	HARDPAN	CLAY	n/a	n/a	1	10 ft
3	CLAY	n/a	n/a	GREY	10	21 ft
4	COARSE SAND	n/a	n/a	n/a	21	29 ft

End of Record

17	Easting:	665114.90	Latitude: 44.141157 Longitude: -78.935659	Well ID: 1905392
	Northing:	4889623.00		
	Elev (masl):	261.66		
LOCATION	Lot:	022	Tag: Audit No: Contractor License: 1413 Well Completion Date: 06-05-1979	
	Con:	08		
	Municipality:	DURHAM		
	Township:			

LOI	Street:	SCUGOG TOWNSHIP (REACH)	Received Date:	07-20-1979
	City:	n/a		
WELL	Well Status:	Abandoned-Supply	Well Depth (m):	76.2
	Prim. Use:	n/a	Depth to Bedrock (m):	241
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Rotary (Convent.)	Water Kind:	Not stated
PUMP TEST	Test Method:		Pipe ID:	
	Pump Set (m):		Pump Test ID	
	SWL (ft)		Flowing:	
	Final Level:		Pump Duration (hr):	
	Pump Rate:		Pump Duration (m):	
	Recom. Rate:			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
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FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	HARD	BROWN	0	22 ft
2	SAND	GRAVEL	LOOSE	BROWN	22	30 ft
3	CLAY	DENSE	n/a	BLUE	30	79 ft
4	SILT	SOFT	n/a	GREY	79	83 ft
5	CLAY	DENSE	n/a	BLUE	83	181 ft
6	SILT	CLAY	LAYERED	GREY	181	190 ft
7	CLAY	SAND	HARD	GREY	190	241 ft
8	LIMESTONE	HARD	n/a	GREY	241	250 ft

End of Record

17	Easting:	663714.90	Latitude: 44.139672 Longitude: -78.953214	Well ID: 1905793
	Northing:	4889423.00		
	Elev (masl):	273.10		

LOCATION	Lot:	020	Tag:	
	Con:	09	Audit No:	
	Municipality:	DURHAM	Contractor License:	1926
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	07-28-1980
	Street:		Received Date:	08-13-1980
WELL	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	79.248
PUMP TEST	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Cable Tool	Water Kind:	FRESH
	Test Method:	CLEAR	Pipe ID:	10623175
	Pump Set (m):	n/a	Pump Test ID	991905793
	SWL (ft)	52	Flowing:	N
	Final Level:	240 ft	Pump Duration (hr):	4
	Pump Rate:	12 GPM	Pump Duration (m):	0
	Recom. Rate:	10 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930132342	6	inch	STEEL	n/a	257 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	2 ft
2	CLAY	SAND	n/a	BROWN	2	16 ft
3	CLAY	SAND	n/a	GREY	16	44 ft
4	SAND	n/a	n/a	BROWN	44	52 ft
5	CLAY	SAND	n/a	GREY	52	217 ft
6	SAND	SILT	n/a	GREY	217	225 ft

7	CLAY	n/a	n/a	GREY	225	256	ft
8	SAND	n/a	n/a	BROWN	256	260	ft

End of Record

17	Easting:	665184.90	Latitude:	44.139431	Well ID:	1908216
	Northing:	4889433.00	Longitude:	-78.934844		
	Elev (masl):	250.42				

LOCATION	Lot:	022	Tag:	
	Con:	08	Audit No:	03460
	Municipality:	DURHAM	Contractor License:	1672
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	04-13-1987
	Street:		Received Date:	04-28-1987
City:	n/a			

WELL	Well Status:	Water Supply	Well Depth (m):	65.2272
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Cable Tool	Water Kind:	FRESH

PUMP TEST	Test Method:	n/a	Pipe ID:	10625420
	Pump Set (m):	n/a	Pump Test ID	991908216
	SWL (ft)	2	Flowing:	N
	Final Level:	60 ft	Pump Duration (hr):	3
	Pump Rate:	20 GPM	Pump Duration (m):	0
	Recom. Rate:	15 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930134720	6	inch	STEEL	n/a	214 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	2 ft
2	SAND	GRAVEL	n/a	n/a	2	39 ft
3	CLAY	n/a	n/a	n/a	39	115 ft
4	CLAY	GRAVEL	n/a	n/a	115	124 ft
5	CLAY	n/a	n/a	n/a	124	174 ft
6	HARDPAN	n/a	n/a	n/a	174	209 ft
7	SAND	GRAVEL	n/a	n/a	209	214 ft

End of Record

17	Easting:	665183.90	Latitude:	44.139702	Well ID:	1908289
	Northing:	4889463.00	Longitude:	-78.934848		
	Elev (masl):	251.44				

LOCATION	Lot:	022	Tag:	
	Con:	08	Audit No:	08078
	Municipality:	DURHAM	Contractor License:	2104
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	04-29-1987
	Street:		Received Date:	05-12-1987
City:	n/a			

WELL	Well Status:	Water Supply	Well Depth (m):	68.8848
	Prim. Use:	n/a	Depth to Bedrock (m):	224
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Cable Tool	Water Kind:	SULPHUR

PUMP TEST	Test Method:	CLEAR	Pipe ID:	10625493
	Pump Set (m):	n/a	Pump Test ID	991908289
	SWL (ft)	50	Flowing:	N
	Final Level:	150 ft	Pump Duration (hr):	3
	Pump Rate:	8 GPM	Pump Duration (m):	0
	Recom. Rate:	8 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
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1 930134782 6 inch STEEL n/a 226 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	BOULDERS	MEDIUM-GRAINED	BROWN	0	55 ft
2	CLAY	MEDIUM-GRAINED	n/a	GREY	55	195 ft
3	CLAY	GRAVEL	HARD	BROWN	195	224 ft
4	SHALE	GRAVEL	LOOSE	BROWN	224	226 ft

End of Record

17	Easting:	665237.90	Latitude: 44.142362 Longitude: -78.93408	Well ID: 1908330
	Northing:	4889760.00		
	Elev (masl):	252.50		
LOCATION	Lot:	022	Tag: Audit No: 03474 Contractor License: 1672 Well Completion Date: 04-30-1987 Received Date: 06-02-1987	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 68.2752 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Cable Tool		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10625534 Pump Test ID: 991908330 Flowing: N Pump Duration (hr): 3 Pump Duration (m): 0	
	Pump Set (m):	n/a		
	SWL (ft)	40		
	Final Level:	n/a ft		
	Pump Rate:	10 GPM		
	Recom. Rate:	10 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930134820	6	inch	STEEL	n/a	224 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	2 ft
2	SAND	CLAY	STONES	n/a	2	39 ft
3	SAND	GRAVEL	n/a	n/a	39	51 ft
4	CLAY	FINE SAND	n/a	n/a	51	59 ft
5	CLAY	GRAVEL	n/a	n/a	59	210 ft
6	GRAVEL	SAND	n/a	n/a	210	224 ft

End of Record

17	Easting:	665192.90	Latitude: 44.14095 Longitude: -78.934691	Well ID: 1908472
	Northing:	4889602.00		
	Elev (masl):	253.14		
LOCATION	Lot:	022	Tag: Audit No: 12108 Contractor License: 3129 Well Completion Date: 07-29-1987 Received Date: 08-20-1987	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 15.24 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Boring		
TEST	Test Method:	CLEAR	Pipe ID: 10625675 Pump Test ID: 991908472 Flowing: N	
	Pump Set (m):	n/a		
	SWL (ft)			

PUMP	Final Level:	28 ft	Pump Duration (hr):	1
	Pump Rate:	8 GPM	Pump Duration (m):	0
	Recom. Rate:	4 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930134965	30	inch	CONCRETE	n/a	50 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	SAND	GRAVEL	n/a	n/a	1	18 ft
3	CLAY	n/a	n/a	BLUE	18	50 ft

End of Record

17	Easting:	663735.00	Latitude: 44.138696 Longitude: -78.952996	Well ID: 1908747
	Northing:	4889315.00		
	Elev (masl):	273.12		
LOCATION	Lot:	021	Tag: Audit No: NA Contractor License: 1413 Well Completion Date: 11-03-1987 Received Date: 12-10-1987	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 21.336 Depth to Bedrock (m): n/a Depth to Water: Water Kind:	
	Well Status:	Abandoned-Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Not Known		
PUMP TEST	Test Method:		Pipe ID: Pump Test ID Flowing: Pump Duration (hr): Pump Duration (m):	
	Pump Set (m):			
	SWL (ft)			
	Final Level:			
	Pump Rate:			
	Recom. Rate:			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
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FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	SOFT	n/a	BROWN	0	10 ft
2	FINE SAND	n/a	n/a	BROWN	10	20 ft
3	CLAY	HARD	n/a	GREY	20	35 ft
4	FINE SAND	MUCK	n/a	GREY	35	40 ft
5	CLAY	HARD	n/a	GREY	40	41 ft
6	SAND	SILT	MUCK	GREY	41	50 ft
7	CLAY	DENSE	n/a	GREY	50	70 ft

End of Record

17	Easting:	665206.90	Latitude: 44.143736 Longitude: -78.934419	Well ID: 1908887
	Northing:	4889912.00		
	Elev (masl):	255.99		
LOCATION	Lot:	019	Tag: Audit No: 12189 Contractor License: 3129 Well Completion Date: 01-11-1988 Received Date: 02-17-1988	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 9.144 Depth to Bedrock (m): n/a	
	Well Status:	Water Supply		
	Prim. Use:			

WE	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Boring	Water Kind:	FRESH
PUMP TEST	Test Method:	CLEAR	Pipe ID:	10626085
	Pump Set (m):	n/a	Pump Test ID	991908887
	SWL (ft)	10	Flowing:	N
	Final Level:	18 ft	Pump Duration (hr):	1
	Pump Rate:	8 GPM	Pump Duration (m):	0
	Recom. Rate:	4 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930135391	30	inch	CONCRETE	n/a	30 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	CLAY	n/a	n/a	BROWN	1	4 ft
3	SAND	WATER-BEARING	n/a	n/a	4	17 ft
4	CLAY	n/a	n/a	BLUE	17	30 ft

End of Record

17	Easting:	664592.90	Latitude: 44.135084 Longitude: -78.942397	Well ID: 1909096
	Northing:	4888935.00		
	Elev (masl):	267.77		
LOCATION	Lot:	021	Tag: Audit No: 30245 Contractor License: 1413 Well Completion Date: 05-03-1988 Received Date: 06-21-1988	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 13.1064 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Rotary (Convent.)		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10626293 Pump Test ID 991909096 Flowing: N Pump Duration (hr): 1 Pump Duration (m): 0	
	Pump Set (m):	n/a		
	SWL (ft)	32		
	Final Level:	n/a ft		
	Pump Rate:	7 GPM		
	Recom. Rate:	7 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930135599	6	inch	STEEL	n/a	35 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	HARD	BROWN	0	8 ft
2	CLAY	DENSE	n/a	BROWN	8	34 ft
3	SAND	CLEAN	n/a	BROWN	34	43 ft

End of Record

17	Easting:	664592.90	Latitude: 44.135084 Longitude: -78.942397	Well ID: 1909097
	Northing:	4888935.00		
	Elev (masl):	267.77		
LOCATION	Lot:	021	Tag: Audit No: 30244 Contractor License: 1413 Well Completion Date: 05-02-1988 Received Date:	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			

WELL	City:	n/a	06-21-1988
	Well Status:	Water Supply	Well Depth (m): 14.3256
	Prim. Use:	n/a	Depth to Bedrock (m): n/a
	Sec. Use:	n/a	Depth to Water: ft
PUMP TEST	Boring Method:	Rotary (Convent.)	Water Kind: FRESH
	Test Method:	CLEAR	Pipe ID: 10626294
	Pump Set (m):	n/a	Pump Test ID 991909097
	SWL (ft)	15	Flowing: N
	Final Level:	40 ft	Pump Duration (hr): 1
	Pump Rate:	7 GPM	Pump Duration (m): 0
	Recom. Rate:	7 GPM	

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930135600	6	inch	STEEL	n/a	41 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	HARD	BROWN	0	10 ft
2	CLAY	DENSE	n/a	BROWN	10	30 ft
3	SAND	CLEAN	n/a	BROWN	30	47 ft

End of Record

17	Easting:	664453.90	Latitude: 44.134027 Longitude: -78.944171	Well ID: 1909308
	Northing:	4888814.00		
	Elev (masl):	270.26		

LOCATION	Lot:	019	Tag:	
	Con:	08	Audit No:	33822
	Municipality:	DURHAM	Contractor License:	1910
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	09-07-1988
WELL	Street:		Received Date:	09-30-1988
	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	10.668
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
PUMP TEST	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Cable Tool	Water Kind:	FRESH
	Test Method:	CLEAR	Pipe ID:	10626505
	Pump Set (m):	n/a	Pump Test ID	991909308
	SWL (ft)	12	Flowing:	N
	Final Level:	18 ft	Pump Duration (hr):	5
	Pump Rate:	30 GPM	Pump Duration (m):	0
	Recom. Rate:	20 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930135808	6	inch	STEEL	n/a	30 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	2 ft
2	CLAY	SANDY	n/a	BROWN	2	8 ft
3	CLAY	n/a	n/a	BLUE	8	31 ft
4	GRAVEL	n/a	n/a	BROWN	31	35 ft

End of Record

17	Easting:	665194.90	Latitude: 44.139348 Longitude: -78.934722	Well ID: 1909636
	Northing:	4889424.00		
	Elev (masl):	249.54		

LOCATION	Lot:		Tag:	
	Con:	10	Audit No:	49131
	Municipality:	DURHAM	Contractor License:	1413
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	01-24-1989
	Street:		Received Date:	02-09-1989
WELL	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	66.4464
	Prim. Use:	n/a	Depth to Bedrock (m):	213
	Sec. Use:	n/a	Depth to Water:	ft
PUMP TEST	Boring Method:	Rotary (Convent.)	Water Kind:	FRESH
	Test Method:	CLEAR	Pipe ID:	10626833
	Pump Set (m):	n/a	Pump Test ID	991909636
	SWL (ft)	3	Flowing:	N
	Final Level:	12 ft	Pump Duration (hr):	2
	Pump Rate:	10 GPM	Pump Duration (m):	0
	Recom. Rate:	8 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930136150	6	inch	STEEL	n/a	213 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	HARD	n/a	BROWN	0	20 ft
2	SAND	LOOSE	n/a	BROWN	20	25 ft
3	CLAY	HARD	n/a	BROWN	25	40 ft
4	GRAVEL	SILT	LOOSE	BLACK	40	42 ft
5	CLAY	DENSE	n/a	GREY	42	155 ft
6	FINE SAND	n/a	n/a	GREY	155	166 ft
7	CLAY	SAND	LAYERED	GREY	166	213 ft
8	LIMESTONE	HARD	n/a	GREY	213	218 ft

End of Record

17	Easting:	665138.00	Latitude: 44.138731 Longitude: -78.935455	Well ID: 1910094
	Northing:	4889354.00		
	Elev (masl):	252.61		

LOCATION	Lot:	021	Tag:	
	Con:	08	Audit No:	66334
	Municipality:	DURHAM	Contractor License:	1413
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	08-15-1989
	Street:		Received Date:	09-22-1989
WELL	City:	n/a		
	Well Status:	Observation Wells	Well Depth (m):	13.4112
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
PUMP TEST	Boring Method:	Rotary (Convent.)	Water Kind:	FRESH
	Test Method:		Pipe ID:	
	Pump Set (m):		Pump Test ID	
	SWL (ft)		Flowing:	
	Final Level:		Pump Duration (hr):	
	Pump Rate:		Pump Duration (m):	
	Recom. Rate:			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930136611	2	inch	PLASTIC	n/a	44 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FINE SAND	CLAY	n/a	BROWN	0	4 ft
2	CLAY	STONES	SANDY	BROWN	4	6 ft

3	GRAVEL	SAND	LOOSE	BROWN	6	10	ft
4	CLAY	STONES	PACKED	BROWN	10	17	ft
5	SAND	LOOSE	n/a	BROWN	17	44	ft

End of Record

17	Easting: 665134.00		Latitude: 44.138543	Longitude: -78.935512	Well ID: 1910095	
	Northing: 4889333.00					
	Elev (masl): 252.27					
LOCATION	Lot:	021	Tag:			
	Con:	08	Audit No: 66335			
	Municipality:	DURHAM	Contractor License: 1413			
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date: 08-15-1989			
	Street:		Received Date: 09-22-1989			
WELL	City:	n/a				
	Well Status:	Water Supply	Well Depth (m): 86.868			
	Prim. Use:	n/a	Depth to Bedrock (m): 246			
	Sec. Use:	n/a	Depth to Water: ft			
	Boring Method:	Rotary (Reverse)	Water Kind: FRESH			
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10627292			
	Pump Set (m):	n/a	Pump Test ID 991910095			
	SWL (ft)	26	Flowing: N			
	Final Level:	n/a ft	Pump Duration (hr): 3			
	Pump Rate:	6 GPM	Pump Duration (m): 15			
	Recom. Rate:	4 GPM				

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930136612	6	inch	STEEL	n/a	246 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FINE SAND	CLAY	n/a	BROWN	0	4 ft
2	CLAY	STONES	SANDY	BROWN	4	6 ft
3	GRAVEL	SAND	LOOSE	BROWN	6	10 ft
4	CLAY	STONES	PACKED	BROWN	10	17 ft
5	SAND	LOOSE	n/a	BROWN	17	46 ft
6	CLAY	DENSE	n/a	GREY	46	156 ft
7	CLAY	STONES	SILTY	GREY	156	211 ft
8	CLAY	DENSE	n/a	GREY	211	220 ft
9	CLAY	GRAVEL	SILTY	GREY	220	238 ft
10	CLAY	STONES	SILTY	GREY	238	246 ft
11	LIMESTONE	HARD	n/a	GREY	246	285 ft

End of Record

17	Easting: 665130.00		Latitude: 44.138427	Longitude: -78.935566	Well ID: 1910096		
	Northing: 4889320.00						
	Elev (masl): 252.17						
LOCATION	Lot:	021	Tag:				
	Con:	08	Audit No: 66330				
	Municipality:	DURHAM	Contractor License: 1413				
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date: 08-10-1989				
	Street:		Received Date: 09-22-1989				
WELL	City:	n/a					
	Well Status:	Test Hole	Well Depth (m): 80.772				
	Prim. Use:	n/a	Depth to Bedrock (m): 245				
	Sec. Use:	n/a	Depth to Water: ft				
	Boring Method:	Rotary (Convent.)	Water Kind: FRESH				
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10627293				
	Pump Set (m):	n/a	Pump Test ID 991910096				
	SWL (ft)	42	Flowing: N				
	Final Level:	n/a	Pump Duration (hr): 4				

Pump Rate: 30 GPM
Recom. Rate: 15 GPM

Pump Duration (m): 30

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930136613	6	inch	STEEL	n/a	245 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	LOOSE	n/a	BROWN	0	8 ft
2	CLAY	SANDY	n/a	BROWN	8	22 ft
3	SAND	LOOSE	n/a	BROWN	22	24 ft
4	CLAY	PACKED	n/a	BROWN	24	28 ft
5	CLAY	STONES	DENSE	GREY	28	162 ft
6	CLAY	GRAVEL	SILTY	GREY	162	164 ft
7	CLAY	STONES	SILTY	GREY	164	196 ft
8	GRAVEL	SAND	LOOSE	GREY	196	199 ft
9	CLAY	DENSE	n/a	GREY	199	210 ft
10	CLAY	SOFT	n/a	GREY	210	223 ft
11	CLAY	GRAVEL	SANDY	GREY	223	245 ft
12	LIMESTONE	FRACTURED	HARD	GREY	245	265 ft

End of Record

17

Easting:	665084.90
Northing:	4889437.00
Elev (masl):	260.88

Latitude: 44.13949
Longitude: -78.936093

Well ID: **1910383**

LOCATION

Lot: 022
Con: 09
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 73033
Contractor License: 1910
Well Completion Date: 01-11-1990
Received Date: 02-06-1990

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 71.0184
Depth to Bedrock (m): 221
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: n/a
Pump Set (m): n/a
SWL (ft): 35
Final Level: 150 ft
Pump Rate: 5 GPM
Recom. Rate: 4 GPM

Pipe ID: 10627579
Pump Test ID: 991910383
Flowing: N
Pump Duration (hr): 6
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930136904	6	inch	STEEL	n/a	233 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	n/a	n/a	BROWN	0	18 ft
2	SAND	n/a	n/a	BROWN	18	56 ft
3	CLAY	n/a	n/a	GREY	56	175 ft
4	QUICKSAND	n/a	n/a	BROWN	175	188 ft
5	CLAY	n/a	n/a	GREY	188	221 ft
6	SHALE	ROCK	LAYERED	BROWN	221	233 ft

End of Record

17

Easting:	665204.90
Northing:	4889613.00
Elev (masl):	252.33

Latitude: 44.141047
Longitude: -78.934538

Well ID: **1910931**

LOCATION	Lot:		Tag:	
	Con:	08	Audit No:	90796
	Municipality:	DURHAM	Contractor License:	2104
WELL	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	11-29-1990
	Street:		Received Date:	12-10-1990
	City:	n/a		
PUMP TEST	Well Status:	Water Supply	Well Depth (m):	67.056
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Cable Tool	Water Kind:	GAS
	Test Method:	CLEAR	Pipe ID:	10628124
	Pump Set (m):	n/a	Pump Test ID	991910931
	SWL (ft)	90	Flowing:	N
	Final Level:	200 ft	Pump Duration (hr):	3
	Pump Rate:	5 GPM	Pump Duration (m):	0
	Recom. Rate:	5 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930137459	6	inch	STEEL	n/a	216 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BROWN	0	2 ft
2	SAND	CLAY	n/a	BROWN	2	18 ft
3	CLAY	n/a	n/a	GREY	18	185 ft
4	GRAVEL	CLAY	n/a	GREY	185	200 ft
5	GRAVEL	SAND	n/a	BROWN	200	220 ft

End of Record

17	Easting:	665112.90	Latitude:	44.141652	Well ID: 1911112
	Northing:	4889678.00	Longitude:	-78.935667	
	Elev (masl):	262.59			

LOCATION	Lot:	022	Tag:	
	Con:	08	Audit No:	44633
	Municipality:	DURHAM	Contractor License:	2214
WELL	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	05-27-1991
	Street:		Received Date:	07-22-1991
	City:	n/a		
PUMP TEST	Well Status:	Water Supply	Well Depth (m):	12.8016
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Boring	Water Kind:	FRESH
	Test Method:	CLOUDY	Pipe ID:	10628305
	Pump Set (m):	n/a	Pump Test ID	991911112
	SWL (ft)	26	Flowing:	N
	Final Level:	37 ft	Pump Duration (hr):	1
	Pump Rate:	5 GPM	Pump Duration (m):	0
	Recom. Rate:	3 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930137658	24	inch	STEEL	n/a	23 ft
2	930137659	18	inch	STEEL	n/a	42 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	SAND	GRAVEL	n/a	BROWN	1	26 ft
3	SAND	WATER-BEARING	n/a	BROWN	26	42 ft

17	Easting:	665274.90
	Northing:	4889582.00
	Elev (masl):	248.94

Latitude: 44.140752
Longitude: -78.933673

Well ID: **1911122**

LOCATION
Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 71880
Contractor License: 3129
Well Completion Date: 07-19-1991
Received Date: 07-30-1991

WELL
Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 60.96
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: GAS

PUMP TEST
Test Method: CLOUDY
Pump Set (m): n/a
SWL (ft): 10
Final Level: 70 ft
Pump Rate: 10 GPM
Recom. Rate: 5 GPM

Pipe ID: 10628315
Pump Test ID: 991911122
Flowing: N
Pump Duration (hr): 5
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930137671	6	inch	STEEL	n/a	200 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	SOFT	n/a	BLUE	0	2 ft
2	CLAY	SOFT	n/a	GREY	2	195 ft
3	GRAVEL	HARD	n/a	GREY	195	200 ft

17	Easting:	665149.90
	Northing:	4889459.00
	Elev (masl):	254.91

Latitude: 44.139673
Longitude: -78.935274

Well ID: **1911769**

LOCATION
Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 134235
Contractor License: 2104
Well Completion Date: 08-24-1993
Received Date: 09-17-1993

WELL
Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 64.008
Depth to Bedrock (m): 207
Depth to Water: ft
Water Kind: FRESH

PUMP TEST
Test Method: CLEAR
Pump Set (m): n/a
SWL (ft): 30
Final Level: 75 ft
Pump Rate: 50 GPM
Recom. Rate: 40 GPM

Pipe ID: 10628961
Pump Test ID: 991911769
Flowing: N
Pump Duration (hr): 3
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930138377	6	inch	STEEL	n/a	207 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	MEDIUM-GRAINED	BROWN	0	24 ft

2	CLAY	MEDIUM-GRAINED	n/a	GREY	24	180	ft
3	CLAY	GRAVEL	HARD	GREY	180	207	ft
4	LIMESTONE	n/a	n/a	GREY	207	210	ft

End of Record

17

Easting:664837.00

Northing:4888995.00

Elev (masl):260.33

Latitude:44.135569

Longitude:-78.939328

Well ID:1912266

LOCATION

Lot:020

Con:08

Municipality:DURHAM

Township:SCUGOG TOWNSHIP (REACH)

Street:

City:n/a

WELL

Well Status:Observation Wells

Prim. Use:n/a

Sec. Use:n/a

Boring Method:Rotary (Air)

PUMP TEST

Test Method:CLEAR

Pump Set (m):n/a

SWL (ft):25

Final Level:40 ft

Pump Rate:15 GPM

Recom. Rate:8 GPM

Tag:

Audit No:156284

Contractor License:1413

Well Completion Date:12-02-1994

Received Date:01-11-1995

Well Depth (m):14.9352

Depth to Bedrock (m):n/a

Depth to Water:ft

Water Kind:FRESH

Pipe ID:10629456

Pump Test ID:991912266

Flowing:N

Pump Duration (hr):1

Pump Duration (m):0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930138870	6	inch	STEEL	n/a	42 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	GRAVEL	STONES	BROWN	0	36 ft
2	SAND	FINE SAND	CLEAN	GREY	36	49 ft

End of Record

17	Easting: 664887.00		Latitude: 44.136287		Well ID: 1912385		
	Northing: 4889076.00		Longitude: -78.938678				
	Elev (masl): 260.76						
LOCATION	Lot:	020			Tag:		
	Con:	08			Audit No: 154518		
	Municipality:	DURHAM			Contractor License: 2104		
	Township:	SCUGOG TOWNSHIP (REACH)			Well Completion Date: 03-14-1995		
	Street:				Received Date: 04-10-1995		
WELL	City:	n/a					
	Well Status:	Water Supply			Well Depth (m): 69.1896		
	Prim. Use:	n/a			Depth to Bedrock (m): n/a		
	Sec. Use:	n/a			Depth to Water: ft		
	Boring Method:	Cable Tool			Water Kind: Not stated		
PUMP TEST	Test Method:	CLEAR			Pipe ID: 10629575		
	Pump Set (m):	n/a			Pump Test ID 991912385		
	SWL (ft)	16			Flowing: N		
	Final Level:	140 ft			Pump Duration (hr): 4		
	Pump Rate:	8 GPM			Pump Duration (m): 30		
	Recom. Rate:	5 GPM					

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930138992	6	inch	STEEL	n/a	223 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BROWN	0	3 ft
2	CLAY	n/a	n/a	BROWN	3	17 ft
3	CLAY	n/a	n/a	GREY	17	35 ft
4	CLAY	n/a	n/a	GREY	35	174 ft
5	CLAY	SILT	WATER-BEARING	GREY	174	184 ft
6	CLAY	HARD	n/a	GREY	184	208 ft
7	HARDPAN	n/a	n/a	GREY	208	223 ft
8	GRAVEL	SAND	WATER-BEARING	GREY	223	227 ft

End of Record

17	Easting:	664774.00	Latitude: 44.134729 Longitude: -78.940145	Well ID: 1912930
	Northing:	4888900.00		
	Elev (masl):	260.43		
LOCATION	Lot:	021	Tag: Audit No: 173692 Contractor License: 2104 Well Completion Date: 09-25-1996 Received Date: 09-27-1996	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 11.8872 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Cable Tool		
PUMP TEST	Test Method:	CLOUDY	Pipe ID: 10630119 Pump Test ID 991912930 Flowing: N Pump Duration (hr): 3 Pump Duration (m): 30	
	Pump Set (m):	n/a		
	SWL (ft)	7		
	Final Level:	16 ft		
	Pump Rate:	5 GPM		
	Recom. Rate:	4 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930139550	6	inch	STEEL	n/a	39 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BROWN	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	18 ft
3	CLAY	n/a	n/a	GREY	18	38 ft
4	GRAVEL	SAND	n/a	GREY	38	39 ft

End of Record

17	Easting:	664359.00	Latitude: 44.140535 Longitude: -78.945131	Well ID: 1913275
	Northing:	4889535.00		
	Elev (masl):	265.01		
LOCATION	Lot:	022	Tag: Audit No: 180918 Contractor License: 6874 Well Completion Date: 07-10-1997 Received Date: 07-21-1997	
	Con:	09		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 4.8768 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Other Method		
TEST	Test Method:	CLEAR	Pipe ID: 10630463 Pump Test ID 991913275 Flowing: N	
	Pump Set (m):	n/a		
	SWL (ft)			

PUMP	Final Level:	16 ft	Pump Duration (hr):	2
	Pump Rate:	25 GPM	Pump Duration (m):	0
	Recom. Rate:	1 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930139856	36	inch	CONCRETE	n/a	16 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	PREVIOUSLY DUG	CEMENTED	n/a	n/a	0	10 ft
2	CLAY	SANDY	n/a	BLUE	10	16 ft

End of Record

17	Easting:	664359.00	Latitude: 44.140535 Longitude: -78.945131	Well ID: 1913276
	Northing:	4889535.00		
	Elev (masl):	265.01		
LOCATION	Lot:	022	Tag:	
	Con:	09	Audit No:	180911
	Municipality:	DURHAM	Contractor License:	6874
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	07-10-1997
	Street:		Received Date:	07-21-1997
WELL	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	3.9624
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Cable Tool	Water Kind:	FRESH
PUMP TEST	Test Method:	CLEAR	Pipe ID:	10630464
	Pump Set (m):	n/a	Pump Test ID	991913276
	SWL (ft)	8	Flowing:	N
	Final Level:	13 ft	Pump Duration (hr):	2
	Pump Rate:	25 GPM	Pump Duration (m):	0
	Recom. Rate:	1 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930139857	36	inch	CONCRETE	n/a	13 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	PREVIOUSLY DUG	CEMENTED	n/a	n/a	0	10 ft
2	CLAY	n/a	n/a	BLUE	10	13 ft

End of Record

17	Easting:	664359.00	Latitude: 44.140535 Longitude: -78.945131	Well ID: 1913277
	Northing:	4889535.00		
	Elev (masl):	265.01		
LOCATION	Lot:	022	Tag:	
	Con:	09	Audit No:	180910
	Municipality:	DURHAM	Contractor License:	6874
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	07-10-1997
	Street:		Received Date:	07-21-1997
WELL	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	8.8392
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Cable Tool	Water Kind:	FRESH

PUMP TEST

Test Method: CLEAR
 Pump Set (m): n/a
 SWL (ft): 6
 Final Level: 29 ft
 Pump Rate: 25 GPM
 Recom. Rate: 3 GPM

Pipe ID: 10630465
 Pump Test ID: 991913277
 Flowing: N
 Pump Duration (hr): 2
 Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930139858	30	inch	CONCRETE	n/a	15 ft
2	930139859	n/a	inch	STEEL	n/a	29 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	PREVIOUSLY DUG	CEMENTED	n/a	n/a	0	15 ft
2	CLAY	SANDY	n/a	BLUE	15	29 ft

End of Record

17

Easting:	664794.00
Northing:	4888938.00
Elev (masl):	259.43

Latitude: 44.135066
 Longitude: -78.939883

Well ID: **1913920**

LOCATION

Lot: 020
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street:
 City: n/a

Tag:
 Audit No: 186851
 Contractor License: 2104
 Well Completion Date: 01-25-1999
 Received Date: 02-03-1999

WELL

Well Status: Test Hole
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Cable Tool

Well Depth (m): 28.956
 Depth to Bedrock (m): n/a
 Depth to Water:
 Water Kind:

PUMP TEST

Test Method: n/a
 Pump Set (m): n/a
 SWL (ft): n/a
 Final Level: n/a ft
 Pump Rate: n/a GPM
 Recom. Rate: n/a GPM

Pipe ID: 10631081
 Pump Test ID: 991913920
 Flowing: N
 Pump Duration (hr): n/a
 Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930140494	6	inch	STEEL	n/a	90 ft
2	930140495	6	inch	OPEN HOLE	n/a	95 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	CLAY	SOFT	n/a	GREY	1	30 ft
3	SAND	SILT	SOFT	GREY	30	45 ft
4	CLAY	SILT	n/a	GREY	45	95 ft

End of Record

17

Easting:	664794.00
Northing:	4888938.00
Elev (masl):	259.43

Latitude: 44.135066
 Longitude: -78.939883

Well ID: **1913921**

LOCATION

Lot: 020
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street:
 City: n/a

Tag:
 Audit No: 186856
 Contractor License: 2104
 Well Completion Date: 02-05-1999
 Received Date: 02-16-1999

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 70.4088
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 35
Final Level: 60 ft
Pump Rate: 20 GPM
Recom. Rate: 18 GPM

Pipe ID: 10631082
Pump Test ID 991913921
Flowing: N
Pump Duration (hr): 2
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930140496	6	inch	STEEL	n/a	231 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	SAND	STONES	HARD	GREY	1	40 ft
3	CLAY	SILT	n/a	GREY	40	86 ft
4	HARDPAN	CLAY	HARD	GREY	86	120 ft
5	CLAY	STONES	HARD	GREY	120	185 ft
6	CLAY	SILT	n/a	GREY	185	220 ft
7	GRAVEL	SAND	HARDPAN	BROWN	220	231 ft

End of Record

17

Easting: 664547.00
Northing: 4889588.00
Elev (masl): 263.69

Latitude: 44.14097
Longitude: -78.942766

Well ID: **1913981**

LOCATION

Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 188937
Contractor License: 1413
Well Completion Date: 03-30-1999
Received Date: 04-29-1999

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 77.1144
Depth to Bedrock (m): 247
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 38
Final Level: 240 ft
Pump Rate: 20 GPM
Recom. Rate: 10 GPM

Pipe ID: 10631142
Pump Test ID 991913981
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930140555	6	inch	STEEL	n/a	247 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	FINE SAND	n/a	BROWN	0	15 ft
2	SAND	SILT	FINE SAND	GREY	15	30 ft
3	SAND	MEDIUM SAND	n/a	GREY	30	38 ft
4	SAND	CLAY	SILT	GREY	38	78 ft
5	CLAY	STONES	DENSE	GREY	78	183 ft
6	SAND	SILT	FINE SAND	GREY	183	190 ft
7	CLAY	STONES	HARD	GREY	190	240 ft
8	GRAVEL	COARSE GRAVEL	CLEAN	GREY	240	247 ft
9	LIMESTONE	HARD	n/a	GREY	247	253 ft

End of Record

17	Easting:	664547.00
	Northing:	4889588.00
	Elev (masl):	263.69

Latitude: 44.14097
Longitude: -78.942766

Well ID: **1913982**

LOCATION

Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 188938
Contractor License: 1413
Well Completion Date: 03-31-1999
Received Date: 04-29-1999

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 17.6784
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft): 21
Final Level: 53 ft
Pump Rate: 6 GPM
Recom. Rate: 5 GPM

Pipe ID: 10631143
Pump Test ID: 991913982
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930140556	6	inch	STEEL	n/a	53 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	HARD	n/a	BROWN	0	17 ft
2	GRAVEL	COARSE GRAVEL	n/a	BROWN	17	30 ft
3	CLAY	SAND	LAYERED	BROWN	30	50 ft
4	SAND	FINE SAND	n/a	BROWN	50	58 ft

End of Record

17	Easting:	665213.00
	Northing:	4889762.00
	Elev (masl):	254.76

Latitude: 44.142385
Longitude: -78.93439

Well ID: **1913993**

LOCATION

Lot: 004
Con: n/a
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 199677
Contractor License: 6874
Well Completion Date: 04-14-1999
Received Date: 04-23-1999

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 6.096
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft): 6
Final Level: 20 ft
Pump Rate: 25 GPM
Recom. Rate: 1 GPM

Pipe ID: 10631154
Pump Test ID: 991913993
Flowing: N
Pump Duration (hr): 2
Pump Duration (m): 30

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930140568	30	inch	CONCRETE	n/a	20 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	CLEAN	n/a	BROWN	0	20 ft

17	Easting:	665134.00
	Northing:	4889322.00
	Elev (masl):	251.96

Latitude: 44.138444
Longitude: -78.935515

Well ID: **1914028**

LOCATION
Lot: 021
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 202711
Contractor License: 1413
Well Completion Date: 05-05-1999
Received Date: 06-14-1999

WELL
Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 23.7744
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST
Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930140609	6	inch	STEEL	n/a	78 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	HARD	n/a	BROWN	0	57 ft
2	CLAY	SILT	SOFT	GREY	57	73 ft
3	GRAVEL	SILT	CEMENTED	BLACK	73	78 ft

17	Easting:	665160.00
	Northing:	4889435.00
	Elev (masl):	253.01

Latitude: 44.139455
Longitude: -78.935155

Well ID: **1914030**

LOCATION
Lot: 021
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 202712
Contractor License: 1413
Well Completion Date: 05-05-1999
Received Date: 06-14-1999

WELL
Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 14.9352
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST
Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 10
Final Level: 40 ft
Pump Rate: 20 GPM
Recom. Rate: 10 GPM

Pipe ID: 10631191
Pump Test ID 991914030
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930140611	6	inch	STEEL	n/a	46 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	HARD	n/a	BROWN	0	10 ft
2	GRAVEL	COARSE GRAVEL	n/a	BROWN	10	25 ft
3	CLAY	SOFT	n/a	GREY	25	35 ft
4	SAND	FINE SAND	n/a	GREY	35	40 ft
5	SAND	COARSE SAND	n/a	BROWN	40	49 ft

End of Record

17	Easting:	664547.00	Latitude: 44.14097 Longitude: -78.942766	Well ID: 1914149
	Northing:	4889588.00		
	Elev (masl):	263.69		
LOCATION	Lot:	022	Tag: Audit No: 202768 Contractor License: 1413 Well Completion Date: 07-30-1999 Received Date: 08-26-1999	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 125.2728 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Rotary (Air)		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10631310 Pump Test ID: 991914149 Flowing: N Pump Duration (hr): 1 Pump Duration (m): n/a	
	Pump Set (m):	n/a		
	SWL (ft)	10		
	Final Level:	38 ft		
	Pump Rate:	5 GPM		
	Recom. Rate:	5 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930140746	6	inch	STEEL	n/a	38 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	GRAVEL	LOOSE	BROWN	0	20 ft
2	CLAY	SOFT	n/a	GREY	20	37 ft
3	FINE SAND	n/a	n/a	GREY	37	411 ft

End of Record

17	Easting:	665010.30	Latitude: 44.138796 Longitude: -78.937049	Well ID: 1914609
	Northing:	4889358.00		
	Elev (masl):	263.81		
LOCATION	Lot:	022	Tag: Audit No: 199396 Contractor License: 2104 Well Completion Date: 05-16-2000 Received Date: 07-11-2000	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 81.3816 Depth to Bedrock (m): 254 Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Cable Tool		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 10631770 Pump Test ID: 991914609 Flowing: N Pump Duration (hr): 3 Pump Duration (m): 30	
	Pump Set (m):	n/a		
	SWL (ft)	55		
	Final Level:	249 ft		
	Pump Rate:	4 GPM		
	Recom. Rate:	4 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930141198	6	inch	STEEL	n/a	n/a ft
2	930141199	6	inch	OPEN HOLE	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BROWN	0	6 ft
2	STONES	GRAVEL	n/a	BROWN	6	45 ft
3	SAND	n/a	n/a	BROWN	45	63 ft
4	SILT	CLAY	n/a	GREY	63	120 ft
5	GRAVEL	SILT	n/a	GREY	120	254 ft
6	LIMESTONE	ROCK	n/a	GREY	254	267 ft

End of Record

17	Easting:	665010.30	Latitude: 44.138796 Longitude: -78.937049	Well ID: 1914979
	Northing:	4889358.00		
	Elev (masl):	263.81		
LOCATION	Lot:	022	Tag: Audit No: 228907 Contractor License: 5459 Well Completion Date: 02-12-2001 Received Date: 03-16-2001	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 30.48 Depth to Bedrock (m): n/a Depth to Water: Water Kind:	
	Well Status:	Abandoned-Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Not Known		
PUMP TEST	Test Method:		Pipe ID: Pump Test ID Flowing: Pump Duration (hr): Pump Duration (m):	
	Pump Set (m):			
	SWL (ft)			
	Final Level:			
	Pump Rate:			
	Recom. Rate:			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
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FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	2 ft
2	CLAY	SAND	STONES	BROWN	2	16 ft
3	SAND	GRAVEL	CLAY	BROWN	16	38 ft
4	CLAY	SILTY	n/a	GREY	38	62 ft
5	CLAY	STONES	n/a	GREY	62	100 ft

End of Record

17	Easting:	665010.30	Latitude: 44.138796 Longitude: -78.937049	Well ID: 1914980
	Northing:	4889358.00		
	Elev (masl):	263.81		
LOCATION	Lot:	022	Tag: Audit No: 228905 Contractor License: 5459 Well Completion Date: 02-22-2001 Received Date: 03-16-2001	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 24.384 Depth to Bedrock (m): n/a Depth to Water: Water Kind:	
	Well Status:	Abandoned-Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Not Known		

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
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FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	2 ft
2	CLAY	SAND	STONES	BROWN	2	36 ft
3	CLAY	SILTY	n/a	GREY	36	69 ft
4	CLAY	STONES	n/a	GREY	69	80 ft

End of Record

17

Easting: 665010.30
Northing: 4889358.00
Elev (masl): 263.81

Latitude: 44.138796
Longitude: -78.937049

Well ID: **1914981**

LOCATION

Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 228901
Contractor License: 5459
Well Completion Date: 02-21-2001
Received Date: 03-16-2001

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 30.48
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
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FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	n/a	n/a	BROWN	0	6 ft
2	GRAVEL	STONES	n/a	BROWN	6	12 ft
3	CLAY	SAND	n/a	BROWN	12	16 ft
4	SAND	SILT	n/a	BROWN	16	27 ft
5	CLAY	SILT	n/a	GREY	27	53 ft
6	CLAY	n/a	n/a	GREY	53	100 ft

End of Record

17

Easting: 665010.30
Northing: 4889358.00
Elev (masl): 263.81

Latitude: 44.138796
Longitude: -78.937049

Well ID: **1914982**

LOCATION

Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 228906
Contractor License: 5459
Well Completion Date: 02-14-2001
Received Date: 03-16-2001

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 10.9728
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft): 10
Final Level: 20 ft
Pump Rate: 3 GPM
Recom. Rate: 3 GPM

Pipe ID: 10632141
Pump Test ID: 991914982
Flowing: N
Pump Duration (hr): 2
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930141571	6	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	2 ft
2	CLAY	SAND	STONES	BROWN	2	27 ft
3	SAND	SILT	n/a	BROWN	27	33 ft
4	SAND	LOOSE	n/a	BROWN	33	36 ft
5	CLAY	SILTY	n/a	GREY	36	36 ft

End of Record

17

Easting:	665010.30
Northing:	4889358.00
Elev (masl):	263.81

Latitude: 44.138796
Longitude: -78.937049

Well ID: **1914983**

LOCATION

Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 228904
Contractor License: 5459
Well Completion Date: 02-06-2001
Received Date: 03-16-2001

WELL

Well Status: Abandoned-Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Not Known

Well Depth (m): 22.86
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft):
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID:
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
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FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	2 ft
2	CLAY	SAND	STONES	BROWN	2	20 ft
3	SAND	SILT	n/a	BROWN	20	28 ft
4	CLAY	STONE	n/a	GREY	28	75 ft

End of Record

17

Easting:	665010.30
Northing:	4889358.00
Elev (masl):	263.81

Latitude: 44.138796
Longitude: -78.937049

Well ID: **1915058**

ION

Lot: 022
Con:

Tag:
Audit No: 207714

LOCATI	Municipality:	DURHAM	Contractor License:	2214
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	03-12-2001
	Street:		Received Date:	05-04-2001
	City:	n/a		
WELL	Well Status:	Water Supply	Well Depth (m):	9.144
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Boring	Water Kind:	FRESH
PUMP TEST	Test Method:	CLOUDY	Pipe ID:	10632217
	Pump Set (m):	n/a	Pump Test ID	991915058
	SWL (ft)	6	Flowing:	N
	Final Level:	13 ft	Pump Duration (hr):	1
	Pump Rate:	8 GPM	Pump Duration (m):	30
	Recom. Rate:	5 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930141645	36	inch	STEEL	n/a	n/a ft
2	930141646	30	inch	GALVANIZED	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	CLAY	SAND	STONES	BROWN	1	18 ft
3	SAND	n/a	n/a	BROWN	18	22 ft
4	TILL	n/a	n/a	GREY	22	26 ft
5	SAND	GRAVEL	n/a	n/a	26	28 ft
6	CLAY	STONES	n/a	GREY	28	30 ft

End of Record

17	Easting:	665010.30	Latitude: 44.138796 Longitude: -78.937049	Well ID: 1915059
	Northing:	4889358.00		
	Elev (masl):	263.81		

LOCATION	Lot:	022	Tag:	
	Con:	08	Audit No:	207715
	Municipality:	DURHAM	Contractor License:	2214
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	03-16-2001
WELL	Street:		Received Date:	05-04-2001
	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	10.668
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
PUMP TEST	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Boring	Water Kind:	FRESH
	Test Method:	CLOUDY	Pipe ID:	10632218
	Pump Set (m):	n/a	Pump Test ID	991915059
	SWL (ft)	10	Flowing:	N
	Final Level:	15 ft	Pump Duration (hr):	1
	Pump Rate:	8 GPM	Pump Duration (m):	30
	Recom. Rate:	3 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930141647	36	inch	STEEL	n/a	n/a ft
2	930141648	30	inch	GALVANIZED	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	10 ft
3	CLAY	n/a	n/a	BROWN	10	21 ft
4	SAND	n/a	n/a	BROWN	21	28 ft

5	SAND	GRAVEL	n/a	n/a	28	29	ft
6	TILL	n/a	n/a	GREY	29	32	ft
7	SAND	GRAVEL	n/a	n/a	32	35	ft

End of Record

17	Easting:	665010.30	Latitude:	44.138796	Well ID: 1915060
	Northing:	4889358.00	Longitude:	-78.937049	
	Elev (masl):	263.81			
LOCATION	Lot:	022	Tag:		
	Con:	08	Audit No: 194291		
	Municipality:	DURHAM	Contractor License: 2214		
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date: 03-20-2001		
	Street:		Received Date: 05-04-2001		
WELL	City:	n/a			
	Well Status:	Water Supply	Well Depth (m): 9.144		
	Prim. Use:	n/a	Depth to Bedrock (m): n/a		
	Sec. Use:	n/a	Depth to Water: ft		
	Boring Method:	Boring	Water Kind: FRESH		
PUMP TEST	Test Method:	CLOUDY	Pipe ID: 10632219		
	Pump Set (m):	n/a	Pump Test ID 991915060		
	SWL (ft)	6	Flowing: N		
	Final Level:	11 ft	Pump Duration (hr): 1		
	Pump Rate:	8 GPM	Pump Duration (m): 30		
	Recom. Rate:	3 GPM			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930141649	36	inch	STEEL	n/a	n/a ft
2	930141650	30	inch	GALVANIZED	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	23 ft
3	SAND	GRAVEL	n/a	n/a	23	24 ft
4	CLAY	STONES	n/a	GREY	24	29 ft
5	SAND	n/a	n/a	n/a	29	30 ft

End of Record

17

Easting:

665010.30

Northing:

4889358.00

Elev (masl):

263.81

Latitude:

44.138796

Longitude:

-78.937049

Well ID:

1915173

LOCATION

Lot:

022

Con:

08

Municipality:

DURHAM

Township:

SCUGOG TOWNSHIP (REACH)

Street:

City:

n/a

WELL

Well Status:

Water Supply

Prim. Use:

n/a

Sec. Use:

n/a

Boring Method:

Cable Tool

PUMP TEST

Test Method:

CLEAR

Pump Set (m):

n/a

SWL (ft)

35

Final Level:

75 ft

Pump Rate:

20 GPM

Recom. Rate:

15 GPM

Tag:

228961

Audit No:

228961

Contractor License:

5459

Well Completion Date:

07-20-2001

Received Date:

07-26-2001

Well Depth (m):

66.7512

Depth to Bedrock (m):

n/a

Depth to Water:

ft

Water Kind:

FRESH

Pipe ID:

11065719

Pump Test ID

991915173

Flowing:

N

Pump Duration (hr):

1

Pump Duration (m):

30

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
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1 930141728 6 inch STEEL n/a n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	CLAY	n/a	BROWN	0	34 ft
2	CLAY	SOFT	n/a	GREY	34	75 ft
3	CLAY	n/a	n/a	GREY	75	183 ft
4	CLAY	SILT	n/a	GREY	183	186 ft
5	CLAY	HARD	n/a	GREY	186	216 ft
6	MEDIUM SAND	n/a	n/a	GREY	216	219 ft

End of Record

17	Easting:	665010.30	Latitude: 44.138796 Longitude: -78.937049	Well ID: 1915391
	Northing:	4889358.00		
	Elev (masl):	263.81		
LOCATION	Lot:	022	Tag: Audit No: 236583 Contractor License: 7156 Well Completion Date: 09-21-2001 Received Date: 10-05-2001	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 24.384 Depth to Bedrock (m): n/a Depth to Water: Water Kind:	
	Well Status:	Unfinished		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Cable Tool		
PUMP TEST	Test Method:	n/a	Pipe ID: 11065933 Pump Test ID: 991915391 Flowing: N Pump Duration (hr): n/a Pump Duration (m): n/a	
	Pump Set (m):	n/a		
	SWL (ft)	n/a		
	Final Level:	n/a ft		
	Pump Rate:	n/a GPM		
	Recom. Rate:	n/a GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930141940	6	inch	STEEL	n/a	n/a ft
2	930141941	6	inch	STEEL	n/a	n/a ft
3	930141942	6	inch	OPEN HOLE	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	SILT	CLAY	n/a	GREY	1	38 ft
3	CLAY	SILT	n/a	GREY	38	80 ft

End of Record

17	Easting:	665010.30	Latitude: 44.138796 Longitude: -78.937049	Well ID: 1915392
	Northing:	4889358.00		
	Elev (masl):	263.81		
LOCATION	Lot:	022	Tag: Audit No: 236582 Contractor License: 7156 Well Completion Date: 09-17-2001 Received Date: 10-05-2001	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:			
WELL	City:	n/a	Well Depth (m): 14.6304 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Cable Tool		
TEST	Test Method:	CLOUDY	Pipe ID: 11065934 Pump Test ID: 991915392 Flowing: N	
	Pump Set (m):	n/a		
	SWL (ft)			

PUMP	Final Level:	25 ft	Pump Duration (hr):	4
	Pump Rate:	12 GPM	Pump Duration (m):	0
	Recom. Rate:	5 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930141943	6	inch	STEEL	n/a	n/a ft
2	930141944	6	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	SILT	CLAY	SOFT	GREY	1	44 ft
3	SAND	SILT	HARD	BROWN	44	48 ft

End of Record

17	Easting:	665010.30	Latitude:	44.138796	Well ID: 1915393
	Northing:	4889358.00	Longitude:	-78.937049	
	Elev (masl):	263.81			

LOCATION	Lot:	022	Tag:	
	Con:	08	Audit No:	236581
	Municipality:	DURHAM	Contractor License:	7156
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	09-10-2001
	Street:		Received Date:	10-05-2001
City:	n/a			

WELL	Well Status:	Abandoned-Other	Well Depth (m):	27.432
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	
	Boring Method:	Cable Tool	Water Kind:	

PUMP TEST	Test Method:		Pipe ID:	
	Pump Set (m):		Pump Test ID	
	SWL (ft)		Flowing:	
	Final Level:		Pump Duration (hr):	
	Pump Rate:		Pump Duration (m):	
Recom. Rate:				

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
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FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	SOFT	n/a	BLACK	0	1 ft
2	SILT	SOFT	n/a	GREY	1	10 ft
3	CLAY	SILT	SOFT	GREY	10	55 ft
4	CLAY	STONES	SOFT	GREY	55	90 ft

End of Record

17	Easting:	665010.30	Latitude:	44.138796	Well ID: 1915669
	Northing:	4889358.00	Longitude:	-78.937049	
	Elev (masl):	263.81			

LOCATION	Lot:	022	Tag:	
	Con:	08	Audit No:	210862
	Municipality:	DURHAM	Contractor License:	3108
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	03-16-2002
	Street:		Received Date:	04-15-2002
City:	n/a			

WELL	Well Status:	Water Supply	Well Depth (m):	82.296
	Prim. Use:	n/a	Depth to Bedrock (m):	248
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Rotary (Convent.)	Water Kind:	Not stated

PUMP TEST

Test Method: CLOUDY
 Pump Set (m): n/a
 SWL (ft): 35
 Final Level: 67 ft
 Pump Rate: 9 GPM
 Recom. Rate: 7 GPM

Pipe ID: 11072901
 Pump Test ID: 991915669
 Flowing: N
 Pump Duration (hr): 1
 Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930142219	5	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FINE SAND	n/a	n/a	BROWN	0	15 ft
2	CLAY	SAND	LAYERED	BROWN	15	37 ft
3	SAND	n/a	n/a	BROWN	37	46 ft
4	CLAY	n/a	n/a	BROWN	46	53 ft
5	SAND	GRAVEL	n/a	n/a	53	61 ft
6	CLAY	HARD	n/a	GREY	61	220 ft
7	CLAY	STONES	n/a	GREY	220	242 ft
8	GRAVEL	n/a	n/a	n/a	242	248 ft
9	LIMESTONE	HARD	n/a	GREY	248	270 ft

End of Record

17

Easting: 665010.30
 Northing: 4889358.00
 Elev (masl): 263.81

Latitude: 44.138796
 Longitude: -78.937049

Well ID: **1915670**

LOCATION

Lot: 022
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street:
 City: n/a

Tag:
 Audit No: 210861
 Contractor License: 3108
 Well Completion Date: 03-04-2002
 Received Date: 04-15-2002

WELL

Well Status: Water Supply
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Rotary (Convent.)

Well Depth (m): 82.296
 Depth to Bedrock (m): 255
 Depth to Water: ft
 Water Kind: MINERIAL

PUMP TEST

Test Method: CLEAR
 Pump Set (m): n/a
 SWL (ft): 54
 Final Level: 114 ft
 Pump Rate: 14 GPM
 Recom. Rate: 10 GPM

Pipe ID: 11072902
 Pump Test ID: 991915670
 Flowing: N
 Pump Duration (hr): 1
 Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930142220	6	inch	STEEL	n/a	n/a ft
2	930142221	5	inch	STEEL	n/a	n/a ft
3	930142222	5	inch	OPEN HOLE	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	PREV. DRILLED	n/a	n/a	n/a	0	75 ft
2	CLAY	n/a	n/a	GREY	75	215 ft
3	CLAY	SAND	LAYERED	GREY	215	228 ft
4	CLAY	GRAVEL	n/a	GREY	228	255 ft
5	LIMESTONE	n/a	n/a	GREY	255	270 ft

End of Record

17

Easting: 665010.30
 Northing: 4889358.00
 Elev (masl):

Latitude: 44.138796
 Longitude: -78.937049

Well ID: **1915671**

LOCATION	Lot:	022	263.81	Tag:	
	Con:	08		Audit No:	210865
	Municipality:	DURHAM		Contractor License:	3108
	Township:	SCUGOG TOWNSHIP (REACH)		Well Completion Date:	04-03-2002
	Street:			Received Date:	04-15-2002
WELL	City:	n/a			
	Well Status:	Water Supply		Well Depth (m):	30.48
	Prim. Use:	n/a		Depth to Bedrock (m):	n/a
	Sec. Use:	n/a		Depth to Water:	ft
PUMP TEST	Boring Method:	Rotary (Convent.)		Water Kind:	Not stated
	Test Method:	CLEAR		Pipe ID:	11072903
	Pump Set (m):	n/a		Pump Test ID	991915672
	SWL (ft)	14		Flowing:	N
	Final Level:	25 ft		Pump Duration (hr):	n/a
	Pump Rate:	2 GPM		Pump Duration (m):	40
	Recom. Rate:	2 GPM			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930142223	6	inch	STEEL	n/a	n/a ft
2	930142224	5	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TILL	n/a	n/a	n/a	0	1 ft
2	CLAY	n/a	n/a	BROWN	1	20 ft
3	FINE SAND	n/a	n/a	BROWN	20	30 ft
4	COARSE SAND	n/a	n/a	BROWN	30	38 ft
5	CLAY	SAND	SOFT	BLUE	38	41 ft
6	CLAY	SAND	SOFT	BROWN	41	71 ft
7	CLAY	n/a	n/a	BLUE	71	100 ft

End of Record

17	Easting:	665010.30	Latitude:	44.138796	Well ID: 1915672
	Northing:	4889358.00	Longitude:	-78.937049	
	Elev (masl):	263.81			

LOCATION	Lot:	022	Tag:	
	Con:	08	Audit No:	210866
	Municipality:	DURHAM	Contractor License:	3108
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	04-05-2002
	Street:		Received Date:	04-15-2002
WELL	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	24.384
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
PUMP TEST	Boring Method:	Rotary (Convent.)	Water Kind:	FRESH
	Test Method:	CLEAR	Pipe ID:	11072904
	Pump Set (m):	n/a	Pump Test ID	991915672
	SWL (ft)	14	Flowing:	N
	Final Level:	39 ft	Pump Duration (hr):	1
	Pump Rate:	5 GPM	Pump Duration (m):	0
	Recom. Rate:	5 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930142225	6	inch	STEEL	n/a	n/a ft
2	930142226	5	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
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1	TILL	n/a	n/a	n/a	0	1	ft
2	CLAY	n/a	n/a	BROWN	1	23	ft
3	CLAY	HARD	n/a	BLUE	23	33	ft
4	FINE SAND	n/a	n/a	BROWN	33	50	ft
5	COARSE SAND	n/a	n/a	BROWN	50	65	ft
6	CLAY	n/a	n/a	BLUE	65	80	ft

End of Record

17	Easting:	665010.30
	Northing:	4889358.00
	Elev (masl):	263.81

Latitude: 44.138796
Longitude: -78.937049

Well ID: **1915673**

LOCATION
Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 210867
Contractor License: 3108
Well Completion Date: 03-29-2002
Received Date: 04-15-2002

WELL
Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Convent.)

Well Depth (m): 30.48
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: Not stated

PUMP TEST
Test Method: CLEAR
Pump Set (m): n/a
SWL (ft): 20
Final Level: 29 ft
Pump Rate: 3 GPM
Recom. Rate: 3 GPM

Pipe ID: 11072905
Pump Test ID: 991915673
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930142227	6	inch	STEEL	n/a	n/a ft
2	930142228	5	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TILL	n/a	n/a	n/a	0	1 ft
2	CLAY	n/a	n/a	BROWN	1	32 ft
3	SAND	n/a	n/a	BROWN	32	42 ft
4	CLAY	HARD	n/a	BLUE	42	50 ft
5	SAND	n/a	n/a	BROWN	50	58 ft
6	CLAY	SOFT	n/a	BROWN	58	63 ft
7	GRAVEL	n/a	n/a	n/a	63	72 ft
8	CLAY	n/a	n/a	BLUE	72	100 ft

End of Record

17	Easting:	665010.30
	Northing:	4889358.00
	Elev (masl):	263.81

Latitude: 44.138796
Longitude: -78.937049

Well ID: **1915674**

LOCATION
Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 210864
Contractor License: 3108
Well Completion Date: 02-23-2002
Received Date: 04-25-2002

WELL
Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Convent.)

Well Depth (m): 24.384
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: Not stated

TEST
Test Method: CLEAR
Pump Set (m): n/a
SWL (ft)

Pipe ID: 11072906
Pump Test ID: 991915674
Flowing: N

PUMP	Final Level:	38 ft	Pump Duration (hr):	1
	Pump Rate:	8 GPM	Pump Duration (m):	0
	Recom. Rate:	8 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930142229	6	inch	STEEL	n/a	n/a ft
2	930142230	5	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	GRAVEL	n/a	n/a	n/a	0	30 ft
2	CLAY	SAND	GRAVEL	BROWN	30	48 ft
3	SAND	n/a	n/a	BROWN	48	65 ft
4	CLAY	SAND	LAYERED	BROWN	65	80 ft

End of Record

17	Easting:	665010.30	Latitude: 44.138796 Longitude: -78.937049	Well ID: 1915864
	Northing:	4889358.00		
	Elev (masl):	263.81		
LOCATION	Lot:	022	Tag: Audit No: 238391 Contractor License: 5459 Well Completion Date: 06-14-2002 Received Date: 06-21-2002	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
WELL	Street:		Well Depth (m): 12.192 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	City:	n/a		
	Well Status:	Water Supply		
	Prim. Use:	n/a		
PUMP TEST	Sec. Use:	n/a	Pipe ID: 11073096 Pump Test ID: 991915864 Flowing: N Pump Duration (hr): 1 Pump Duration (m): 30	
	Boring Method:	Cable Tool		
	Test Method:	n/a		
	Pump Set (m):	n/a		
	SWL (ft)	8		
	Final Level:	30 ft		
	Pump Rate:	4 GPM		
	Recom. Rate:	4 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930142333	6	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	19 ft
2	CLAY	SOFT	n/a	BROWN	19	32 ft
3	FINE SAND	n/a	n/a	BROWN	32	40 ft

End of Record

17	Easting:	665010.30	Latitude: 44.138796 Longitude: -78.937049	Well ID: 1915866
	Northing:	4889358.00		
	Elev (masl):	263.81		
LOCATION	Lot:	022	Tag: Audit No: 238384 Contractor License: 5459 Well Completion Date: 05-29-2002 Received Date: 06-07-2002	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
WELL	Street:		Well Depth (m): 11.5824 Depth to Bedrock (m): n/a Depth to Water: ft	
	City:	n/a		
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:			

Boring Method: Cable Tool

Water Kind: FRESH

Test Method: n/a
Pump Set (m): n/a
SWL (ft) 18
Final Level: 30 ft
Pump Rate: 5 GPM
Recom. Rate: 4 GPM

Pipe ID: 11073098
Pump Test ID 991915866
Flowing: N
Pump Duration (hr): 2
Pump Duration (m): 30

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930142336	6	inch	STEEL	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	STONES	SAND	n/a	BROWN	0	18 ft
2	CLAY	SAND	n/a	BROWN	18	30 ft
3	MEDIUM SAND	n/a	n/a	BROWN	30	38 ft

End of Record

17	Easting:	664584.00	Latitude:	44.135104
	Northing:	4888937.00	Longitude:	-78.942507
	Elev (masl):	267.94		

Well ID: 1916512

Lot: 021
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:
City: n/a

Tag:
Audit No: 255539
Contractor License: 1413
Well Completion Date: 05-15-2003
Received Date: 06-16-2003

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 78.3336
Depth to Bedrock (m): 244
Depth to Water: ft
Water Kind: FRESH

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 40
Final Level: 120 ft
Pump Rate: 100 GPM
Recom. Rate: 8 GPM

Pipe ID: 11086653
Pump Test ID 991916512
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930142893	6	inch	STEEL	n/a	244 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	CLAY	LAYERED	BROWN	0	50 ft
2	CLAY	DENSE	n/a	GREY	50	235 ft
3	CLAY	STONES	HARD	GREY	235	244 ft
4	LIMESTONE	HARD	n/a	GREY	244	250 ft
5	LIMESTONE	LOOSE	n/a	GREY	250	257 ft

End of Record

17	Easting:	664584.00	Latitude:	44.135104
	Northing:	4888937.00	Longitude:	-78.942507
	Elev (masl):	267.94		

Well ID: 1916513

Lot: 021
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street:

Tag:
Audit No: 255535
Contractor License: 1413
Well Completion Date: 05-01-2003
Received Date:

L	City:	n/a	06-16-2003
	Well Status:	Water Supply	Well Depth (m): 84.4296
	Prim. Use:	n/a	Depth to Bedrock (m): 267
	Sec. Use:	n/a	Depth to Water: ft
WELL	Boring Method:	Rotary (Air)	Water Kind: FRESH
	Test Method:	CLEAR	Pipe ID: 11086654
	Pump Set (m):	n/a	Pump Test ID: 991916513
	SWL (ft)	30	Flowing: N
PUMP TEST	Final Level:	277 ft	Pump Duration (hr): 1
	Pump Rate:	100 GPM	Pump Duration (m): 0
	Recom. Rate:	10 GPM	

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930142894	6	inch	STEEL	n/a	267 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	PACKED	n/a	BROWN	0	37 ft
2	CLAY	SILT	PACKED	GREY	37	95 ft
3	CLAY	DENSE	n/a	GREY	95	260 ft
4	GRAVEL	SAND	LOOSE	GREY	260	267 ft
5	LIMESTONE	HARD	n/a	GREY	267	277 ft

End of Record

17	Easting:	664584.30	Latitude: 44.135113 Longitude: -78.942503	Well ID: 1916948
	Northing:	4888938.00		
	Elev (masl):	267.92		

LOCATION	Lot:	021	Tag:	
	Con:	08	Audit No:	256069
	Municipality:	DURHAM	Contractor License:	1455
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	06-04-2003
WELL	Street:		Received Date:	03-11-2004
	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	77.724
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
PUMP TEST	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Cable Tool	Water Kind:	FRESH
	Test Method:	CLEAR	Pipe ID:	11101431
	Pump Set (m):	n/a	Pump Test ID:	991916948
	SWL (ft)	40	Flowing:	N
	Final Level:	120 ft	Pump Duration (hr):	2
	Pump Rate:	10 GPM	Pump Duration (m):	0
	Recom. Rate:	5 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930832618	6	inch	STEEL	n/a	188 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	28 ft
3	CLAY	SANDY	n/a	BROWN	28	85 ft
4	CLAY	STONES	n/a	GREY	85	229 ft
5	SAND	CLAY	n/a	n/a	229	250 ft
6	SAND	GRAVEL	n/a	n/a	250	255 ft

End of Record

17	Easting:	664584.30	Latitude: 44.135113 Longitude: -78.942503	Well ID: 1916951	
	Northing:	4888938.00			
	Elev (masl):	267.92			
LOCATION	Lot:	021	Tag:		
	Con:	08	Audit No:		256054
	Municipality:	DURHAM	Contractor License:		1455
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:		05-09-2003
	Street:		Received Date:		03-11-2004
WELL	City:	n/a			
	Well Status:	Water Supply	Well Depth (m):	75.5904	
	Prim. Use:	n/a	Depth to Bedrock (m):	224	
	Sec. Use:	n/a	Depth to Water:	ft	
PUMP TEST	Boring Method:	Cable Tool	Water Kind:	FRESH	
	Test Method:	CLEAR	Pipe ID:	11101434	
	Pump Set (m):	n/a	Pump Test ID	991916951	
	SWL (ft)	45	Flowing:	N	
	Final Level:	62 ft	Pump Duration (hr):	4	
	Pump Rate:	10 GPM	Pump Duration (m):	0	
	Recom. Rate:	5 GPM			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930832621	6	inch	STEEL	n/a	244 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BROWN	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	24 ft
3	CLAY	SANDY	n/a	BROWN	24	70 ft
4	CLAY	STONES	n/a	GREY	70	224 ft
5	CLAY	SHALE	n/a	GREY	224	234 ft
6	GRAVEL	SAND	n/a	n/a	234	248 ft

End of Record

17	Easting:	664584.30	Latitude:	44.135113	Well ID:	1916952
	Northing:	4888938.00	Longitude:	-78.942503		
	Elev (masl):	267.92				
LOCATION	Lot:	021	Tag:			
	Con:	08	Audit No: 256055			
	Municipality:	DURHAM	Contractor License: 1455			
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date: 04-25-2003			
	Street:		Received Date: 03-11-2004			
WELL	City:	n/a				
	Well Status:	Abandoned-Supply	Well Depth (m):	0		
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a		
	Sec. Use:	n/a	Depth to Water:			
	Boring Method:	Cable Tool	Water Kind:			
PUMP TEST	Test Method:		Pipe ID:			
	Pump Set (m):		Pump Test ID			
	SWL (ft)		Flowing:			
	Final Level:		Pump Duration (hr):			
	Pump Rate:		Pump Duration (m):			
	Recom. Rate:					

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
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FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
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End of Record

17

Easting:

664955.00

Northing:

4889100.00

Elev (masl):

257.98

Latitude:

44.136487

Longitude:

-78.937821

Well ID:

1917895

LOCATION

Lot:

019

Con:

07

Municipality:

DURHAM

Township:

SCUGOG TOWNSHIP (REACH)

Street:

96 CAURKERS COVE

City:

PORT PERRY

WELL

Well Status:

Water Supply

Prim. Use:

n/a

Sec. Use:

n/a

Boring Method:

Rotary (Air)

PUMP TEST

Test Method:

CLOUDY

Pump Set (m):

210

SWL (ft)

33

Final Level:

138.ft

Pump Rate:

12 GPM

Recom. Rate:

n/a GPM

Tag:

A032908

Audit No:

Z35782

Contractor License:

5459

Well Completion Date:

11-01-2005

Received Date:

11-24-2005

Well Depth (m):

70.104

Depth to Bedrock (m):

n/a

Depth to Water:

ft

Water Kind:

FRESH

Pipe ID:

11332340

Pump Test ID

11346413

Flowing:

n/a

Pump Duration (hr):

1

Pump Duration (m):

n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930857345	6	inch	STEEL	0	223 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	n/a	LOOSE	BROWN	0	55 ft
2	CLAY	CLAY	SOFT	GREY	55	207 ft
3	GRAVEL	SILTY	LOOSE	GREY	207	230 ft

End of Record

17	Easting:	664532.00	Latitude: 44.136825 Longitude: -78.943097	Well ID: 1918410	
	Northing:	4889127.00			
	Elev (masl):	267.01			
LOCATION	Lot:	020	Tag:		A032779
	Con:	08	Audit No:		Z54701
	Municipality:	DURHAM	Contractor License:		5459
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:		08-10-2006
	Street:	CLYDE COURT	Received Date:		10-04-2006
WELL	City:	REACH			
	Well Status:	Water Supply	Well Depth (m):		17.0688
	Prim. Use:	n/a	Depth to Bedrock (m):		n/a
	Sec. Use:	n/a	Depth to Water:		ft
PUMP TEST	Boring Method:	Rotary (Air)	Water Kind:		FRESH
	Test Method:	CLEAR	Pipe ID:		11696968
	Pump Set (m):	35	Pump Test ID		11701621
	SWL (ft)	10.8	Flowing:		n/a
	Final Level:	32.5m	Pump Duration (hr):		1
	Pump Rate:	7.5 LPM	Pump Duration (m):		0
	Recom. Rate:	n/a LPM			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930887112	6	inch	STEEL	0	49 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	8 ft
2	SILT	GRAVEL	STONES	BROWN	8	26 ft
3	CLAY	STONES	n/a	GREY	26	30 ft
4	FINE SAND	n/a	n/a	BROWN	30	56 ft

End of Record

17	Easting: 664585.00		Latitude: 44.135923 Longitude: -78.942466	Well ID: 1918411
	Northing: 4889028.00			
	Elev (masl): 266.90			
LOCATION	Lot:	020	Tag:	A032770
	Con:	08	Audit No:	Z54702
	Municipality:	DURHAM	Contractor License:	5459
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	08-09-2006
	Street:	CLYDE COURT	Received Date:	10-04-2006
WELL	City:	REACH		
	Well Status:	Water Supply	Well Depth (m):	254
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	m
	Boring Method:	Rotary (Air)	Water Kind:	GAS
PUMP TEST	Test Method:	CLEAR	Pipe ID:	11696969
	Pump Set (m):	230	Pump Test ID	11701622
	SWL (ft)	53.5	Flowing:	n/a
	Final Level:	80.4m	Pump Duration (hr):	1
	Pump Rate:	8 LPM	Pump Duration (m):	0
	Recom. Rate:	n/a LPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930887113	6	cm	STEEL	0	249 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FILL	n/a	n/a	BROWN	0	10 m
2	CLAY	STONES	n/a	GREY	10	26 m
3	CLAY	STONES	SILT	GREY	26	55 m
4	CLAY	STONES	n/a	GREY	55	109 m
5	SAND	GRAVEL	SILT	BROWN	109	125 m
6	CLAY	STONES	n/a	GREY	125	232 m
7	SILT	STONES	CLAY	BROWN	232	250 m
8	GRAVEL	SAND	n/a	GREY	250	254 m

End of Record

17	Easting:	647656.80	Latitude: 44.138422 Longitude: -78.952757	Well ID: 4602276	
	Northing:	4909428.00			
	Elev (masl):	272.70			
LOCATION	Lot:	020	Tag:		
	Con:	08	Audit No:		
	Municipality:	DURHAM	Contractor License:		2518
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:		12-07-1962
	Street:		Received Date:		01-07-1963
WELL	City:	n/a			
	Well Status:	Water Supply	Well Depth (m):		17.6784
	Prim. Use:	n/a	Depth to Bedrock (m):		n/a
	Sec. Use:	n/a	Depth to Water:		ft
	Boring Method:	Cable Tool	Water Kind:		FRESH
TEST	Test Method:	CLEAR	Pipe ID:		10842211
	Pump Set (m):	n/a	Pump Test ID		994602276
	SWL (ft)		Flowing:		

PUMP	Final Level:	23 ft	Pump Duration (hr):	6
	Pump Rate:	6 GPM	Pump Duration (m):	0
	Recom. Rate:	4 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930485714	6	inch	STEEL	n/a	58 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	2 ft
2	CLAY	STONES	n/a	BLUE	2	50 ft
3	GRAVEL	COARSE SAND	n/a	n/a	50	58 ft

End of Record

17	Easting:	647550.80	Latitude: 44.142173 Longitude: -78.934086	Well ID: 4602277
	Northing:	4909685.00		
	Elev (masl):	252.71		
LOCATION	Lot:	022	Tag:	
	Con:	08	Audit No:	
	Municipality:	DURHAM	Contractor License:	3102
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	04-26-1967
	Street:		Received Date:	06-26-1967
WELL	City:	n/a		
	Well Status:	Water Supply	Well Depth (m):	8.2296
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
PUMP TEST	Boring Method:	Boring	Water Kind:	FRESH
	Test Method:	CLEAR	Pipe ID:	10842212
	Pump Set (m):	n/a	Pump Test ID	994602277
	SWL (ft)	19	Flowing:	N
	Final Level:	n/a ft	Pump Duration (hr):	n/a
	Pump Rate:	3 GPM	Pump Duration (m):	n/a
	Recom. Rate:	2 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930485715	30	inch	CONCRETE	n/a	27 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	CLAY	n/a	n/a	BROWN	1	23 ft
3	COARSE SAND	n/a	n/a	n/a	23	27 ft

End of Record

17	Easting:	653680.80	Latitude: 44.136157 Longitude: -78.945972	Well ID: 4603671
	Northing:	4867341.00		
	Elev (masl):	267.09		
LOCATION	Lot:	021		Tag:
	Con:	08		Audit No:
	Municipality:	DURHAM		Contractor License: 5412
	Township:	SCUGOG TOWNSHIP (REACH)		Well Completion Date: 09-04-1962
	Street:			Received Date: 09-20-1962
WELL	City:	n/a		
	Well Status:	Water Supply		Well Depth (m): 7.62
	Prim. Use:	n/a		Depth to Bedrock (m): n/a
	Sec. Use:	Domestic		Depth to Water: ft
	Boring Method:	Boring		Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
 Pump Set (m): n/a
 SWL (ft): 10
 Final Level: n/a ft
 Pump Rate: n/a GPM
 Recom. Rate: 3 GPM

Pipe ID: 10843598
 Pump Test ID: 994603671
 Flowing: N
 Pump Duration (hr): n/a
 Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930487217	30	inch	CONCRETE	n/a	25 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	n/a	n/a	BROWN	0	10 ft
2	CLAY	n/a	n/a	BLUE	10	15 ft
3	MEDIUM SAND	n/a	n/a	n/a	15	25 ft

End of Record

17

Easting:	644914.80
Northing:	4934374.00
Elev (masl):	249.56

Latitude: 44.140323
 Longitude: -78.934376

Well ID: **4605066**

LOCATION

Lot: 022
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street:
 City: n/a

Tag:
 Audit No:
 Contractor License: 1556
 Well Completion Date: 08-23-1971
 Received Date: 02-11-1972

WELL

Well Status: Water Supply
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Boring

Well Depth (m): 3.048
 Depth to Bedrock (m): n/a
 Depth to Water: ft
 Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
 Pump Set (m): n/a
 SWL (ft): 5
 Final Level: 9 ft
 Pump Rate: 3 GPM
 Recom. Rate: 3 GPM

Pipe ID: 10844958
 Pump Test ID: 994605066
 Flowing: N
 Pump Duration (hr): 0
 Pump Duration (m): 45

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930488772	30	inch	CONCRETE	n/a	10 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	MEDIUM SAND	n/a	n/a	BROWN	1	5 ft
3	MEDIUM SAND	GRAVEL	n/a	BROWN	5	8 ft
4	MEDIUM SAND	n/a	n/a	BROWN	8	9 ft
5	MUCK	n/a	n/a	BLUE	9	10 ft

End of Record

17

Easting:	661318.90
Northing:	4867867.00
Elev (masl):	250.96

Latitude: 44.140766
 Longitude: -78.93446

Well ID: **4605672**

LOCATION

Lot: 022
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street:
 City: n/a

Tag:
 Audit No:
 Contractor License: 2214
 Well Completion Date: 10-09-1973
 Received Date: 01-07-1974

WELL

Well Status: Water Supply
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Boring

Well Depth (m): 7.0104
 Depth to Bedrock (m): n/a
 Depth to Water: ft
 Water Kind: FRESH

PUMP TEST

Test Method: CLOUDY
 Pump Set (m): n/a
 SWL (ft): 10
 Final Level: 22 ft
 Pump Rate: 5 GPM
 Recom. Rate: 3 GPM

Pipe ID: 10845555
 Pump Test ID: 994605672
 Flowing: N
 Pump Duration (hr): 1
 Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930489482	30	inch	CONCRETE	n/a	23 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	10 ft
3	SAND	n/a	n/a	BROWN	10	23 ft

End of Record

17

Easting:	632049.00
Northing:	4840293.00
Elev (masl):	267.00

Latitude: 44.136426
 Longitude: -78.942436

Well ID: **7034476**

LOCATION

Lot: 020
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street: CLYDE COURT
 City: REACH

Tag: A032771
 Audit No: Z54703
 Contractor License: 5459
 Well Completion Date: 08-07-2006
 Received Date: 10-04-2006

WELL

Well Status: Water Supply
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Rotary (Air)

Well Depth (m): 61
 Depth to Bedrock (m): n/a
 Depth to Water: m
 Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
 Pump Set (m): 40
 SWL (ft): 12.2
 Final Level: 33.4m
 Pump Rate: 7 LPM
 Recom. Rate: n/a LPM

Pipe ID: 11768462
 Pump Test ID: 11776054
 Flowing: n/a
 Pump Duration (hr): 1
 Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	930892904	6	cm	STEEL	0	49 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	5 m
2	GRAVEL	SILT	SAND	BROWN	5	20 m
3	CLAY	STONES	n/a	GREY	20	25 m
4	FINE SAND	n/a	n/a	BROWN	25	61 m

End of Record

17

Easting:	664419.00
Northing:	4888938.00
Elev (masl):	268.38

Latitude: 44.13515
 Longitude: -78.944568

Well ID: **7052126**

LOCATION

Lot: 022
 Con: 09
 Municipality:

Tag: A061083
 Audit No: Z61034
 Contractor License: 5459

LOCAL	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	10-01-2007
	Street:	CLYDE COURT	Received Date:	11-05-2007
	City:	PORT PERRY		
WELL	Well Status:	Water Supply	Well Depth (m):	75.5904
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
PUMP TEST	Boring Method:	Rotary (Air)	Water Kind:	Not stated
	Test Method:	CLEAR	Pipe ID:	1000041097
	Pump Set (m):	230	Pump Test ID	1000041098
	SWL (ft)	67.2	Flowing:	n/a
	Final Level:	71.3ft	Pump Duration (hr):	1
	Pump Rate:	7.5 GPM	Pump Duration (m):	n/a
	Recom. Rate:	n/a GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
0	1000041111	6	inch	STEEL	n/a	244 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	SILT	HARD	BROWN	0	18 ft
2	GRAVEL	SILT	HARD	BROWN	18	30 ft
3	CLAY	SILT	LAYERED	GREY	30	60 ft
4	CLAY	SILT	HARD	GREY	60	88 ft
5	CLAY	STONES	DENSE	GREY	88	205 ft
6	SILT	CLAY	LAYERED	GREY	205	212 ft
7	FINE SAND	SILT	PACKED	BROWN	212	218 ft
8	CLAY	SILT	SOFT	GREY	218	245 ft
9	GRAVEL	SAND	HARD	GREY	245	248 ft

End of Record

17	Easting:	664707.00	Latitude: 44.135131 Longitude: -78.940969	Well ID: 7052127
	Northing:	4888943.00		
	Elev (masl):	264.78		

LOCATION	Lot:	022	Tag:	A064972
	Con:	09	Audit No:	Z61033
	Municipality:	DURHAM	Contractor License:	5459
WELL	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	10-02-2007
	Street:	CLYDE COURT	Received Date:	11-05-2007
	City:	PORT PERRY		
PUMP TEST	Well Status:	Water Supply	Well Depth (m):	16.1544
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Rotary (Air)	Water Kind:	FRESH
	Test Method:	CLEAR	Pipe ID:	1000041209
	Pump Set (m):	40	Pump Test ID	1000041210
	SWL (ft)	17.4	Flowing:	n/a
	Final Level:	21 ft	Pump Duration (hr):	1
	Pump Rate:	7.5 GPM	Pump Duration (m):	n/a
	Recom. Rate:	10 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
0	1000041221	6	inch	STEEL	n/a	46 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FILL	PACKED	n/a	BROWN	0	10 ft
2	GRAVEL	SILT	HARD	BROWN	10	20 ft
3	CLAY	STONES	HARD	GREY	20	27 ft

4 FINE SAND LOOSE n/a BROWN 27 53 ft

End of Record

17	Easting:	664346.00	Latitude: 44.137848 Longitude: -78.945387	Well ID: 7052135
	Northing:	4889236.00		
	Elev (masl):	265.67		
LOCATION	Lot:	022	Tag: A064975 Audit No: Z61041 Contractor License: 5459 Well Completion Date: 10-11-2007 Received Date: 11-05-2007	
	Con:	08		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:	CLYDE COURT		
WELL	City:	PORT PERRY		
	Well Status:	Water Supply	Well Depth (m): 72.8472 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: Not stated	
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Rotary (Air)		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 1000042509 Pump Test ID 1000042510 Flowing: n/a Pump Duration (hr): 1 Pump Duration (m): n/a	
	Pump Set (m):	220		
	SWL (ft)	58		
	Final Level:	62.3ft		
	Pump Rate:	7.5 GPM		
	Recom. Rate:	n/a GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
0	1000042522	6	inch	STEEL	n/a	235 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	SILT	HARD	BROWN	0	15 ft
2	CLAY	STONES	HARD	GREY	15	25 ft
3	SILT	CLAY	PACKED	GREY	25	45 ft
4	CLAY	STONES	HARD	GREY	45	85 ft
5	CLAY	STONES	DENSE	GREY	85	192 ft
6	SILT	CLAY	LAYERED	GREY	192	208 ft
7	CLAY	STONES	SOFT	GREY	208	236 ft
8	GRAVEL	STONES	CEMENTED	GREY	236	239 ft

End of Record

17	Easting:	664384.00	Latitude: 44.135941 Longitude: -78.944978	Well ID: 7054365
	Northing:	4889025.00		
	Elev (masl):	266.90		
LOCATION	Lot:	022	Tag: A063178 Audit No: Z61069 Contractor License: 5459 Well Completion Date: 11-16-2007 Received Date: 01-03-2008	
	Con:	09		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (SCUGOG)		
	Street:	CLYDE COURT		
WELL	City:	Durham		
	Well Status:	Water Supply	Well Depth (m): 24.384 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Rotary (Air)		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 1001515539 Pump Test ID 1001515540 Flowing: N Pump Duration (hr): 1 Pump Duration (m): 0	
	Pump Set (m):	65		
	SWL (ft)	19.7		
	Final Level:	27.8ft		
	Pump Rate:	7.5 GPM		
	Recom. Rate:	n/a GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
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0 1001515547 6 inch STEEL n/a 73 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FILL	n/a	HARD	BROWN	0	5 ft
2	CLAY	STONES	DENSE	GREY	5	63 ft
3	MEDIUM SAND	FINE SAND	LOOSE	GREY	63	80 ft

End of Record

17	Easting:	720927.00	Latitude: 44.136145 Longitude: -78.938333	Well ID: 7108997
	Northing:	4896476.00		
	Elev (masl):	258.18		
LOCATION	Lot:	022	Tag: A075015 Audit No: Z81669 Contractor License: 5459 Well Completion Date: 07-01-2008 Received Date: 07-31-2008	
	Con:	09		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:	INDIAN WAY		
WELL	City:	PORT PERRY	Well Depth (m): 16.764 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Rotary (Air)		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 1001754312 Pump Test ID: 1001754313 Flowing: N Pump Duration (hr): 1 Pump Duration (m): 0	
	Pump Set (m):	40		
	SWL (ft)	17		
	Final Level:	34.3ft		
	Pump Rate:	8 GPM		
	Recom. Rate:	8 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	1001754323	6	inch	STEEL	0	47 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FILL	n/a	HARD	BROWN	0	15 ft
2	GRAVEL	SAND	LOOSE	BROWN	15	30 ft
3	n/a	SILT	n/a	n/a	30	n/a ft
4	CLAY	SILTY	HARD	GREY	n/a	40 ft
5	n/a	STONES	n/a	n/a	40	n/a ft
6	FINE SAND	MEDIUM SAND	LOOSE	BROWN	n/a	55 ft

End of Record

n/a	Easting:	<null>	Latitude: 44.135942 Longitude: -78.945053	Well ID: 7134472
	Northing:	<null>		
	Elev (masl):	266.85		
LOCATION	Lot:	022	Tag: A075294 Audit No: Z101424 Contractor License: 5459 Well Completion Date: 10-23-2009 Received Date: 11-19-2009	
	Con:	09		
	Municipality:	DURHAM		
	Township:	SCUGOG TOWNSHIP (REACH)		
	Street:	19 CLYDE COURT		
WELL	City:	PORT PERRY	Well Depth (m): 25.908 Depth to Bedrock (m): n/a Depth to Water: ft Water Kind: FRESH	
	Well Status:	Water Supply		
	Prim. Use:	n/a		
	Sec. Use:	n/a		
	Boring Method:	Rotary (Air)		
PUMP TEST	Test Method:	CLEAR	Pipe ID: 1003023311 Pump Test ID: 1003023312 Flowing: n/a Pump Duration (hr): 1	
	Pump Set (m):	70		
	SWL (ft)	40		
	Final Level:	65.5		

PUMP

Pump Rate: 7.5 GPM
 Recom. Rate: 8 GPM

Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	1003023319	6	inch	STEEL	0	75 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	n/a	SOFT	GREY	0	10 ft
2	CLAY	n/a	SOFT	GREY	10	69 ft
3	GRAVEL	SAND	LOOSE	GREY	69	85 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	266.79

Latitude: 44.136005
 Longitude: -78.945039

Well ID: **7134475**

LOCATION

Lot: 022
 Con: 09
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street: 19 CLYDE COURT
 City: PORT PERRY

Tag: A075283
 Audit No: Z101423
 Contractor License: 5459
 Well Completion Date: 10-17-2009
 Received Date: 11-19-2009

WELL

Well Status: Abandoned-Other
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Rotary (Air)

Well Depth (m): 28.956
 Depth to Bedrock (m): n/a
 Depth to Water: ft
 Water Kind:

PUMP TEST

Test Method:
 Pump Set (m):
 SWL (ft)
 Final Level:
 Pump Rate:
 Recom. Rate:

Pipe ID:
 Pump Test ID
 Flowing:
 Pump Duration (hr):
 Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
0	1003023474	n/a	inch	<null>	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	n/a	SOFT	GREY	0	10 ft
2	CLAY	n/a	SOFT	GREY	10	45 ft
3	SILT	GRAVEL	LOOSE	GREY	45	52 ft
4	CLAY	n/a	SOFT	GREY	52	95 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	266.80

Latitude: 44.135944
 Longitude: -78.945128

Well ID: **7168602**

LOCATION

Lot: n/a
 Con: n/a
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street: CLYDE COURT
 City: REACH

Tag: A102814
 Audit No: Z115995
 Contractor License: 5459
 Well Completion Date: 08-27-2011
 Received Date: 09-13-2011

WELL

Well Status: Water Supply
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Rotary (Air)

Well Depth (m): 76.5048
 Depth to Bedrock (m): n/a
 Depth to Water: ft
 Water Kind: GAS

PUMP TEST

Test Method: CLEAR
 Pump Set (m): 200
 SWL (ft): 67
 Final Level: 74.5ft
 Pump Rate: 12 GPM
 Recom. Rate: n/a GPM

Pipe ID: 1003937441
 Pump Test ID: 1003937442
 Flowing: n/a
 Pump Duration (hr): 0
 Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1003937450	6	inch	STEEL	0	244 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	n/a	SOFT	BROWN	0	15 ft
2	CLAY	n/a	SOFT	GREY	15	120 ft
3	SILT	GRAVEL	LOOSE	GREY	120	140 ft
4	CLAY	n/a	SOFT	GREY	140	247 ft
5	GRAVEL	SAND	LOOSE	GREY	247	251 ft

End of Record

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	266.63

Latitude: 44.1363
 Longitude: -78.944891

Well ID: **7173457**

LOCATION

Lot: 022
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street:
 City: PORT PERRY

Tag: A124623
 Audit No: Z141205
 Contractor License: 5459
 Well Completion Date: 11-29-2011
 Received Date: 12-14-2011

WELL

Well Status: Water Supply
 Prim. Use: n/a
 Sec. Use: n/a
 Boring Method: Rotary (Air)

Well Depth (m): 77.724
 Depth to Bedrock (m): n/a
 Depth to Water: ft
 Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
 Pump Set (m): 200
 SWL (ft): 64.8
 Final Level: 80.6ft
 Pump Rate: 10 GPM
 Recom. Rate: n/a GPM

Pipe ID: 1004058726
 Pump Test ID: 1004058727
 Flowing: n/a
 Pump Duration (hr): 1
 Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1004058735	6	inch	STEEL	0	244 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FILL	CLAY	SOFT	GREY	0	30 ft
2	SAND	SILT	SOFT	GREY	30	50 ft
3	SILT	STONES	SOFT	GREY	50	76 ft
4	CLAY	n/a	SOFT	GREY	76	248 ft
5	GRAVEL	SAND	LOOSE	GREY	248	255 ft

End of Record

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	266.51

Latitude: 44.137703
 Longitude: -78.942329

Well ID: **7186617**

LOCATION

Lot: 021
 Con: 08
 Municipality: DURHAM
 Township: SCUGOG TOWNSHIP (REACH)
 Street: CLYDE COURT
 City: REACH

Tag: A124631
 Audit No: Z141342
 Contractor License: 5459
 Well Completion Date: 08-21-2012
 Received Date: 09-04-2012

WELL
PUMP TEST

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Other Method

Well Depth (m): 14.0208
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

Test Method: CLEAR
Pump Set (m): 32
SWL (ft): 13.9
Final Level: 22.6ft
Pump Rate: 10 GPM
Recom. Rate: n/a GPM

Pipe ID: 1004423969
Pump Test ID: 1004423970
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	1004423976	6	inch	STEEL	0	39 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	SAND	STONES	BROWN	0	20 ft
2	CLAY	STONES	DENSE	GREY	20	27 ft
3	FINE SAND	MEDIUM SAND	n/a	BROWN	27	46 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	266.82

Latitude: 44.138138
Longitude: -78.941989

Well ID: **7200899**

LOCATION

Lot: 022
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: LNDIAM WAY
City: PORT PERRY

Tag: A124742
Audit No: Z168309
Contractor License: 5459
Well Completion Date: 04-04-2013
Received Date: 04-30-2013

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 15.24
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): 35
SWL (ft): 5.5
Final Level: 18.7ft
Pump Rate: 10 GPM
Recom. Rate: 15 GPM

Pipe ID: 1004847539
Pump Test ID: 1004847540
Flowing: n/a
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	1004847548	6	inch	STEEL	0	42 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	LOOSE	n/a	BROWN	0	16 ft
2	SAND	GRAVEL	LOOSE	BROWN	16	24 ft
3	CLAY	STONES	DENSE	GREY	24	30 ft
4	SILT	FINE SAND	SOFT	GREY	30	40 ft
5	SAND	MEDIUM SAND	LOOSE	BROWN	40	50 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	252.23

Latitude: 44.139266
Longitude: -78.935149

Well ID: **7205099**

ION

Lot: 022
Con:

Tag: A129395
Audit No: Z170757

LOCATION	Municipality:	DURHAM	Contractor License:	2662
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	07-09-2013
	Street:	79 HONEYS BEACH RD	Received Date:	07-22-2013
	City:	PORT PERRY		
WELL	Well Status:	Water Supply	Well Depth (m):	66.4464
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Other Method	Water Kind:	Untested
PUMP TEST	Test Method:	CLEAR	Pipe ID:	1004870623
	Pump Set (m):	130	Pump Test ID	1004870624
	SWL (ft)	18.2	Flowing:	n/a
	Final Level:	77.5ft	Pump Duration (hr):	1
	Pump Rate:	12 GPM	Pump Duration (m):	n/a
	Recom. Rate:	10 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	1004870636	6.25	inch	STEEL	2	207 ft
2	1004870637	6	inch	OPEN HOLE	207	218 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	n/a	n/a	BROWN	0	6 ft
2	CLAY	SAND	n/a	BROWN	6	16 ft
3	GRAVEL	SILT	CLAY	GREY	16	34 ft
4	CLAY	GRAVEL	n/a	GREY	34	128 ft
5	CLAY	n/a	n/a	GREY	128	154 ft
6	SILT	SOFT	n/a	GREY	154	160 ft
7	SILT	n/a	n/a	GREY	160	207 ft
8	CLAY	GRAVEL	n/a	GREY	207	218 ft

End of Record

n/a	Easting:	<null>	Latitude:	44.137436	Well ID: 7218184
	Northing:	<null>	Longitude:	-78.945489	
	Elev (masl):	265.72			

LOCATION	Lot:	022	Tag:	A155465
	Con:	08	Audit No:	Z170888
	Municipality:	DURHAM	Contractor License:	5224
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	11-24-2013
	Street:	29 CLYDE COURT	Received Date:	03-21-2014
	City:	PORT PERRY		
WELL	Well Status:	Water Supply	Well Depth (m):	73.152
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Air Percussion	Water Kind:	
PUMP TEST	Test Method:	CLEAR	Pipe ID:	1005094956
	Pump Set (m):	150	Pump Test ID	1005094957
	SWL (ft)	65	Flowing:	n/a
	Final Level:	120 ft	Pump Duration (hr):	2
	Pump Rate:	25 GPM	Pump Duration (m):	n/a
	Recom. Rate:	20 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	1005094964	6	inch	STEEL	0	240 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	n/a	STONE	BROWN	0	35 ft
2	CLAY	HARD	PACKED	GREY	35	220 ft
3	CLAY	GRAVEL	SOFT	GREY	220	235 ft

4 SAND GRAVEL n/a GREY 235 240 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	267.51

Latitude: 44.134865
Longitude: -78.942203

Well ID: **7230788**

LOCATION
Lot: 021
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: CAWKERS COVE
City: Scugog

Tag: A124643
Audit No: Z189869
Contractor License: 5459
Well Completion Date: 08-21-2014
Received Date: 09-16-2014

WELL
Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Convent.)

Well Depth (m): 16.764
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: Untested

PUMP TEST
Test Method: CLEAR
Pump Set (m): 45
SWL (ft): 17
Final Level: 43 ft
Pump Rate: 8 GPM
Recom. Rate: 7.5 GPM

Pipe ID: 1005433970
Pump Test ID: 1005433971
Flowing: n/a
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1005433977	6	inch	STEEL	0	48 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	SILT	STONES	BROWN	0	15 ft
2	CLAY	SILT	STONES	GREY	15	40 ft
3	FINE SAND	MEDIUM SAND	LOOSE	BROWN	40	55 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	266.85

Latitude: 44.135969
Longitude: -78.945015

Well ID: **7238845**

LOCATION
Lot: 022
Con: 09
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: 19 CLYDE COURT
City: PORT PERRY

Tag: A170731
Audit No: Z203647
Contractor License: 2662
Well Completion Date: 02-24-2015
Received Date: 03-23-2015

WELL
Well Status: Alteration
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

PUMP TEST
Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID:
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1005582789	6.25	inch	STEEL	-2.5	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
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n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	266.85

Latitude: 44.135969
Longitude: -78.945015

Well ID: **7238846**

LOCATION
Lot: 022
Con: 09
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: 19 CLYDE COURT
City: PORT PERRY

Tag: A170730
Audit No: Z203646
Contractor License: 2662
Well Completion Date: 02-24-2015
Received Date: 03-23-2015

WELL
Well Status: Alteration
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

PUMP TEST
Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1005582836	6.25	inch	STEEL	-2.5	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
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n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	268.83

Latitude: 44.13508
Longitude: -78.943633

Well ID: **7242528**

LOCATION
Lot: 022
Con: 09
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: CLYDE COURT
City: PORT PERRY

Tag: A075306
Audit No: Z210476
Contractor License: 5459
Well Completion Date: 05-15-2015
Received Date: 06-09-2015

WELL
Well Status: Abandoned-Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 77.1144
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

PUMP TEST
Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
0	1005626870	n/a	inch	<null>	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	n/a	SOFT	GREY	0	252 ft
2	STONES	n/a	SILTY	GREY	252	253 ft
3	CLAY	n/a	SOFT	GREY	253	n/a ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	269.30

Latitude: 44.134819
Longitude: -78.943642

Well ID: **7242529**

LOCATION

Lot: n/a
Con: n/a
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: CLYDE COURT
City: PORT PERRY

Tag: A088222
Audit No: Z210477
Contractor License: 5459
Well Completion Date: 05-26-2015
Received Date: 06-09-2015

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 77.724
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): 245
SWL (ft): 75.5
Final Level: 89.2ft
Pump Rate: 10 GPM
Recom. Rate: 20 GPM

Pipe ID: 1005626982
Pump Test ID: 1005626983
Flowing: n/a
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1005626990	6	inch	STEEL	0	252 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	n/a	SOFT	GREY	0	10 ft
2	CLAY	SILT	LAYERED	GREY	10	200 ft
3	CLAY	SILT	LAYERED	GREY	200	254 ft
4	GRAVEL	SAND	LOOSE	GREY	254	255 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	266.84

Latitude: 44.135969
Longitude: -78.945015

Well ID: **7286886**

LOCATION

Lot: n/a
Con: n/a
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: 19 CLYDE COURT
City: PORT PERRY

Tag: A170731
Audit No: Z256347
Contractor License: 2662
Well Completion Date: 05-08-2017
Received Date: 05-18-2017

WELL

Well Status: <null>
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
0	1006744833	n/a	inch	<null>	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
0	n/a	n/a	n/a	n/a	n/a	n/a ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	

Latitude: 44.136623
Longitude: -78.940879

Well ID: **7303070**

LOCATION

Lot: 021
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: INDIAN WAY
City: SCUGOG

Tag: A222234
Audit No: Z265542
Contractor License: 5459
Well Completion Date: 12-21-2017
Received Date: 01-11-2018

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 79.5528
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): 250
SWL (ft): 60.7
Final Level: 98.4ft
Pump Rate: 10 GPM
Recom. Rate: 15 GPM

Pipe ID: 1007090403
Pump Test ID: 1007090404
Flowing: n/a
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diameter	Diameter Units	Material	Top Depth	Bottom Depth
1	1007090415	6	inch	STEEL	0	254 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	SOFT	n/a	GREY	0	30 ft
2	CLAY	n/a	n/a	BROWN	30	35 ft
3	CLAY	DENSE	n/a	GREY	35	42 ft
4	SILT	SOFT	n/a	GREY	42	115 ft
5	CLAY	SOFT	n/a	GREY	115	208 ft
6	SILT	GRAVEL	n/a	GREY	208	214 ft
7	CLAY	TILL	n/a	GREY	214	254 ft
8	GRAVEL	SAND	n/a	GREY	254	261 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	

Latitude: 44.136576
Longitude: -78.939768

Well ID: **7308805**

LOCATION

Lot: n/a
Con: n/a
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: INDIAN WAY
City: PORT PERRY

Tag: A222149
Audit No: Z265546
Contractor License: 5459
Well Completion Date: 01-24-2018
Received Date: 03-07-2018

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use:

Well Depth (m): 82.9056
Depth to Bedrock (m): n/a
Depth to Water: ft

Boring Method: Other Method

Water Kind: Untested

Test Method: CLEAR
Pump Set (m): 240
SWL (ft) 61.7
Final Level: 99.4ft
Pump Rate: 2 GPM
Recom. Rate: 15 GPM

Pipe ID: 1007230146
Pump Test ID 1007230147
Flowing: n/a
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1007230158	6	inch	STEEL	0	268 ft
2	1007230159	6	inch	OPEN HOLE	268	272 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	SILT	HARD	BROWN	0	33 ft
2	CLAY	STONES	DENSE	GREY	33	62 ft
3	FINE SAND	SILT	LOOSE	GREY	62	72 ft
4	CLAY	STONES	DENSE	GREY	72	203 ft
5	FINE SAND	SILT	LOOSE	GREY	203	213 ft
6	CLAY	n/a	DENSE	GREY	213	265 ft
7	LIMESTONE	n/a	WEATHERED	GREY	265	272 ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	

Latitude: 44.136593
Longitude: -78.941205

Well ID: **7310901**

Lot: n/a
Con: 08
Municipality: DURHAM
Township: SCUGOG TOWNSHIP (REACH)
Street: INDIAN WAY
City: REACH

Tag:
Audit No: Z265563
Contractor License: 5459
Well Completion Date: 04-27-2018
Received Date: 05-10-2018

Well Status: Abandoned-Other
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
0	1007194088	n/a	inch	<null>	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
0	n/a	n/a	n/a	n/a	n/a	n/a ft

End of Record

n/a	Easting:	<null>
	Northing:	<null>
	Elev (masl):	

Latitude: 44.138685
Longitude: -78.941845

Well ID: **7347166**

Lot: 021
Con:

Tag: A231191
Audit No: Z304039

LOCATION	Municipality:	DURHAM	Contractor License:	5459
	Township:	SCUGOG TOWNSHIP (REACH)	Well Completion Date:	10-11-2019
	Street:	19 INDIAN WAY	Received Date:	11-15-2019
	City:	PORT PERRY		
WELL	Well Status:	Water Supply	Well Depth (m):	14.3256
	Prim. Use:	n/a	Depth to Bedrock (m):	n/a
	Sec. Use:	n/a	Depth to Water:	ft
	Boring Method:	Other Method	Water Kind:	Untested
PUMP TEST	Test Method:	CLEAR	Pipe ID:	1008109886
	Pump Set (m):	35	Pump Test ID	1008112406
	SWL (ft)	17.4	Flowing:	N
	Final Level:	21.3ft	Pump Duration (hr):	1
	Pump Rate:	10 GPM	Pump Duration (m):	n/a
	Recom. Rate:	20 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1008111826	6	Inch	STEEL	0	41 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	STICKY	BROWN	0	19 ft
2	GRAVEL	COARSE SAND	DRY	BROWN	19	40 ft
3	GRAVEL	COARSE SAND	LOOSE	GREY	40	47 ft

End of Record



Tag#: A124742

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name <i>14 Est</i>	Last Name / Organization <i>Fourteen Estates</i>	E-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) <i>513 Westney Rd. S. Unit 4</i>	Municipality <i>Ajax</i>	Province <i>ON</i>	Postal Code <i>L1S6W8</i>
Telephone No. (inc. area code)			

Well Location

Address of Well Location (Street Number/Name) <i>Indian Way</i>		Township <i>Saugus Reach</i>	Lot <i>22</i>	Concession <i>8</i>
County/District/Municipality <i>Durham</i>		City/Town/Village <i>Port Perry</i>	Province Ontario	Postal Code
UTM Coordinates NAD <i>83</i>	Zone <i>17</i>	Easting <i>646174</i>	Northings <i>4889275</i>	Municipal Plan and Sublot Number
				Other

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
BROWN	SAND		LOOSE	0	16
BROWN	SAND & GRAVEL		LOOSE	16	24
GREY	CLAY	STONES	DENSE	24	30
GREY	SILT	FINE SAND	SOFT	30	40
BROWN	SAND	MEDIUM SAND	LOOSE	40	50

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	20	RENTONITE SLURRY	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify <i>AIR ROTARY</i>	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring

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	☒ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify
6	STEEL	.188	0' 42'	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To
6	S. STEEL	#8	42' 50'

Water Details		Hole Diameter	
Water found at Depth <i>50'</i> (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☒ Fresh ☐ Untested	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth <i>0</i> (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	0 50	6
Water found at Depth <i>0</i> (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information			
Business Name of Well Contractor <i>WILSON'S WATER WELLS</i>		Well Contractor's Licence No. <i>54519</i>	
Business Address (Street Number/Name) <i>13787 HWY 48 STOUFFVILLE</i>		Municipality	
Province <i>ONTARIO</i>	Postal Code <i>L4A1X3</i>	Business E-mail Address	
Bus. Telephone No. (inc. area code) <i>905 640 4126</i>		Name of Well Technician (Last Name, First Name) <i>O'BRIEN MICHAEL</i>	
Well Technician's Licence No. <i>25116</i>		Signature of Technician and/or Contractor <i>M.C. O'Brien</i>	
		Date Submitted <i>2013/04/10</i>	

Results of Well Yield Testing			
After test of well yield, water was: ☒ Clear and sand free ☐ Other, specify	Draw Down		Recovery
	Time (min)	Water Level (m/ft)	Time (min) Water Level (m/ft)
If pumping discontinued, give reason:	Static Level	<i>5.5</i>	
	1	<i>10.7</i>	1
Pump intake set at (m/ft) <i>35'</i>	2	<i>13.0</i>	2
	3	<i>14.6</i>	3
Pumping rate (l/min / GPM) <i>106 GPM</i>	4	<i>15.6</i>	4
	5	<i>16.2</i>	5
Duration of pumping <i>1</i> hrs + <i>0</i> min	10	<i>17.5</i>	10
	15	<i>17.8</i>	15
Final water level end of pumping (m/ft) <i>18.7</i>	20	<i>18.2</i>	20
	25		25
If flowing give rate (l/min / GPM)	30	<i>18.5</i>	30
	40		40
Recommended pump depth (m/ft) <i>338'</i>	50		50
	60	<i>18.7</i>	60
Recommended pump rate (l/min / GPM) <i>15</i>			
Well production (l/min / GPM) <i>20</i>			
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 <i>Y Y Y Y M M D D</i> <i>2013/04/04</i>	Ministry Use Only Audit No. <i>Z 168309</i> <i>APR 30 2013</i>
	Date Work Completed <i>2013/04/04</i>	

Well Owner's Information

First Name 14 Estates	Last Name/Organization	E-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 513 Westney Rd S Unit 4	Municipality Ajax	Province ON	Postal Code L4S6W8
Telephone No. (inc. area code)			

Well Location

Address of Well Location (Street Number/Name) Indian Way	Township Scugog Reach	Lot 22	Concession 8
County/District/Municipality Durham	City/Town/Village Port Perry	Province Ontario	Postal Code
UTM Coordinates Zone Easting NAD 83 176642604889450	Northings	Municipal Plan and Sublot Number	Other

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brown	Clay		Soft	0	5'
Brown	Clay	sand, stones	Hard	5	17
Grey	Clay	silt, stones	Hard	17	46
Grey	silt	clay	soft	46	84
Grey	Clay		Dense	84	116
Grey	silt	sand, gravel	Hard	116	119
Grey	Clay	stones	Dense	119	233
Grey	Gravel	sand	Hard	233	237

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	20'	Bentonite slurry	7.86 ft³

Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☒ Clear and sand free ☐ Other, specify		Static Level	51.2		
If pumping discontinued, give reason:		1	60.4	1	62.1
Pump intake set at (m/ft) 200'		2	62.2	2	56.4
Pumping rate (l/min / GPM) 12 GPM		3	63.4	3	54.6
Duration of pumping 1 hrs + 0 min		4	64	4	53.7
Final water level end of pumping (m/ft) 71.9		5	64.5	5	53.1
If flowing give rate (l/min/GPM)		10	66.8	10	52.5
Recommended pump depth (m/ft) 180		15	68.2	15	51.8
Recommended pump rate (l/min/GPM) 20		20	68.9	20	51.5
Well production (l/min/GPM) 35		25	69.5	25	51.3
Disinfected? ☒ Yes ☐ No		30	70.1	30	51.2
		40	71.1	40	51.2
		50	71.6	50	51.2
		60	71.9	60	51.2

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 rotary air		☐ Other, specify		

Well Use

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
6"	Steel	.188"	0	234'	☒ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
6"	Steel	16	234	237'

Water Details

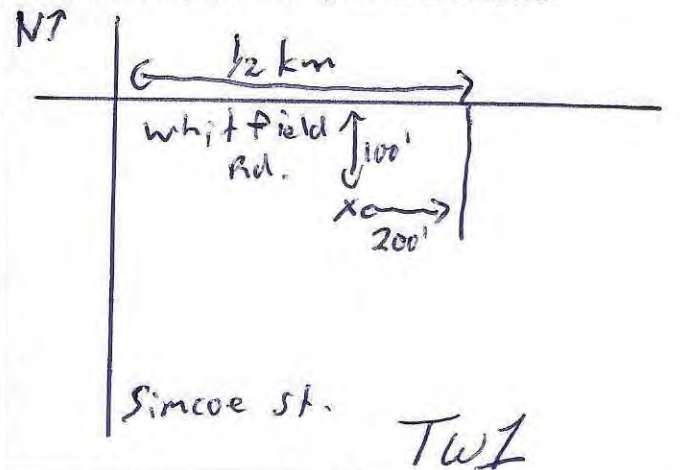
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☒ Untested	Depth (m/ft) From	To	Diameter (cm/in)
237' (m/ft) ☒ Gas	☐ Other, specify	0	20'	10"
Water found at Depth (m/ft) ☐ Gas	☐ Other, specify	0	237'	6"

Well Contractor and Well Technician Information

Business Name of Well Contractor Wilson's Water Wells, Ltd.	Well Contractor's Licence No. 5459
Business Address (Street Number/Name) 13787 Hwy 48	Municipality Stouffville
Province ON	Postal Code L4A3B3
Business E-mail Address	
Bus. Telephone No. (inc. area code) 9056404369	Name of Well Technician (Last Name, First Name) Ferguson, Eric
Well Technician's Licence No. 3490	Signature of Technician and/or Contractor <i>[Signature]</i>
Date Submitted 20230401	

Map of Well Location

Please provide a map below following instructions on the back.



Comments: Chlorinated 200 ppm Residual chlorine 100 ppm → 21 hrs
Well owner's information package delivered ☒ Yes ☐ No
Date Package Delivered 20230315
Date Work Completed 20230315
Ministry Use Only Audit No. 2386910
Received:

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name: 14 Estates Last Name/Organization: Mailing Address (Street Number/Name): 513 Westney Rd South Unit 4 Municipality: Ajax Province: ON Postal Code: L1S 6W8 Telephone No. (inc. area code): ☐ Well Constructed by Well Owner

Well Location

Address of Well Location (Street Number/Name): Indian Way Township: Scugog/Reach Lot: 22 Concession: 8 County/District/Municipality: Durham City/Town/Village: Port Perry Province: Ontario Postal Code: UTM Coordinates Zone: Easting: Northing: NAD: 83 1 7664907 4889669 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)
Brown	Clay	stones	Soft	0 12'
Brown	gravel	sand, silt	Hard, dry	12 38
Brown	clay	silt	Layered	38 52
Grey	gravel	sand, silt	Hard	52 58
Grey	clay		Dense	58 190
Grey	silt	gravel, clay	Soft	190 222
Grey	clay		Dense	222 262
Grey	silt	Gravel, stones	Hard	262 268
Grey	Limestone		Hard	268 279

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 20'	Bentonite slurry	7.86 ft³

Results of Well Yield Testing

After test of well yield, water was:	Draw Down	Recovery
☒ Clear and sand free ☐ Other, specify	Time (min) Water Level (m/ft)	Time (min) Water Level (m/ft)
If pumping discontinued, give reason:	Static Level: 62.9	
Pump intake set at (m/ft): 230'	1 73.4	1 205.1
Pumping rate (l/min / GPM): 12 GPM - 10 GPM @ 30 min	2 82	2 196.2
Duration of pumping: 1 hrs + 0 min	3 90.7	3 188.1
Final water level end of pumping (m/ft): 215'	4 98.1	4 181.4
If flowing give rate (l/min/GPM):	5 105.8	5 175.6
Recommended pump depth (m/ft): 250'	10 138	10 161.1
Recommended pump rate (l/min/GPM): 10	15 216.2	15 158.8
Well production (l/min/GPM): 10	20 182.4	20 148.1
Disinfected? ☒ Yes ☐ No	25 200.1	25 139.6
	30 215	30 131.3
	40 215	40 118.5
	50 215	50 106.6
	60 215	60 96.1

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 rotary air

Well Use

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
6"	Steel	.188"	0 268'	☒ Water Supply
6"	open hole		268 279	☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☐ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify
				☐ Other, specify

Construction Record - Screen

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

Water Details

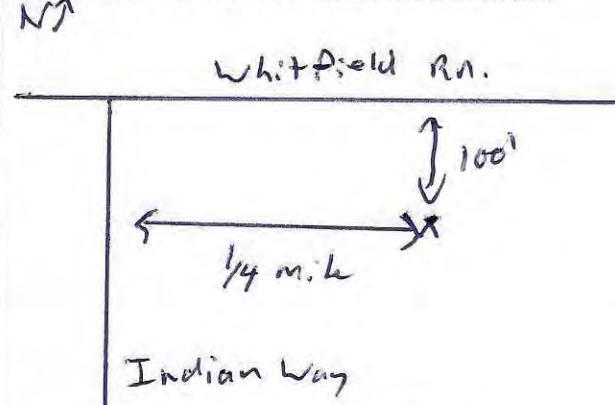
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☒ Untested	Depth (m/ft)	Diameter (cm/in)
279' (m/ft) ☒ Gas ☐ Other, specify		0 20'	10"
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify		0 279'	6"
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify			

Well Contractor and Well Technician Information

Business Name of Well Contractor: Wilson's Water Wells Ltd. Well Contractor's Licence No.: 5459
 Business Address (Street Number/Name): 13757 Hwy 48 Municipality: Stouffville
 Province: ON Postal Code: L4A3B3 Business E-mail Address:
 Bus. Telephone No. (inc. area code): 905 640 4369 Name of Well Technician (Last Name, First Name): Ferguson, Eric
 Well Technician's Licence No.: 3490 Signature of Technician and/or Contractor: Date Submitted: 20230411

Map of Well Location

Please provide a map below following instructions on the back.



Comments: chlorinated 20ppm
Residual chlorine 150 ppm → 22 hrs

Well owner's information package delivered: ☒ Yes ☐ No
 Date Package Delivered: 20230406
 Date Work Completed: 20230406
 Ministry Use Only
 Audit No.: 386909

Well Owner's Information

First Name
Ferguson

Last Name/Organization
Ed

E-mail Address

☐ Well Constructed by Well Owner

Mailing Address (Street Number/Name)
513 Westney Rd

Municipality
Ajax

Province
ON

Postal Code
4156W8

Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name)
Indian Way, Road

Township
Scugog

Lot
20

Concession
8

County/District/Municipality
Durham

City/Town/Village
Port Perry

Province
Ontario

Postal Code

UTM Coordinates Zone Easting Northing
NAD 8 3 17 664769 4889435

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)	
Brown	Clay	silt, stones	Hard	0	19'
Grey	Gravel	sand, silt	Hard	19	34'
Grey	clay	stones	Dense	34	46'
Grey	clay	silt, fine sand	Layered	46	93'
Grey	clay		Dense	93	232'
Grey	clay	silt, stones	Hard	232	262'
Grey	Limestone		Fractured	262	265'

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
0 20'	Bentonite slurry	7.86 ft³	

Method of Construction

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

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)	
6"	steel	.188"	0	263'
6"	open hole		263	265'

Construction Record - Screen

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

Status of Well

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

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☒ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	76.8
Pumping rate (l/min / GPM)		2	83.3
Duration of pumping		3	89.2
Final water level end of pumping (m/ft)		4	94.4
If flowing give rate (l/min/GPM)		5	98.8
Recommended pump depth (m/ft)		10	113
Recommended pump rate (l/min/GPM)		15	120.6
Well production (l/min/GPM)		20	126.2
Disinfected?		25	130.5
☒ Yes ☐ No		30	133.3
		40	139.3
		50	141.2
		60	142.8

Map of Well Location

Please provide a map below following instructions on the back.

Indian Way

200m

200'

15'

house

Clayd Cr+

Lot #16

Well Contractor and Well Technician Information

Business Name of Well Contractor
Wilson's Water Wells Ltd.

Well Contractor's Licence No.
5459

Business Address (Street Number/Name)
13787 Hwy 48

Municipality
Stouffville

Province
ON

Postal Code
L4L3B3

Business E-mail Address

Bus. Telephone No. (inc. area code)
905 640 4369

Name of Well Technician (Last Name, First Name)
Ferguson, Eric

Well Technician's Licence No.
34910

Signature of Technician and/or Contractor

Date Submitted
2024/11/02

Comments: chlorinated 200 ppm
Residual chlorine 100 ppm → 22 hrs

Well owner's information package delivered ☒ Yes ☐ No

Date Package Delivered
2024/11/01

Date Work Completed
2024/11/01

Ministry Use Only

Audit No. **2353051**

Received

Appendix B

Test Pit and Borehole Logs



TEST PIT STRATIGRAPHIC RECORD

TP01-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.

Page 1 of 1

Project: Fourteen Estates, Whitfield Road

Location: Whitfield Road, Scugog, Ontario

Date Range (dd/mm/yyyy): 06/03/2025

Northing: 4889433 m

Logged By: Matt Yee

Drilling Company: Client

Easting: 664267 m

Reviewed By: Michael Nieu Kirk

Equipment Used: Backhoe

Horizontal Datum: NAD83 / UTM zone 17N

Drilling Method(s): Excavation

Elevation: 266.10 m

Final Depth: 3.35 m

Elevation Datum: MAMSL

Dimension:

Coordinates and Elevation Values are Approximate

Depth Scale (m)	Depth (m)	Strata	Description	PID (ppm)	Sample Number	Grain Size Analysis					Moisture Content %	Water Level(s)	Hydraulic piezometer
	Elev. (m)					Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 266.10												
	0.46		TOPSOIL (460 mm)										
	265.64		NATIVE: SANDY SILT, some clay, with rootlets, reddish brown, moist		GS1						21		
	0.76												
1	265.34		SILTY CLAY, trace sand, trace gravel, brown, moist to wet, medium plasticity - mottled grey to brown at 0.91m BGS										
			- groundwater seepage observed at 1.52m BGS		GS2						19		
2													
			- groundwater seepage observed at 2.44m BGS										
3	3.05												
	263.05		SANDY SILT TILL, some clay, trace gravel, grey, moist		GS3						13		
	3.35												
	262.75		End of Hole at 3.35 m BGS										
4			Note: Groundwater accumulation 305 mm in 7 hours, Test pit caved to 2.44 m .										
5													
6													
7													
8													
9													

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

At Time of Excavation:

Upon Completion of Excavation:

Well - Reference Elevation(s)

Location	Elevation (m)
1	267.44

T.O.S.: Top of Screen

B.O.S.: Bottom of Screen

Screen Diameter: mm

Screen Slot Size:

Material:

Water Readings

Date (dd/mm/yyyy)	Depth	Unit
17/03/2025	At ground surface	



TEST PIT STRATIGRAPHIC RECORD

TP02-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.

Project: Fourteen Estates, Whitfield Road

Location: Whitfield Road, Scugog, Ontario

Date Range (dd/mm/yyyy): 06/03/2025

Excavation Company: Client

Equipment Used: Backhoe

Excavation Method(s): Excavation

Northing: 4899329 m

Easting: 664302 m

Horizontal Datum: NAD83 / UTM zone 17N

Elevation: 266.90 m

Elevation Datum: MAMSL

Coordinates and Elevation Values are Approximate

Logged By: Matt Yee

Reviewed By: Michael Nieu Kirk

Final Depth: 3.35 m

Dimension:

Page 1 of 1

Depth Scale (m)	Depth (m)	Strata	Description	PID (ppm)	Sample Number	Grain Size Analysis					Moisture Content %	Water Level(s)	Backfill Details
	Elev. (m)					Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 266.90												
	0.46 266.44		TOPSOIL (460 mm)										
	0.91 265.99		NATIVE: SANDY SILT, some clay, with rootlets, brown, moist		GS1						11		
1			SILTY SAND, trace gravel, occasional cobble/boulders, brown, moist		GS2						15		1
2													2
			- water seepage (rapid) observed, wet at 2.44m BGS										
3					GS3						18		3
	3.35 263.55		End of Test Pit at 3.35 m BGS										
4			Note: Groundwater accumulation 76 mm in minutes then side walls sloughed into hole up to 2.44 m.										4
5													5
6													6
7													7
8													8
9													9

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

▼ At Time of Excavation:

▼ Upon Completion of Excavation:



TEST PIT STRATIGRAPHIC RECORD

TP03-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.

Project: Fourteen Estates, Whitfield Road

Location: Whitfield Road, Scugog, Ontario

Date Range (dd/mm/yyyy): 06/03/2025

Excavation Company: Client

Equipment Used: Backhoe

Excavation Method(s): Excavation

Northing: 4889468 m

Easting: 664412 m

Horizontal Datum: NAD83 / UTM zone 17N

Elevation: 264.40 m

Elevation Datum: MAMSL

Coordinates and Elevation Values are Approximate

Logged By: Matt Yee

Reviewed By: Michael Nieu Kirk

Final Depth: 3.66 m

Dimension:

Page 1 of 1

Depth Scale (m)	Depth (m)	Strata	Description	PID (ppm)	Sample Number	Grain Size Analysis					Moisture Content %	Water Level(s)	Backfill Details
	Elev. (m)					Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 264.40												
1	0.46 263.94		TOPSOIL (460 mm)										
			NATIVE: SAND, some silt, reddish brown, wet		GS1					21			
			- brown, oxidation staining, groundwater seepage (rapid) observed, wet, test pit collapsing at 0.91m BGS										
	1.22 263.18		SILTY CLAY, some sand, some gravel, cobble/boulders, grey, moist, medium plasticity		GS2					10			
2													
3	3.05 261.35		SILTY SAND, grey, wet, dilatent		GS3								
4	3.66 260.74		End of Test Pit at 3.66 m BGS										
			Note: Groundwater accumulation 203 mm in 5 minutes.										
5													
6													
7													
8													
9													

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

▼ At Time of Excavation:

▼ Upon Completion of Excavation:



TEST PIT STRATIGRAPHIC RECORD

TP04-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.

Project: Fourteen Estates, Whitfield Road

Location: Whitfield Road, Scugog, Ontario

Date Range (dd/mm/yyyy): 06/03/2025

Excavation Company: Client

Equipment Used: Backhoe

Excavation Method(s): Excavation

Northing: 4889544 m

Easting: 664558 m

Horizontal Datum: NAD83 / UTM zone 17N

Elevation: 263.50 m

Elevation Datum: MAMSL

Coordinates and Elevation Values are Approximate

Logged By: Matt Yee

Reviewed By: Michael Nieu Kirk

Final Depth: 3.35 m

Dimension:

Page 1 of 1

Depth Scale (m)	Depth (m)	Strata	Description	PID (ppm)	Sample Number	Grain Size Analysis					Moisture Content %	Water Level(s)	Backfill Details
	Elev. (m)					Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 263.50												
	0.30		TOPSOIL (300 mm)										
	263.20		NATIVE: SILTY SAND, some clay, reddish brown, moist		GS1	0	51	36	13	15			
1	1.37		- groundwater seepage observed, wet (perched) at 1.22m BGS										
	262.13		SILTY CLAY, grey to brown, mottled, moist		GS2						23		
	1.68												
2	261.82		SILTY SAND TILL, some gravel, occasional cobbles/boulders, brown, moist		GS3						9		
3			- some silt, groundwater seepage observed, wet at 2.74m BGS		GS4						10		
	3.35												
	260.15		End of Test Pit at 3.35 m BGS										
4			Note: Groundwater accumulation 76 mm in 10 minutes.										
5													
6													
7													
8													
9													

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

▼ At Time of Excavation:

▼ Upon Completion of Excavation:



TEST PIT STRATIGRAPHIC RECORD

TP05-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.

Project: Fourteen Estates, Whitfield Road

Location: Whitfield Road, Scugog, Ontario

Date Range (dd/mm/yyyy): 06/03/2025

Drilling Company: Client

Equipment Used: Backhoe

Drilling Method(s): Excavation

Northing: 4889447 m

Easting: 664585 m

Horizontal Datum: NAD83 / UTM zone 17N

Elevation: 265.20 m

Elevation Datum: MAMSL

Coordinates and Elevation Values are Approximate

Logged By: Matt Yee

Reviewed By: Michael Nieu Kirk

Final Depth: 3.35 m

Dimension:

Page 1 of 1

Depth Scale (m)	Depth (m)	Strata	Description	PID (ppm)	Sample Number	Grain Size Analysis					Moisture Content %	Water Level(s)	Hydraulic piezometer
	Elev. (m)					Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 265.20												
1	0.30		TOPSOIL (300 mm)										
	264.90		NATIVE: SANDY SILT, some clay, reddish brown, moist		GS1						22		
			- trace clay, light brown at 0.76m BGS										
					GS2						16		
	1.52												
2	263.68		SILTY CLAY, light grey, mottled, moist		GS3						20		
	1.68		SILTY SAND, some gravel, occasional cobbles/boulder, light brown, moist										
	263.52												
					GS4						9		
3	3.05		SILTY GRAVEL, some sand, brown, wet		GS5								
	262.15		- groundwater seepage observed at 3.05m BGS								10		
	3.35		End of Hole at 3.35 m BGS										
	261.85												
4			Note: Groundwater accumulation 102 mm in 5 minutes; Groundwater accumulation 2.13 m after 3 hours.										
5													
6													
7													
8													
9													

Legend:
Measuring Point Elevation may change; Refer to Current Elevation Table
▽ At Time of Excavation:
▼ Upon Completion of Excavation:

Well - Reference Elevation(s)		T.O.S.: Top of Screen B.O.S.: Bottom of Screen Screen Diameter: mm Screen Slot Size: Material:
Location	Elevation (m)	
1	266.58	

Water Readings		
Date (dd/mm/yyyy)	Depth	Unit
17/03/2025	Dry	



TEST PIT STRATIGRAPHIC RECORD

TP07-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.

Project: Fourteen Estates, Whitfield Road

Location: Whitfield Road, Scugog, Ontario

Date Range (dd/mm/yyyy): 06/03/2025

Excavation Company: Client

Equipment Used: Backhoe

Excavation Method(s): Excavation

Northing: 4889427 m

Easting: 664699 m

Horizontal Datum: NAD83 / UTM zone 17N

Elevation: 267.10 m

Elevation Datum: MAMSL

Coordinates and Elevation Values are Approximate

Logged By: Matt Yee

Reviewed By: Michael Nieu Kirk

Final Depth: 3.35 m

Dimension:

Page 1 of 1

Depth Scale (m)	Depth (m)	Strata	Description	PID (ppm)	Sample Number	Grain Size Analysis					Moisture Content %	Water Level(s)	Backfill Details
	Elev. (m)					Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 267.10												
	0.30		TOPSOIL (300 mm)										
	266.80		NATIVE: SANDY SILT, some clay, brown, moist		GS1						13		
	0.61												
	266.49		SILTY SAND, some gravel, light brown, moist										
1					GS2						9		1
	1.52												
	265.58		SILTY SAND and GRAVEL, occasional cobbles/boulders light brown, moist										2
2													
3			- groundwater seepage observed, wet at 3.05m BGS		GS3						7		3
	3.35												
	263.75		End of Test Pit at 3.35 m BGS										
4			Note: Groundwater accumulation 102 mm in 5 minutes.										4
5													5
6													6
7													7
8													8
9													9

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

▼ At Time of Excavation:

▼ Upon Completion of Excavation:



TEST PIT STRATIGRAPHIC RECORD

TP08-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.

Project: Fourteen Estates, Whitfield Road

Location: Whitfield Road, Scugog, Ontario

Date Range (dd/mm/yyyy): 06/03/2025

Excavation Company: Client

Equipment Used: Backhoe

Excavation Method(s): Excavation

Northing: 4889547 m

Easting: 664836 m

Horizontal Datum: NAD83 / UTM zone 17N

Elevation: 270.20 m

Elevation Datum: MAMSL

Coordinates and Elevation Values are Approximate

Logged By: Matt Yee

Reviewed By: Michael Nieu Kirk

Final Depth: 3.35 m

Dimension:

Page 1 of 1

Depth Scale (m)	Depth (m)	Strata	Description	PID (ppm)	Sample Number	Grain Size Analysis					Moisture Content %	Water Level(s)	Backfill Details
	Elev. (m)					Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 270.20												
	0.41		TOPSOIL (460 mm)										
	269.79		NATIVE: SANDY SILT, some clay, brown, moist										
	0.91				GS1						15		
1	269.29		SILTY SAND, some gravel, occasional cobbles/boulder, light brown, moist										
	1.52				GS2						8		
	268.68		SILTY SAND TILL, some gravel, occasional cobbles/boulders, brown, moist										
2													
3													
	3.35				GS3						7		
	266.85		End of Test Pit at 3.35 m BGS										
4			Note: No groundwater seepage observed; No groundwater accumulation.										
5													
6													
7													
8													
9													

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

▼ At Time of Excavation:

▼ Upon Completion of Excavation:



STRATIGRAPHIC AND INSTRUMENTATION RECORD

(Overburden)

MW01-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.
Project: Fourteen Estates, Whitfield Road
Location: Whitfield Road, Scugog, Ontario
Date Range (dd/mm/yyyy): 10/03/2025
Drilling Company: ACE Drilling
Equipment Used: Geo Probe
Drilling Method(s): Solid Stem Auger

Page 1 of 1

Northing: 4889608 m
Easting: 664964 m
Horizontal Datum: NAD83 / UTM zone 17N
Elevation: 272.20 m
Elevation Datum: MAMSL
Logged By: Jacob Kempt
Reviewed By: Michael Nieu Kirk
Final Depth: 3.12 m
Coordinates and Elevation Values are Approximate

Depth Scale (m)	Depth (m)	Strata	Description	Sample Number	Recovery %	Blows per 0.15m or Partial Increment	N'/RQD Value	PID (ppm)	Grain Size Analysis					Moisture Content %	Water Level(s)	Monitoring Well
	Elev. (m)								Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 272.20															
1	0.45		TOPSOIL (450 mm)	SS1	83	6-6-11-7	17	0						14		Hole-Plug 1.22 270.98 T.O.S. 1.52 270.68 Sand 3.05 269.15 B.O.S. 3.05 269.15
	271.75		NATIVE: SILTY SAND, some clay, trace gravel, light brown, moist, compact													
	0.76															
	271.44		SILT AND SAND TILL, trace gravel, some clay, light brown, moist, dense	SS2	92	14-15-17-19	32	0						8		
2				SS3	96	17-18-17-17	35	0	4	46	35	15		8		
			- very dense, occasional cobbles, auger grinding at 2.29m BGS													
				SS4	96	11-26-48-50/127 mm	74	0						5		
				SS5	100	50/76 mm	R	0						5		
3	3.12 269.08		End of Hole at 3.12 m BGS													
4																
5																
6																
7																
8																
9																

Legend:
Measuring Point Elevation may change; Refer to Current Elevation Table
At Time of Drilling:
Upon Completion of Drilling: Dry
Last Water Level Taken: 17/03/2025
N Value: R - Refusal

Well - Reference Elevation(s)	
Location	Elevation (m)
MW01-25	

T.O.S.: Top of Screen
B.O.S.: Bottom of Screen
Screen Diameter: 51 mm
Screen Slot Size:
Material: PVC

Water Readings		
Date (dd/mm/yyyy)	Depth	Unit
17/03/2025	Dry	



STRATIGRAPHIC AND INSTRUMENTATION RECORD (Overburden)

MW02-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.
Project: Fourteen Estates, Whitfield Road
Location: Whitfield Road, Scugog, Ontario
Date Range (dd/mm/yyyy): 10/03/2025
Drilling Company: ACE Drilling
Equipment Used: Geo Probe
Drilling Method(s): Solid Stem Auger

Page 1 of 1

Northing: 4889512 m
Easting: 664658 m
Horizontal Datum: NAD83 / UTM zone 17N
Elevation: 266.40 m
Elevation Datum: MAMSL
Logged By: Jacob Kempt
Reviewed By: Michael Nieu Kirk
Final Depth: 5.18 m
Coordinates and Elevation Values are Approximate

Depth Scale (m)	Depth (m)	Strata	Description	Sample Number	Recovery %	Blows per 0.15m or Partial Increment	N/RQD Value	PID (ppm)	Grain Size Analysis					Moisture Content %	Water Level(s)	Monitoring Well
	Elev. (m)								Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 266.40															
1	0.40 266.00		TOPSOIL (400 mm)	SS1	96	7-7-3-4	10	0						23		1
			NATIVE: SANDY SILT, some clay, trace gravel, brown, moist, compact													
				SS2	100	6-9-8-12	17	0						10		
	1.52 264.88		SANDY SILT TILL, some clay, trace gravel, brown, moist, compact	SS3	100	9-12-15-18	27	0						14		
				SS4	100	9-11-11-14	22	0						13		
			- mottled, dense at 3.05m BGS	SS5	100	13-19-25-48	44	0						11		
5	4.57 261.83		GRAVELLY SAND TILL, trace silt, trace clay, light brown, wet, very dense - groundwater encountered, wet at 4.57m BGS	SS6	87	14-22-35-37	57	0	29	59	8	4	10			
	5.18 261.22		End of Hole at 5.18 m BGS													
6																6
7																7
8																8
9																9

Legend:	Well - Reference Elevation(s)		Water Readings		
	Location	Elevation (m)	Date (dd/mm/yyyy)	Depth	Unit
	MW02-25		17/03/2025 02/04/2025	1.78 1.55	mBGS mBGS

Measuring Point Elevation may change; Refer to Current Elevation Table
At Time of Drilling:
Upon Completion of Drilling: 3.05 m on 10/03/2025
Last Water Level Taken: 02/04/2025

T.O.S.: Top of Screen
B.O.S.: Bottom of Screen
Screen Diameter: 51 mm
Screen Slot Size:
Material: PVC
mBGS: Meters below ground surface
mBTC: Meters below top of casing



STRATIGRAPHIC AND INSTRUMENTATION RECORD (Overburden)

MW03-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.
Project: Fourteen Estates, Whitfield Road
Location: Whitfield Road, Scugog, Ontario
Date Range (dd/mm/yyyy): 10/03/2025
Drilling Company: ACE Drilling
Equipment Used: Geo Probe
Drilling Method(s): Solid Stem Auger

Page 1 of 1

Northing: 4889408 m**Logged By:** Jacob Kempt**Easting:** 664401 m**Reviewed By:** Michael Nieu Kirk**Horizontal Datum:** NAD83 / UTM zone 17N**Elevation:** 265.20 m**Final Depth:** 6.71 m**Elevation Datum:** MAMSL**Coordinates and Elevation Values are Approximate**

Depth Scale (m)	Depth (m)	Strata	Description	Sample Number	Recovery %	Blows per 0.15m or Partial Increment	N/RQD Value	PID (ppm)	Grain Size Analysis					Moisture Content %	Water Level(s)	Monitoring Well
	Elev. (m)								Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 265.20															
	0.45 264.75		TOPSOIL (450 mm)	SS1	100	3-4-5-5	9	0						18		
1			NATIVE: SILTY CLAY, trace sand, trace gravel, grey, moist, very stiff	SS2	100	7-10-9-10	19	0						15		
			- stiff at 1.52m BGS	SS3	92	3-4-6-2	10	0						14		
2	2.29 262.91		SANDY CLAYEY SILT, brown, wet, very soft	SS4	50	0-0-0-0	0	0	2	32	36	30		18		
			- VANE TEST at 2.90m BGS	V1												
3				SS5	50	0-0-0-0	0	0						20		
			- VANE TEST at 3.66m BGS	V2												
4			- dark brown, saturated at 3.81m BGS	SS6	67	0-0-11-24	11	0						50		
			- trace root, no recovery, at 4.57m BGS	SS7	0	1-0-2-6	2	0						22		
5	5.33 259.87		SILTY CLAY TILL, trace sand, grey, moist, stiff	SS8	67	2-5-8-10	13	0	1	10	36	53		22		
			- VANE TEST at 5.94m BGS	V3												
6			- very stiff at 6.10m BGS	SS9	79	3-7-12-15	19	0						13		
7	6.71 258.49		End of Hole at 6.71 m BGS													
8																
9																

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

At Time of Drilling:

Upon Completion of Drilling: 0.91 m on 10/03/2025

Last Water Level Taken: 02/04/2025

Well - Reference Elevation(s)

Location	Elevation (m)
MW03-25	

T.O.S.: Top of Screen

B.O.S.: Bottom of Screen

Screen Diameter: 51 mm

Screen Slot Size:

Material: PVC

mBGS: Meters below ground surface

mBTC: Meters below top of casing

Water Readings

Date (dd/mm/yyyy)	Depth	Unit
02/04/2025	0.17	mBGS



STRATIGRAPHIC AND INSTRUMENTATION RECORD (Overburden)

MW04-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.
Project: Fourteen Estates, Whitfield Road
Location: Whitfield Road, Scugog, Ontario
Date Range (dd/mm/yyyy): 10/03/2025
Drilling Company: ACE Drilling
Equipment Used: Geo Probe
Drilling Method(s): Solid Stem Auger

Page 1 of 1

Northing: 4889443 m
Easting: 664388 m
Horizontal Datum: NAD83 / UTM zone 17N
Elevation: 265.10 m
Elevation Datum: MAMSL
Logged By: Jacob Kempt
Reviewed By: Michael Nieu Kirk
Final Depth: 5.18 m
Coordinates and Elevation Values are Approximate

Depth Scale (m)	Depth (m)	Elev. (m)	Strata	Description	Sample Number	Recovery %	Blows per 0.15m or Partial Increment	N/RQD Value	PID (ppm)	Grain Size Analysis					Moisture Content %	Water Level(s)	Monitoring Well
										Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00	265.10															
	0.40	264.70		TOPSOIL (400 mm)	SS1	33	4-6-4-12	10	0						13		
				FILL: CLAYEY SANDY SILT, some gravel, brown, moist to wet, very loose													
1					SS2	38	3-1-2-1	3	0	19	21	38	22		24		Hole-Plug
				- loose at 1.52m BGS													1.22 263.88
2					SS3	79	1-1-5-7	6	0						21		
	2.29	262.81		NATIVE: SILTY SAND, some gravel, some clay, brown, wet, compact													
				- loose at 3.05m BGS	SS4	54	5-4-7-11	11	0						19		
3																	
					SS5	62	2-3-4-5	7	0						14		Sand T.O.S. 3.05 262.05
4																	
5																	
	4.88	260.22		SILTY CLAY TILL, some sand, trace gravel, wet, very stiff	SS6	67	8-10-12-13	22	0						19		4.57 260.53 B.O.S. 4.57 260.63
	5.18	259.92		End of Hole at 5.18 m BGS													
6																	
7																	
8																	
9																	

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

At Time of Drilling:

Upon Completion of Drilling: 0.91 m on 10/03/2025

Last Water Level Taken: 02/04/2025

Well - Reference Elevation(s)

Location Elevation (m)

MW04-25

T.O.S.: Top of Screen

B.O.S.: Bottom of Screen

Screen Diameter: 51 mm

Screen Slot Size:

Material: PVC

mBGS: Meters below ground surface

mBTC: Meters below top of casing

Water Readings

Date (dd/mm/yyyy) Depth Unit

17/03/2025 0.13 mBGS

02/04/2025 0.39 mBGS



STRATIGRAPHIC AND INSTRUMENTATION RECORD

(Overburden)

BH05-25

Project Number: 12656921

Client: Honey Heights Developments Ltd.
Project: Fourteen Estates, Whitfield Road
Location: Whitfield Road, Scugog, Ontario
Date Range (dd/mm/yyyy): 10/03/2025
Drilling Company: ACE Drilling
Equipment Used: Geo Probe
Drilling Method(s): Solid Stem Auger

Page 1 of 1

Northing: 4889427 m**Logged By:** Jacob Kempt**Easting:** 664316 m**Reviewed By:** Michael Nieu Kirk**Horizontal Datum:** NAD83 / UTM zone 17N**Elevation:** 266.30 m**Final Depth:** 3.66 m**Elevation Datum:** MAMSL**Coordinates and Elevation Values are Approximate**

Depth Scale (m)	Depth (m)	Strata	Description	Sample Number	Recovery %	Blows per 0.15m or Partial Increment	N/RQD Value	PID (ppm)	Grain Size Analysis					Moisture Content %	Water Level(s)	Backfill Details
	Elev. (m)								Gravel %	Sand %	Silt %	Clay %	Fines %			
	0.00 266.30															
1	0.40	TOPSOIL/FILL (400 mm)	SS1	83	2-3-5-3	8								27		
	265.90	FILL: SANDY SILT, some clay, trace gravel, brown, moist, loose														
	0.66															
	265.64	NATIVE: SAND, some silt, trace gravel, brown, wet, compact	SS2	42	6-6-10-9	16								12		
2	2.29		SS3	42	3-6-7-7	13								19		
	264.01	SANDY SILT, trace gravel, trace clay, brown, moist to wet, compact	SS4	100	9-8-8-12	16								20		
3	3.05															
	263.25	SANDY SILT TILL, trace gravel, trace clay, brown, moist to wet, dense	SS5	79	10-20-21-30	41								18		
4	3.66 262.64	End of Hole at 3.66 m BGS														
5																
6																
7																
8																
9																

Legend:

Measuring Point Elevation may change; Refer to Current Elevation Table

**At Time of Drilling:****Upon Completion of Drilling:** 0.91 m on 10/03/2025**Last Water Level Taken:****Well - Reference Elevation(s)**

Location Elevation (m)

Water Readings

Date (dd/mm/yyyy) Depth Unit

Appendix C

Physical Laboratory Testing Results



Particle-Size Analysis of Soils

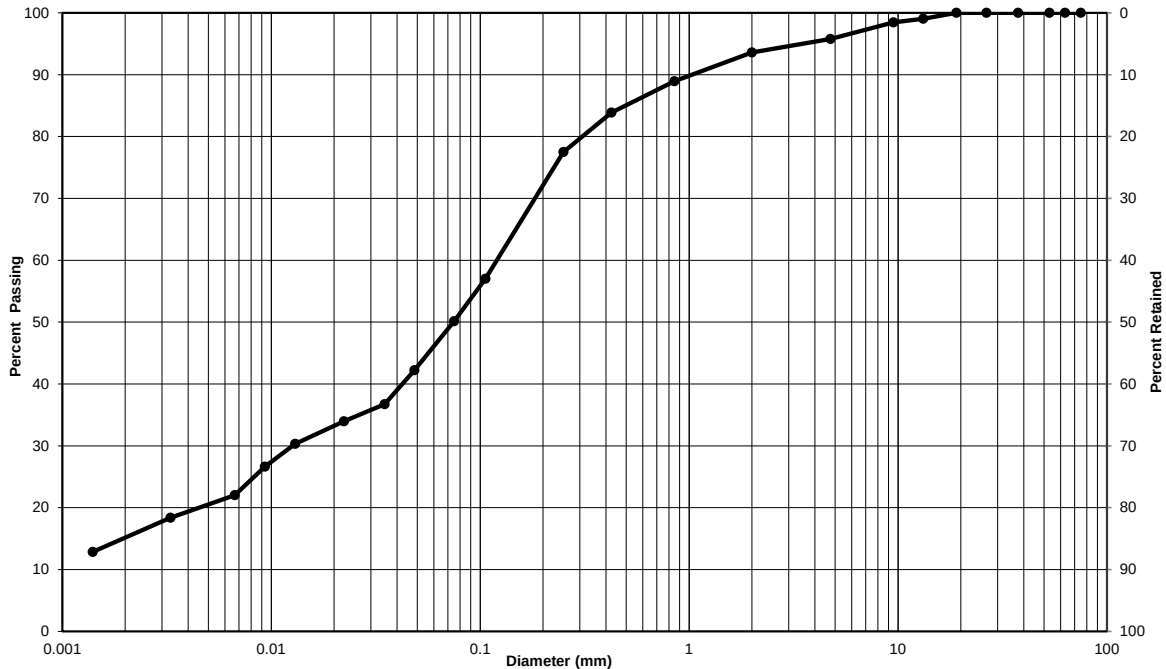
MTO LS-702/ASTM D422 (Geotechnical)

Client: Fourteen Estates Ltd. Lab No.: SS-25-23

Project/Site: Fourteen Estates, Whitfield Road Project No.: 12656921-01

Borehole No.: MW1-25 Sample No.: SS3

Depth: 1.5-2.1m Enclosure: C-1



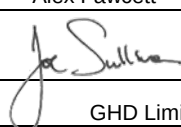
Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Particle-Size Limits as per USCS (ASTM D-2487)					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
Silt and sand, some clay, trace gravel	4	46	50
Silt-size particles (%) :	35		
Clay-size particles (%) (<0.002 mm):	15		

Additional laboratory reporting information available upon request.

Remarks: _____

Performed by: Alex Fawcett Date: March 26, 2025

Verified by: Joe Sullivan  Date: March 26, 2025

Laboratory Location: GHD Limited - 347 Pido Road, Unit 29, Peterborough, ON



Particle-Size Analysis of Soils

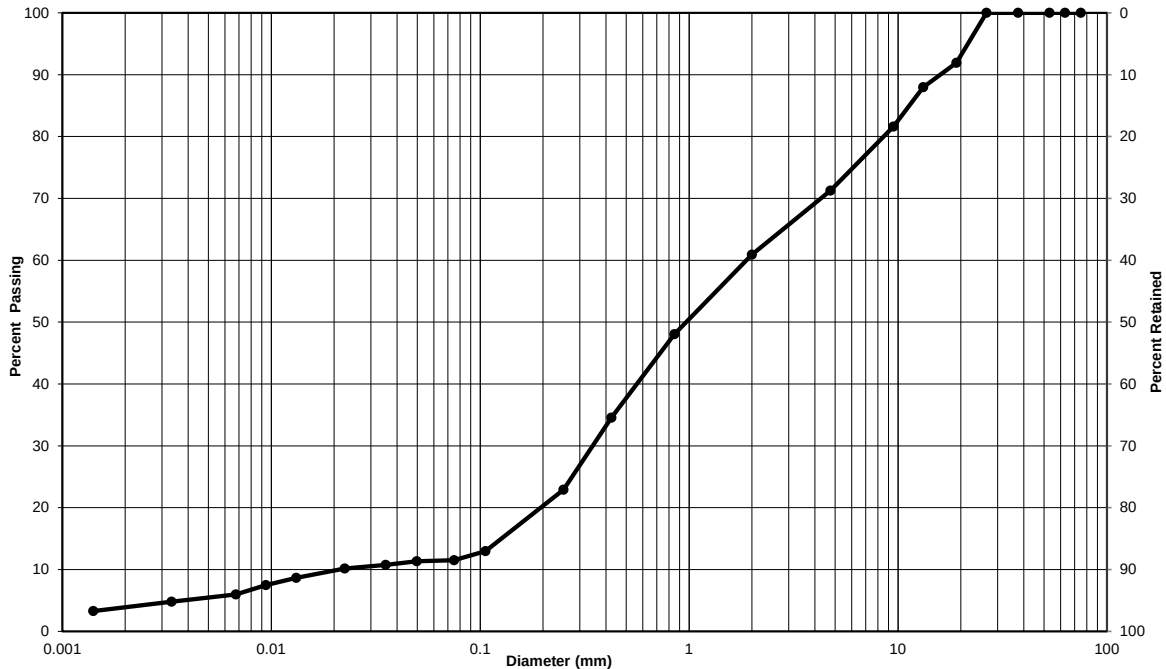
MTO LS-702/ASTM D422 (Geotechnical)

Client: Fourteen Estates Ltd. Lab No.: SS-25-23

Project/Site: Fourteen Estates, Whitfield Road Project No.: 12656921-01

Borehole No.: MW2-25 Sample No.: SS6

Depth: 4.6-5.2m Enclosure: C-2



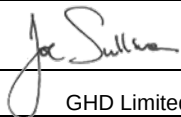
Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Particle-Size Limits as per USCS (ASTM D-2487)					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
Gravelly sand, trace silt and clay	29	59	12
Silt-size particles (%) :	8		
Clay-size particles (%) (<0.002 mm):	4		

Additional laboratory reporting information available upon request.

Remarks: _____

Performed by: Alex Fawcett Date: March 26, 2025

Verified by: Joe Sullivan  Date: March 26, 2025

Laboratory Location: GHD Limited - 347 Pido Road, Unit 29, Peterborough, ON



Particle-Size Analysis of Soils

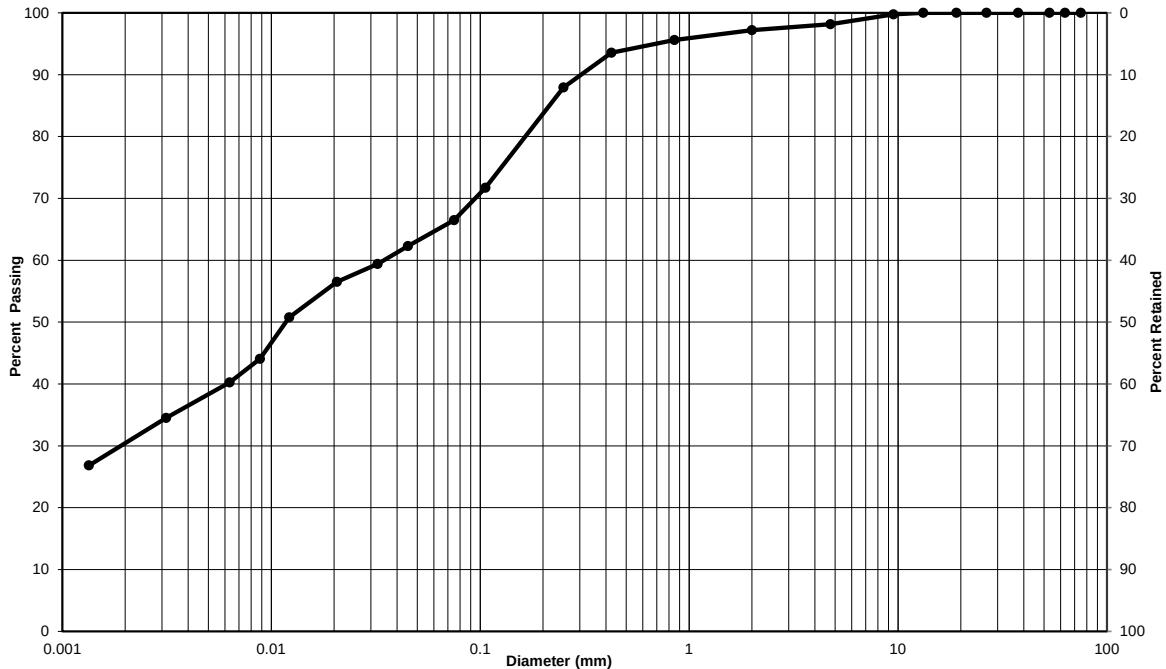
MTO LS-702/ASTM D422 (Geotechnical)

Client: Fourteen Estates Ltd. Lab No.: SS-25-23

Project/Site: Fourteen Estates, Whitfield Road Project No.: 12656921-01

Borehole No.: MW3-25 Sample No.: SS4

Depth: 2.3-2.9m Enclosure: C-3



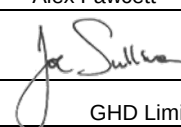
Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Particle-Size Limits as per USCS (ASTM D-2487)					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
Sandy, clayey silt, trace gravel	2	32	66
Silt-size particles (%) :	36		
Clay-size particles (%) (<0.002 mm):	30		

Additional laboratory reporting information available upon request.

Remarks: _____

Performed by: Alex Fawcett Date: March 26, 2025

Verified by: Joe Sullivan  Date: March 26, 2025

Laboratory Location: GHD Limited - 347 Pido Road, Unit 29, Peterborough, ON



Particle-Size Analysis of Soils

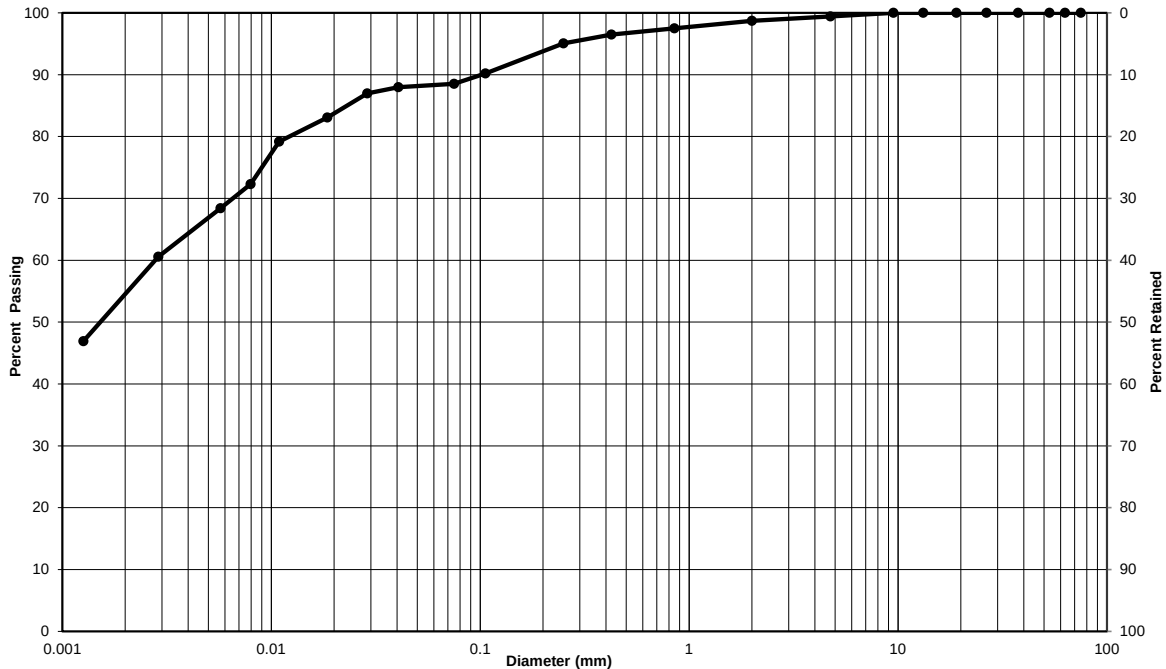
MTO LS-702/ASTM D422 (Geotechnical)

Client: Fourteen Estates Ltd. Lab No.: SS-25-23

Project/Site: Fourteen Estates, Whitfield Road Project No.: 12656921-01

Borehole No.: MW3-25 Sample No.: SS8

Depth: 5.3-5.9m Enclosure: C-4



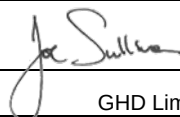
Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Particle-Size Limits as per USCS (ASTM D-2487)					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
Clay and silt, some sand, trace gravel	1	10	89
Silt-size particles (%) :	36		
Clay-size particles (%) (<0.002 mm):	53		

Additional laboratory reporting information available upon request.

Remarks: _____

Performed by: Alex Fawcett Date: March 26, 2025

Verified by: Joe Sullivan  Date: March 26, 2025

Laboratory Location: GHD Limited - 347 Pido Road, Unit 29, Peterborough, ON



Particle-Size Analysis of Soils

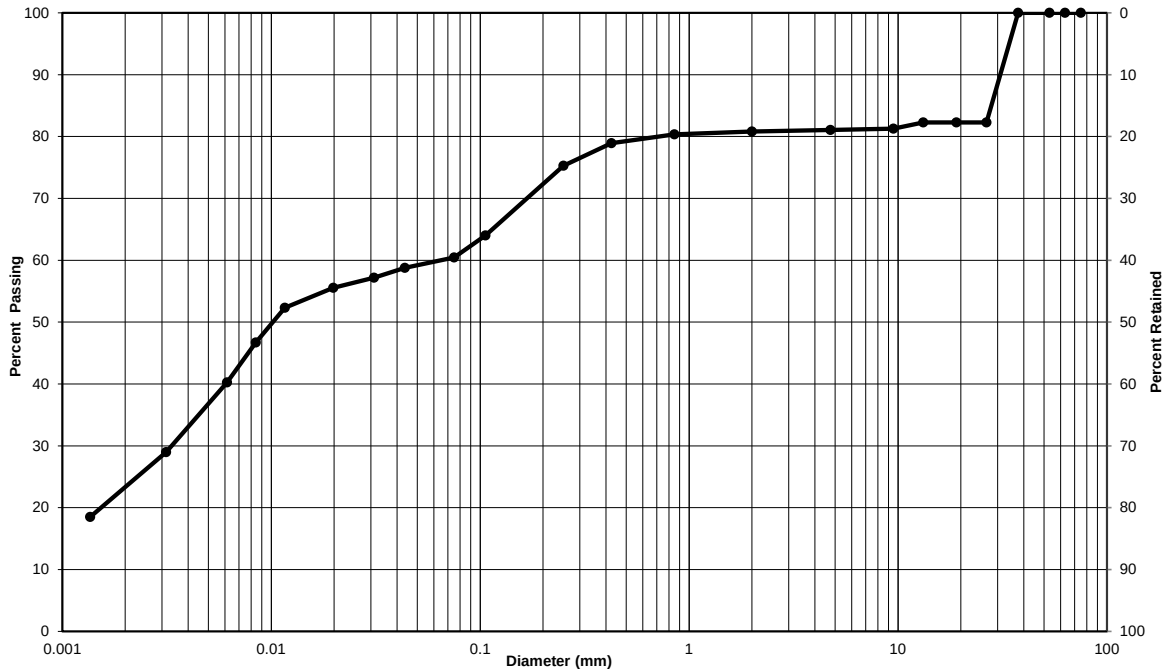
MTO LS-702/ASTM D422 (Geotechnical)

Client: Fourteen Estates Ltd. Lab No.: SS-25-23

Project/Site: Fourteen Estates, Whitfield Road Project No.: 12656921-01

Borehole No.: MW4-25 Sample No.: SS2

Depth: 0.8-1.4m Enclosure: C-5



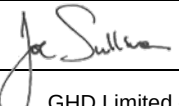
Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Particle-Size Limits as per USCS (ASTM D-2487)					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
Clayey, sandy silt, some gravel	19	21	60
Silt-size particles (%) :	38		
Clay-size particles (%) (<0.002 mm):	22		

Additional laboratory reporting information available upon request.

Remarks: _____

Performed by: Alex Fawcett Date: March 26, 2025

Verified by: Joe Sullivan  Date: March 26, 2025

Laboratory Location: GHD Limited - 347 Pido Road, Unit 29, Peterborough, ON



Particle-Size Analysis of Soils

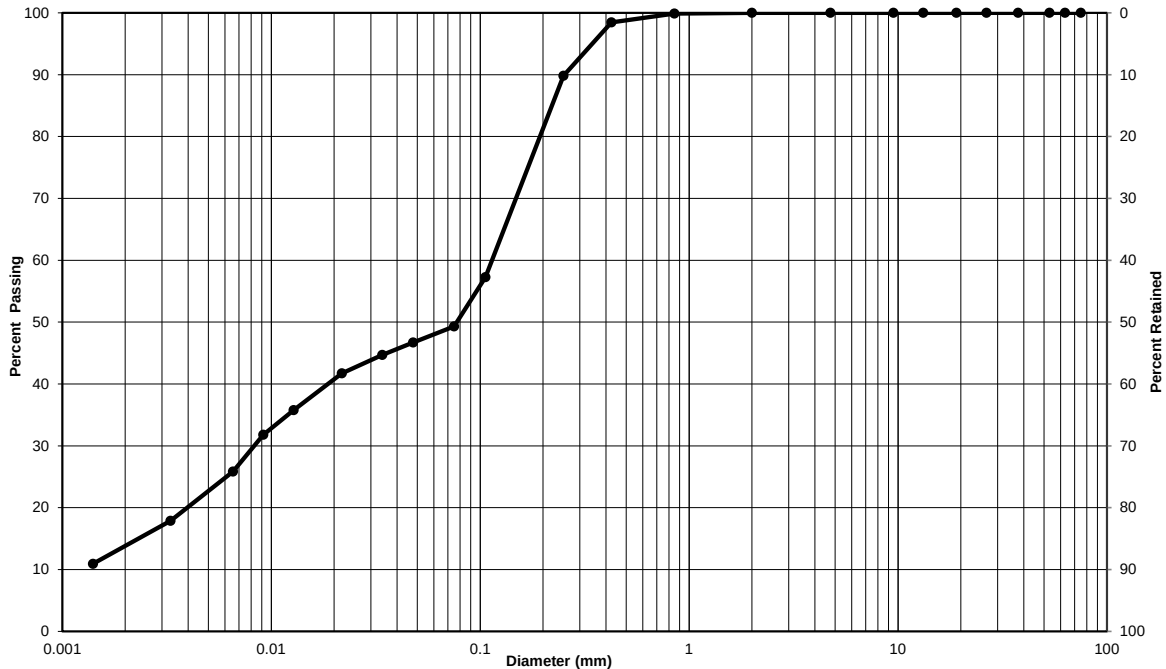
MTO LS-702/ASTM D422 (Geotechnical)

Client: Fourteen Estates Ltd. Lab No.: SS-25-23

Project/Site: Fourteen Estates, Whitfield Road Project No.: 12656921-01

Borehole No.: TP4-25 Sample No.: GS1

Depth: 0.3-0.6m Enclosure: C-6



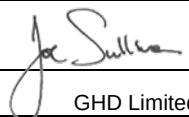
Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Particle-Size Limits as per USCS (ASTM D-2487)					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
Sand and silt, some clay	0	51	49
Silt-size particles (%) :	36		
Clay-size particles (%) (<0.002 mm):	13		

Additional laboratory reporting information available upon request.

Remarks: _____

Performed by: Alex Fawcett Date: March 26, 2025

Verified by: Joe Sullivan  Date: March 26, 2025

Laboratory Location: GHD Limited - 347 Pido Road, Unit 29, Peterborough, ON



Particle-Size Analysis of Soils

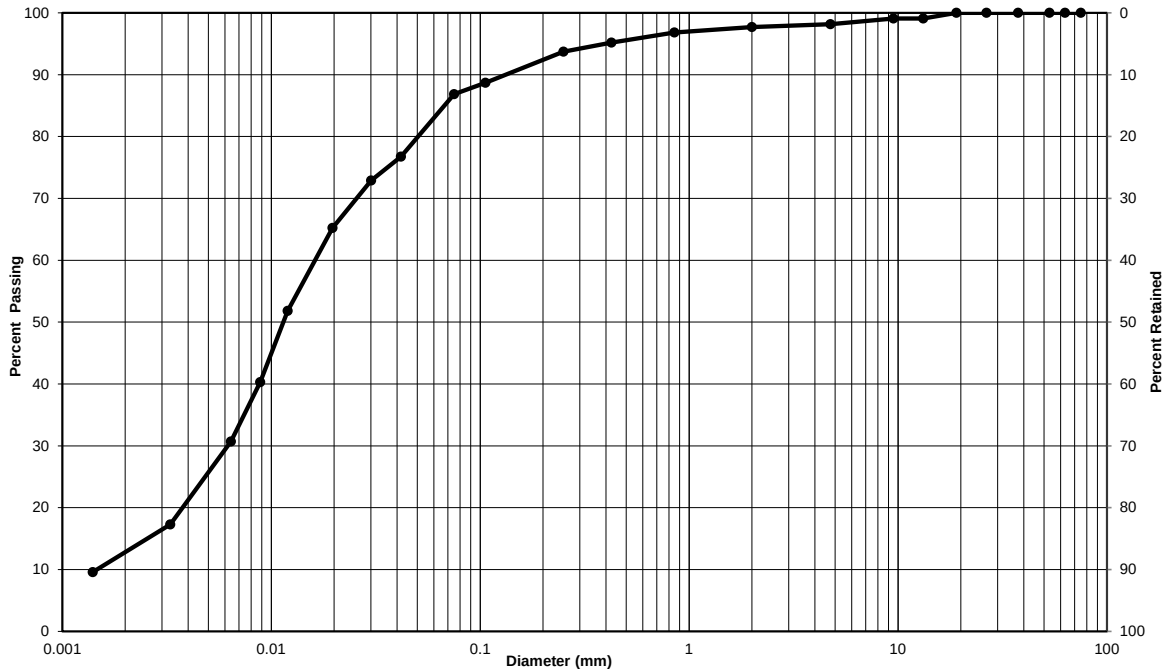
MTO LS-702/ASTM D422 (Geotechnical)

Client: Fourteen Estates Ltd. Lab No.: SS-25-23

Project/Site: Fourteen Estates, Whitfield Road Project No.: 12656921-01

Borehole No.: TP9-25 Sample No.: GS2

Depth: 0.9-1.2m Enclosure: C-7



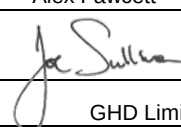
Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Particle-Size Limits as per USCS (ASTM D-2487)					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
Silt, some clay and sand, trace gravel	2	11	87
Silt-size particles (%) :	75		
Clay-size particles (%) (<0.002 mm):	12		

Additional laboratory reporting information available upon request.

Remarks: _____

Performed by: Alex Fawcett Date: March 26, 2025

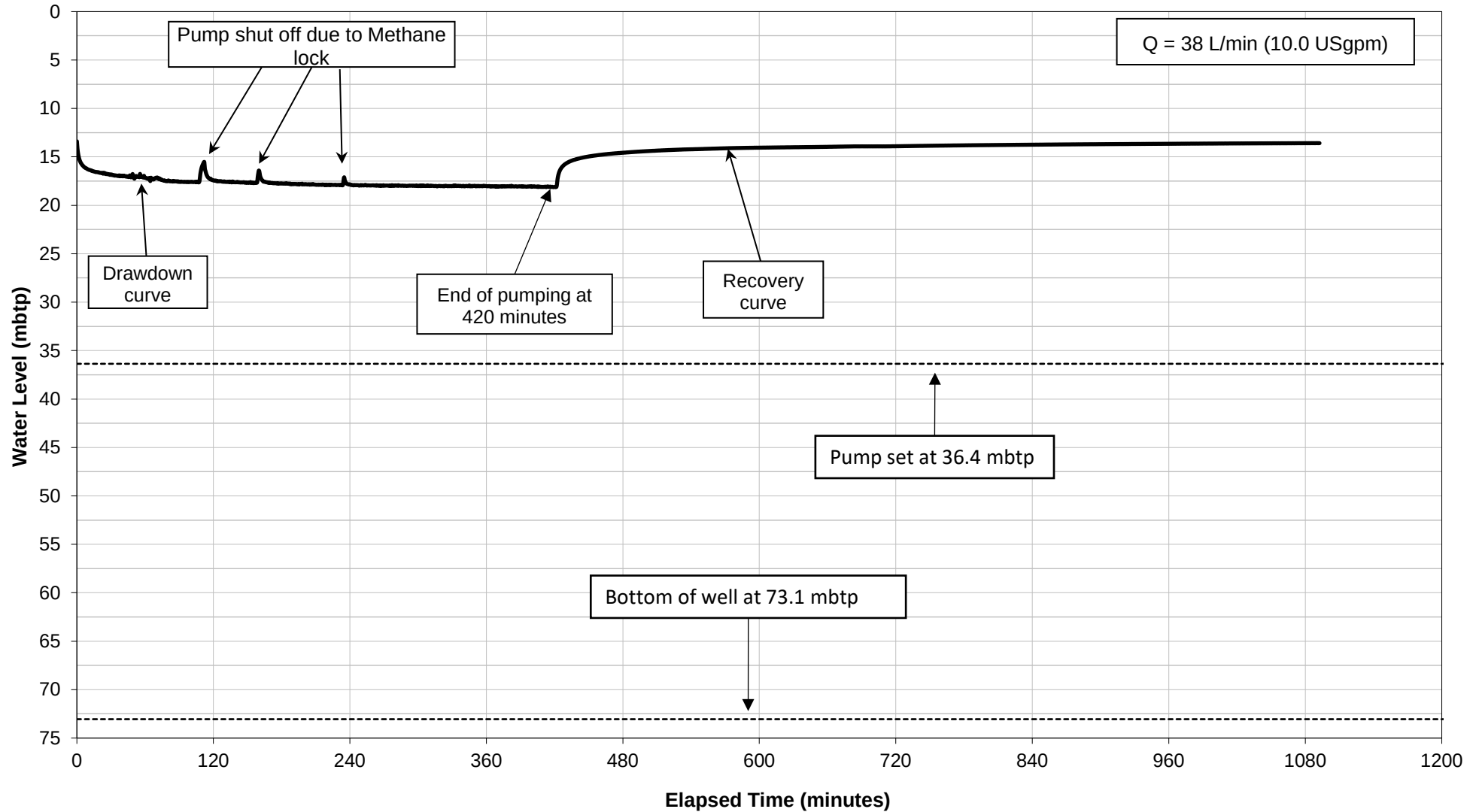
Verified by: Joe Sullivan  Date: March 26, 2025

Laboratory Location: GHD Limited - 347 Pido Road, Unit 29, Peterborough, ON

Appendix D

Aquifer Performance Data

PUMP HISTORY CURVE **TW-1 (A310857): Tested on May 15, 2023**



PUMP HISTORY CURVE

Drilled Well - TW-1
 MECP Well Tag: A310857

Static Level = 13.39 mbtp (14.24 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.85 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

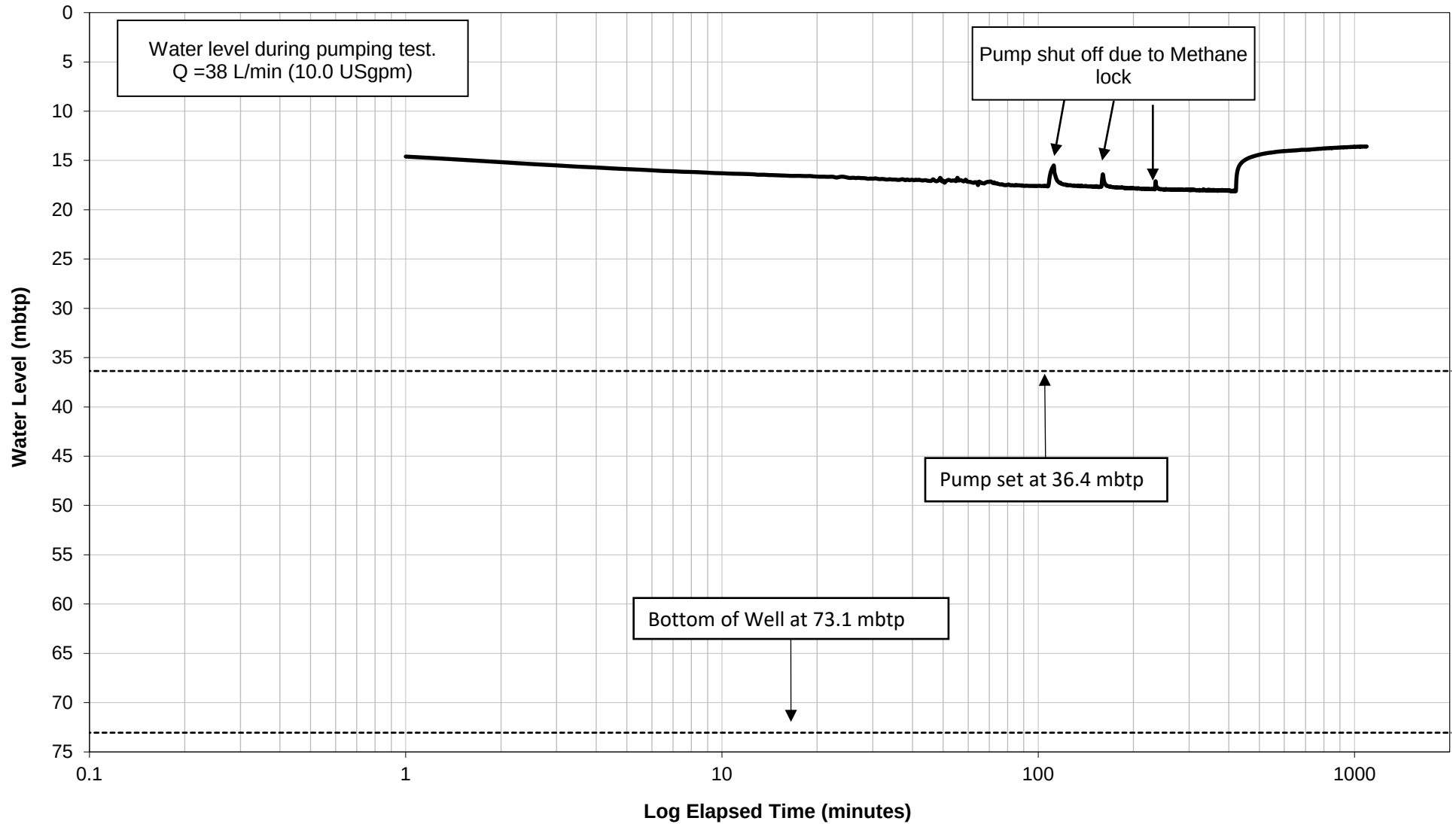
JOB NUMBER: 12612058

DRAWING NUMBER: D-1



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7
www.ghd.com

**CONSTANT RATE TEST: WATER LEVEL vs. LOG ELAPSED
TIME TW-1 (A310857): Tested on May 15, 2023**



CONSTANT RATE

Drilled Well - TW-1

MECP Well Tag: A310857

Static Level = 13.39 mbtp (14.24 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.85 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

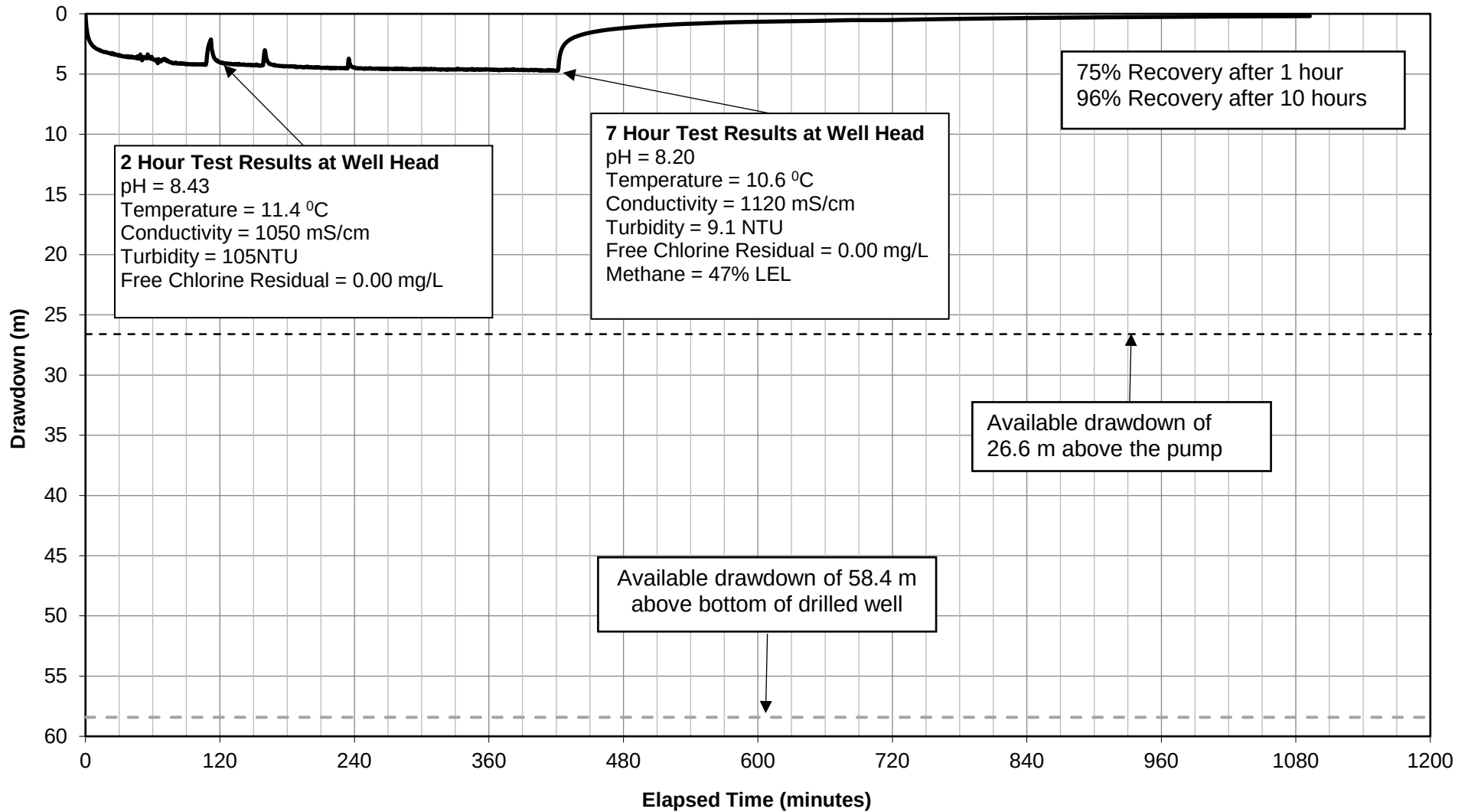
JOB NUMBER: 12612058

DRAWING NUMBER: D-2



347 PIDO ROAD, UNIT 29
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**CONSTANT RATE DRAWDOWN, RECOVERY AND TESTING
DETAILS TW-1 (A310857): Tested on May 15, 2023**



CONSTANT RATE DRAWDOWN

Drilled Well - TW-1
 MECP Well Tag: A310857
 Static Level = 13.39 mbtp (14.24 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.85 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

JOB NUMBER: 12612058

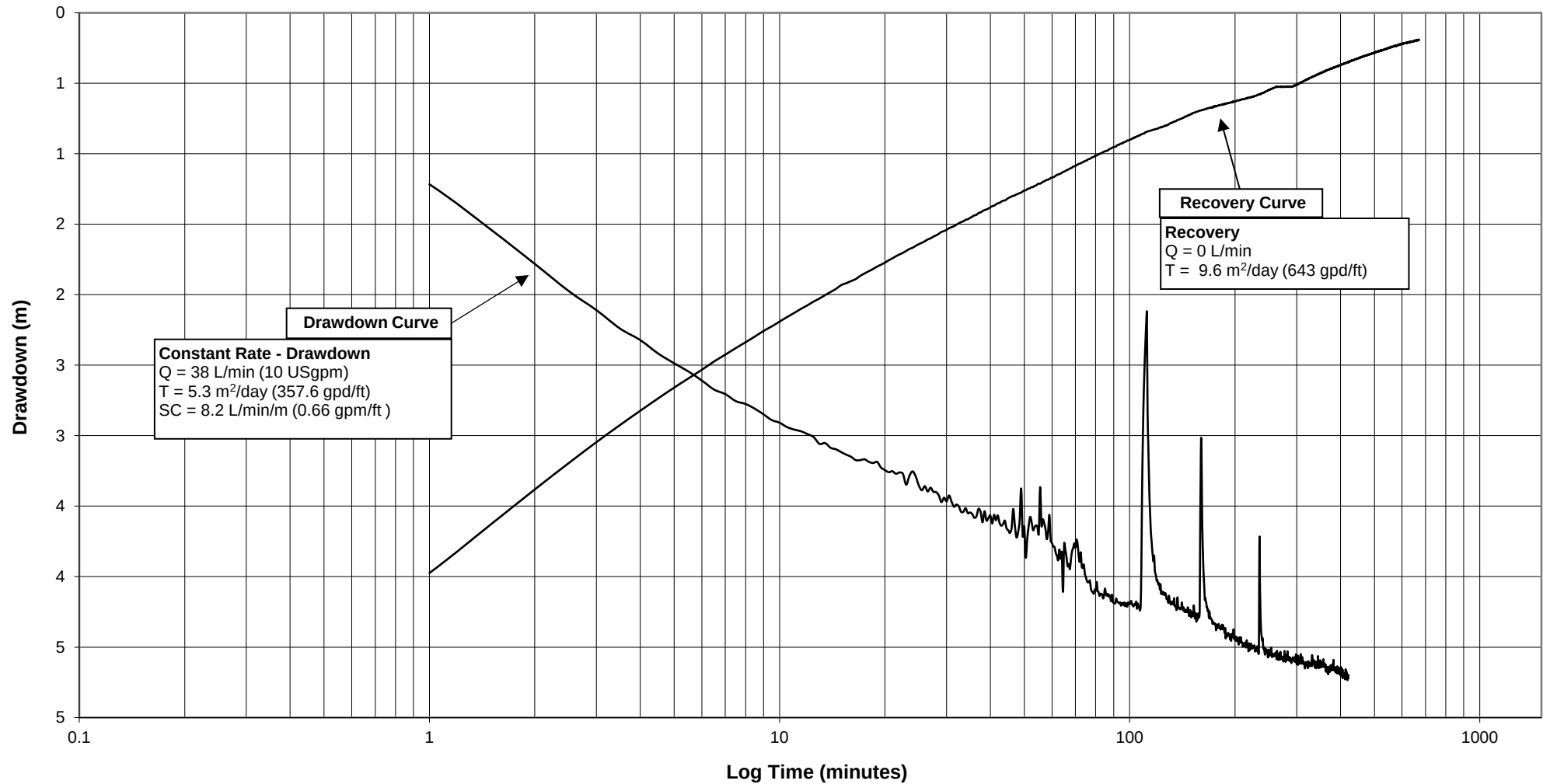
DRAWING NUMBER: D-3



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7

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CONSTANT RATE: DRAWDOWN and RECOVERY VS LOG TIME
TW-1 (A310857): Tested on May 15, 2023



TRANSMISSIVITY

Drilled Well - TW-1
 MECP Well Tag: A310857
 Static Level = 13.39 mbtp (14.24 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.85 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry

JOB NUMBER: 12612058

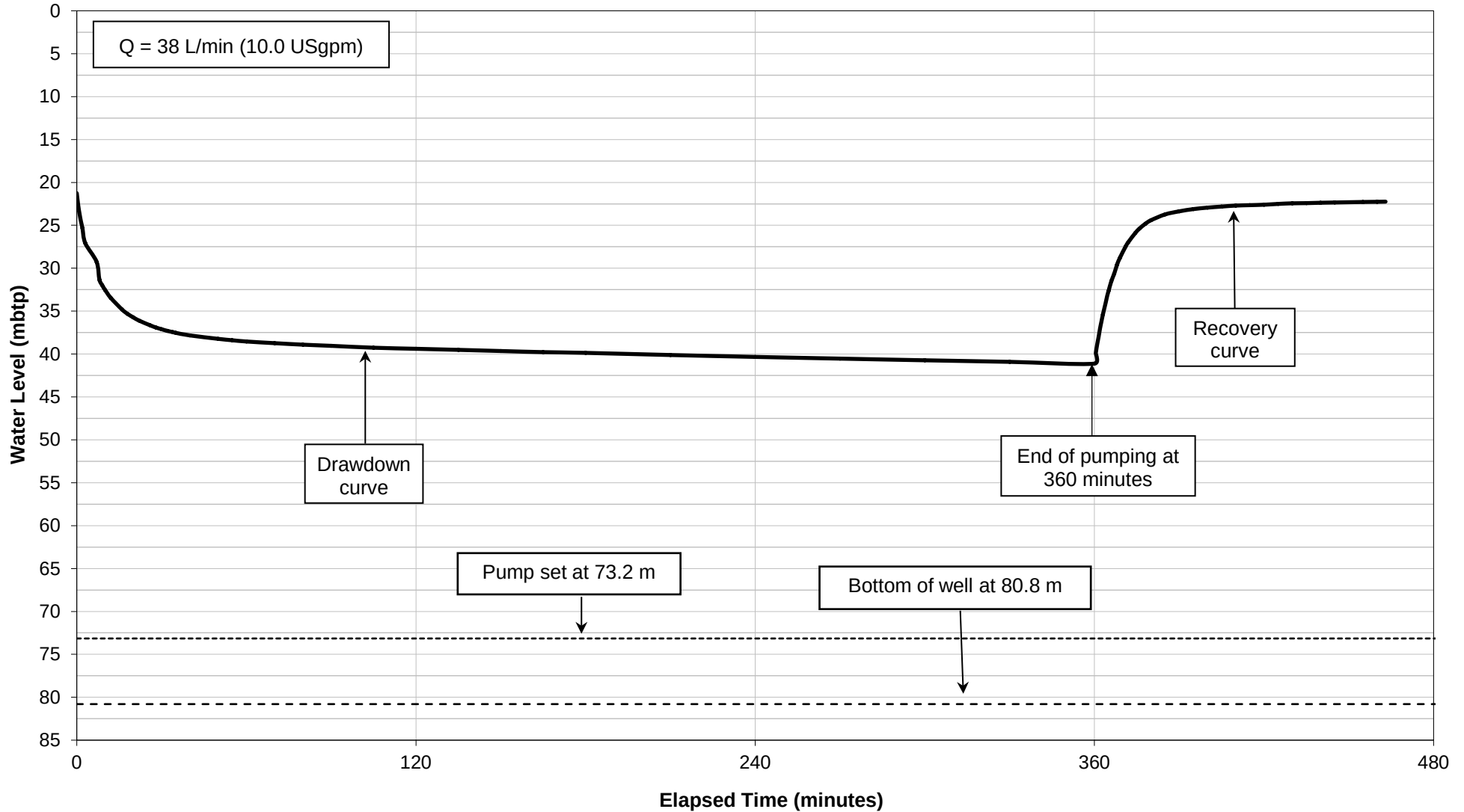
DRAWING NUMBER: D-4



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7

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PUMP HISTORY CURVE TW-2: October 26, 2023



PUMP HISTORY CURVE

Drilled Well - TW-2

MECP Well ID: A231205

Static Level = 21.20 mbtp (20.61 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.59 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

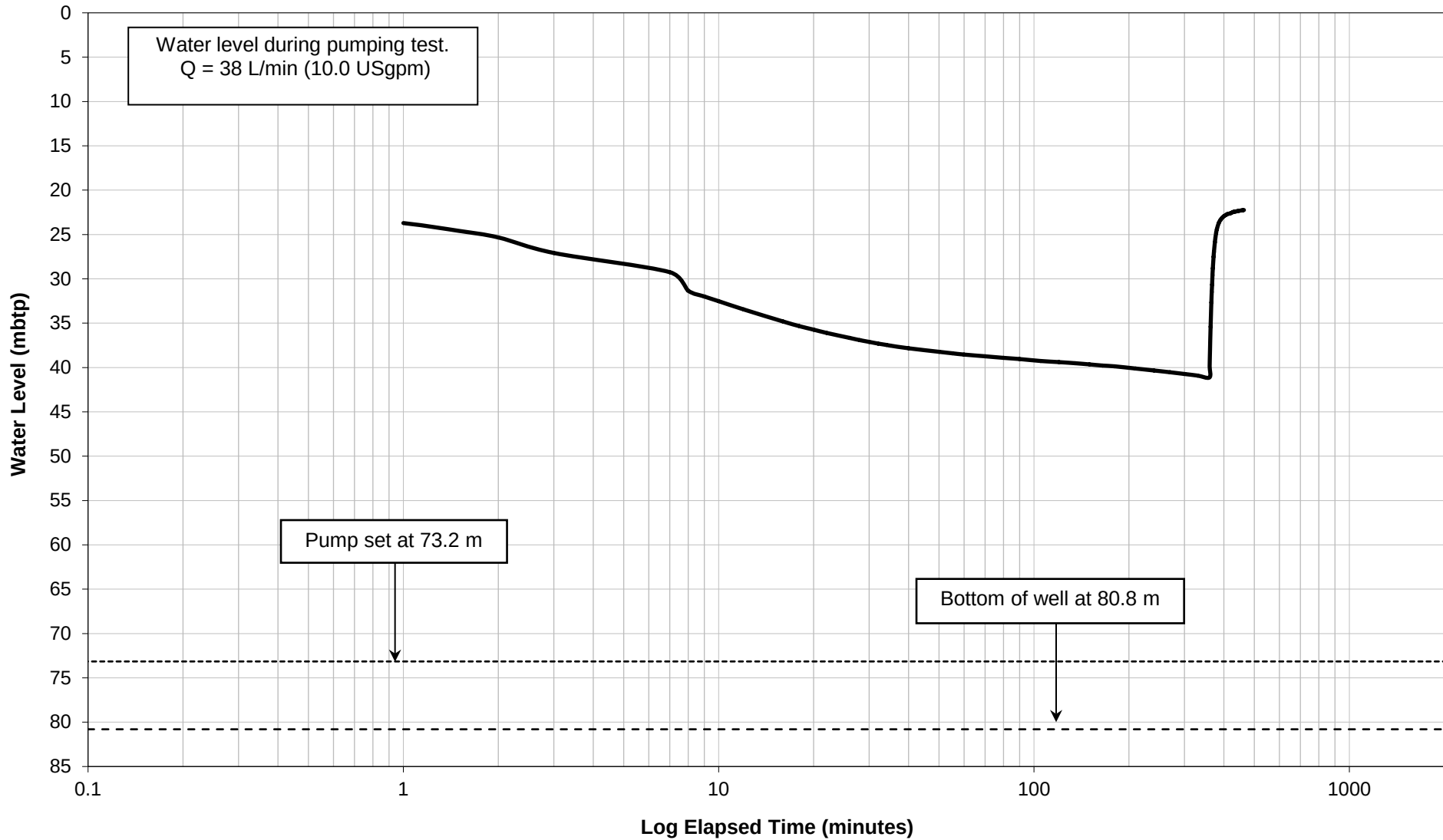
JOB NUMBER: 12612058

DRAWING NUMBER: D-5



347 PIDO ROAD, UNIT 29
PETERBOROUGH, ON K9J 6X7
www.ghd.com

CONSTANT RATE TEST: WATER LEVEL vs. LOG ELAPSED
TIME TW-2 (A231205): Tested on October 26, 2023



CONSTANT RATE

Drilled Well - TW-2

MECP Well ID: A231205

Static Level = 21.20 mbtp (20.61 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.59 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

JOB NUMBER: 12612058

DRAWING NUMBER: D-6

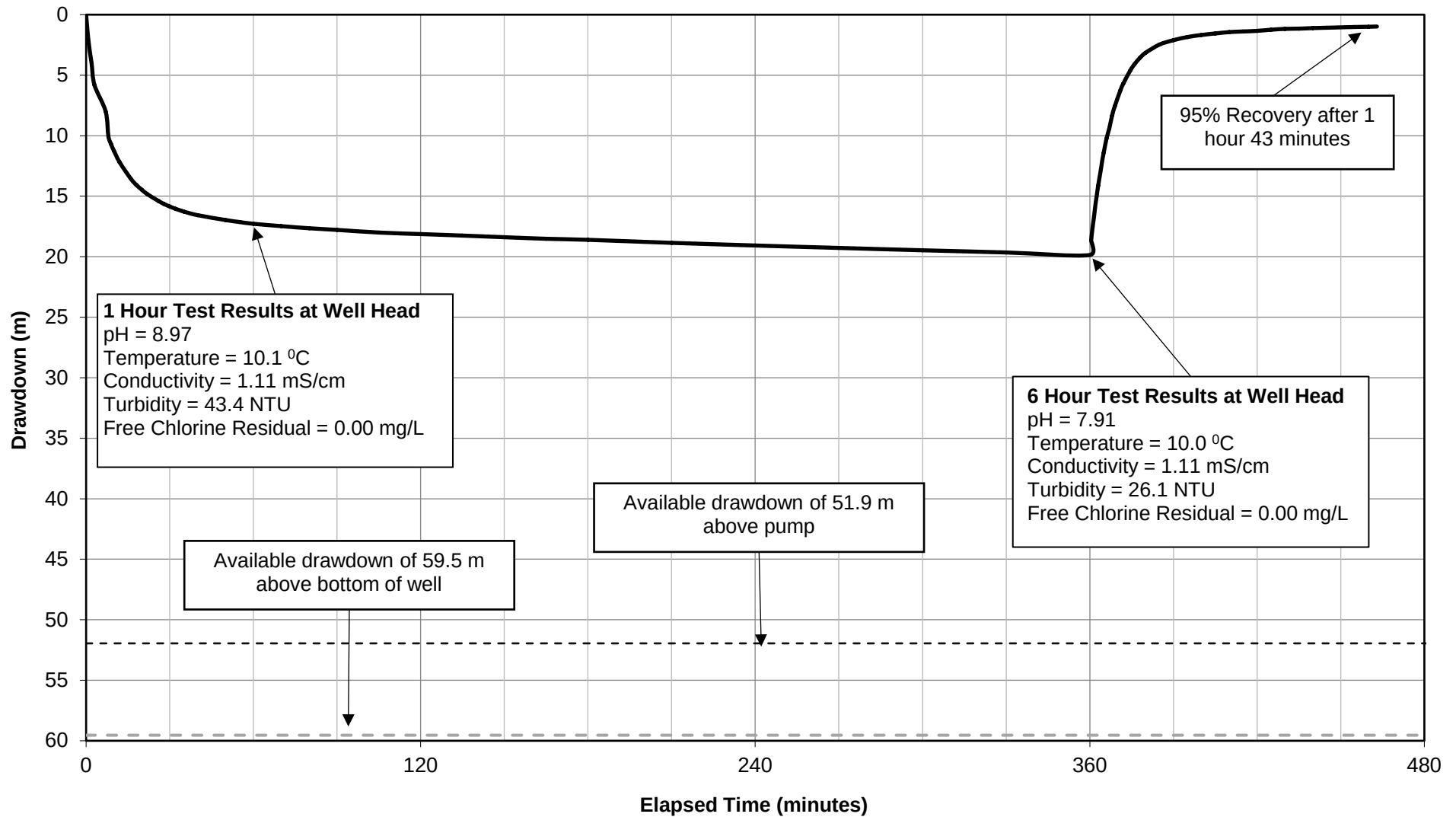


347 PIDO ROAD, UNIT 29

PETERBOROUGH, ON K9J 6X7

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**CONSTANT RATE TEST: WATER LEVEL vs. LOG ELAPSED
TIME TW-2 (A231205): Tested on October 26, 2023**



CONSTANT RATE DRAWDOWN

Drilled Well - TW-2
 MECP Well ID: A231205
 Static Level = 21.20 mbtp (20.61 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.59 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

JOB NUMBER: 12612058

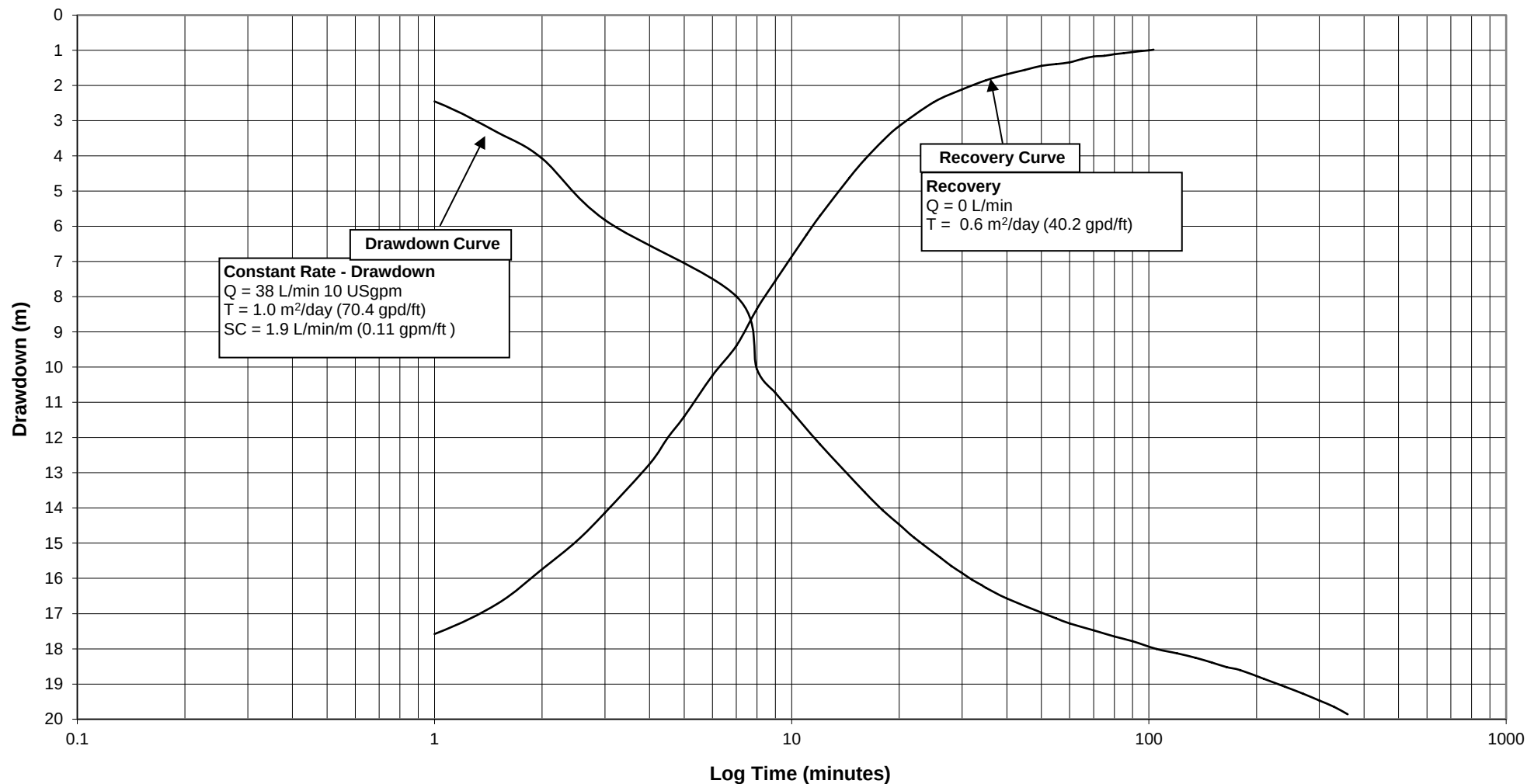
DRAWING NUMBER: D-7



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7

www.ghd.com

CONSTANT RATE: DRAWDOWN and RECOVERY VS LOG TIME
TW-2 (A231205): Tested on October 26, 2023



TRANSMISSIVITY

Drilled Well - TW-2
 MECP Well ID: A231205
 Static Level = 21.20 mbtp (20.61 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.59 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

JOB NUMBER: 12612058

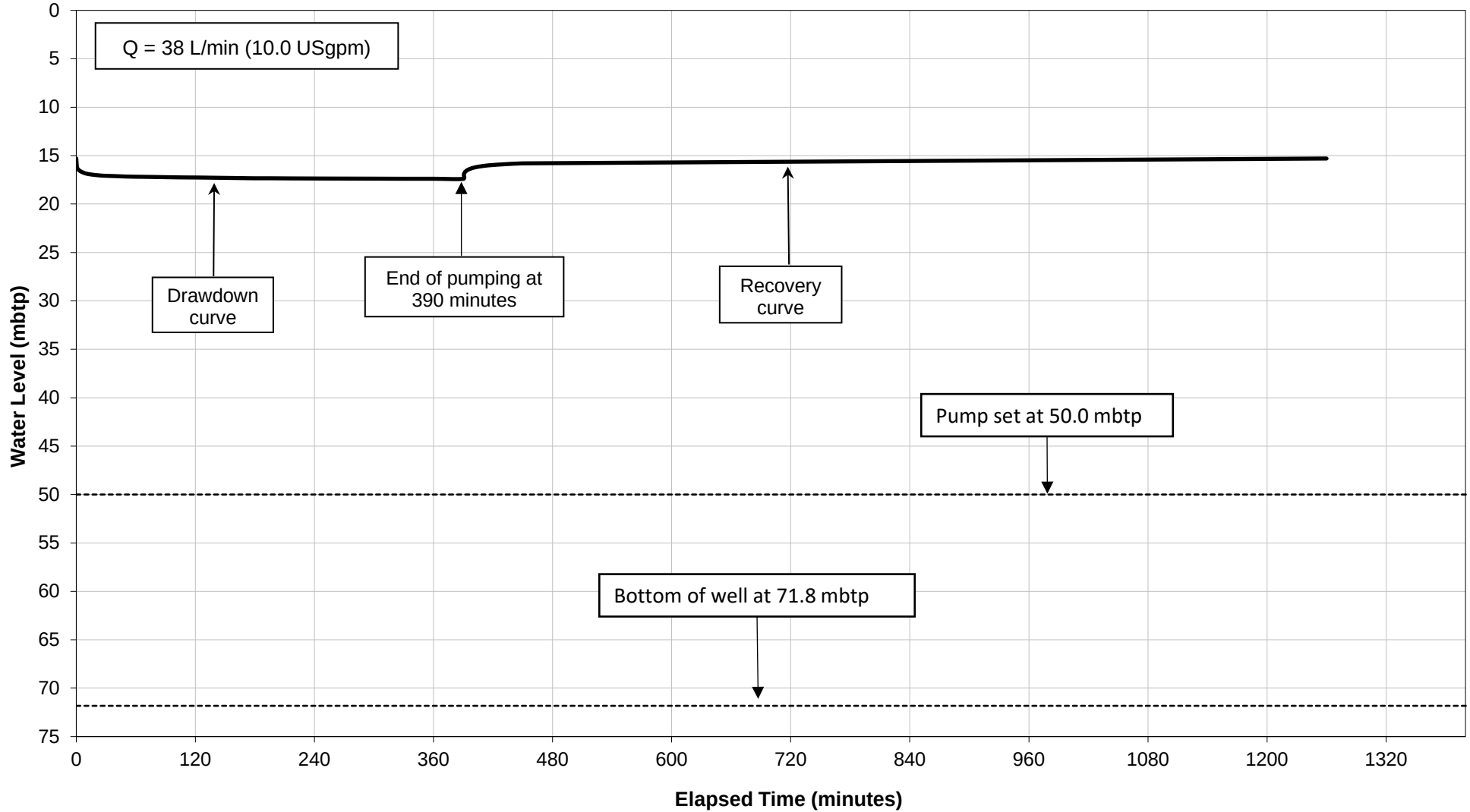
DRAWING NUMBER: D-8



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7

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PUMP HISTORY CURVE **TW-3 (A310856): Tested on May 8, 2023**



PUMP HISTORY CURVE

Drilled Well - TW-3
 MECP Well Tag A310856

Static Level = 15.29 mbtp (14.69 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.60 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

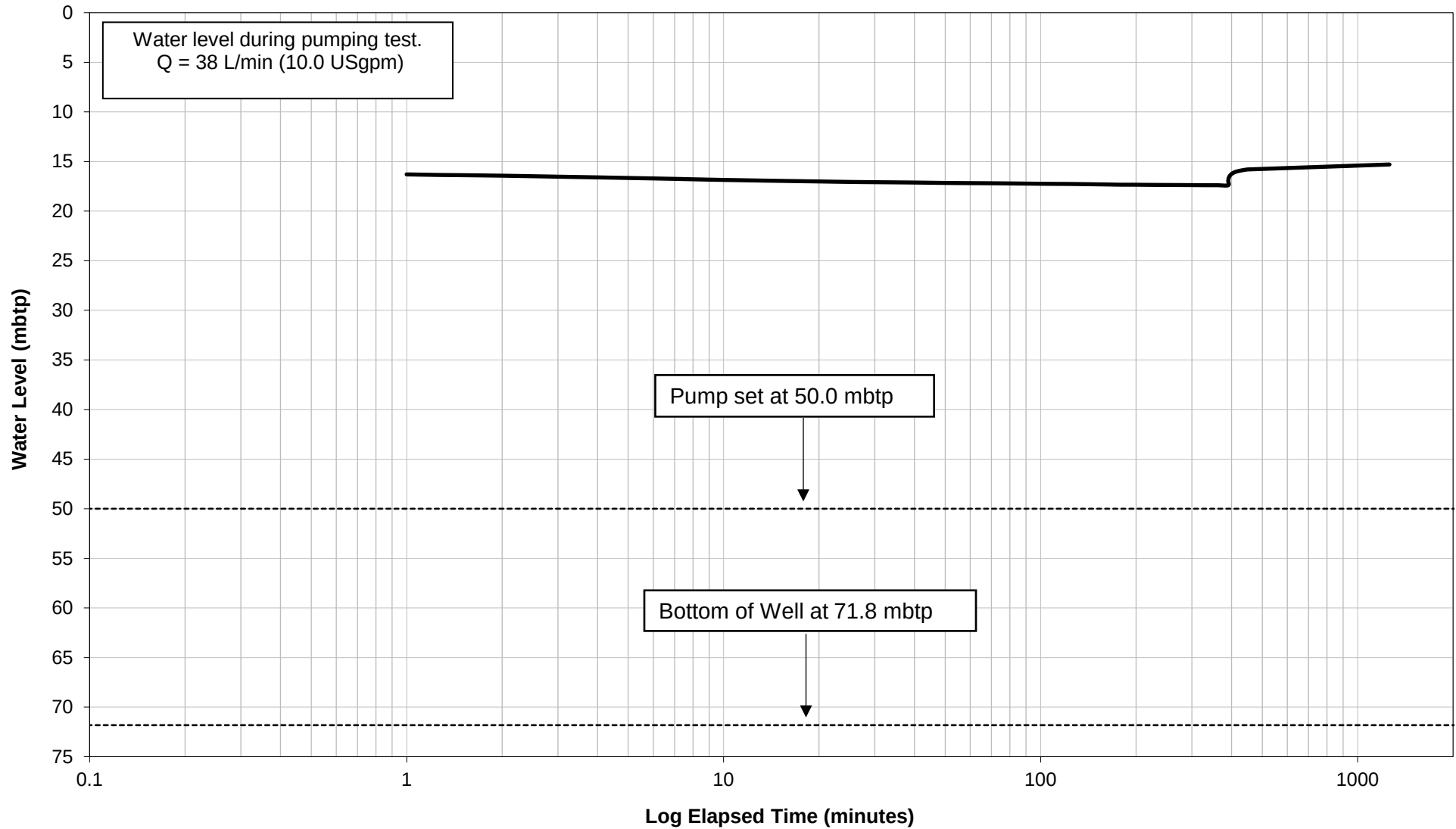
JOB NUMBER: 12612058

DRAWING NUMBER: D-9



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7
www.ghd.com

**CONSTANT RATE TEST: WATER LEVEL vs. LOG ELAPSED
TIME TW-3 (A310856): Tested on May 8, 2023**



CONSTANT RATE

Drilled Well - TW-3
MECP Well Tag A310856
Static Level = 15.29 mbtp (14.69 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.60 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

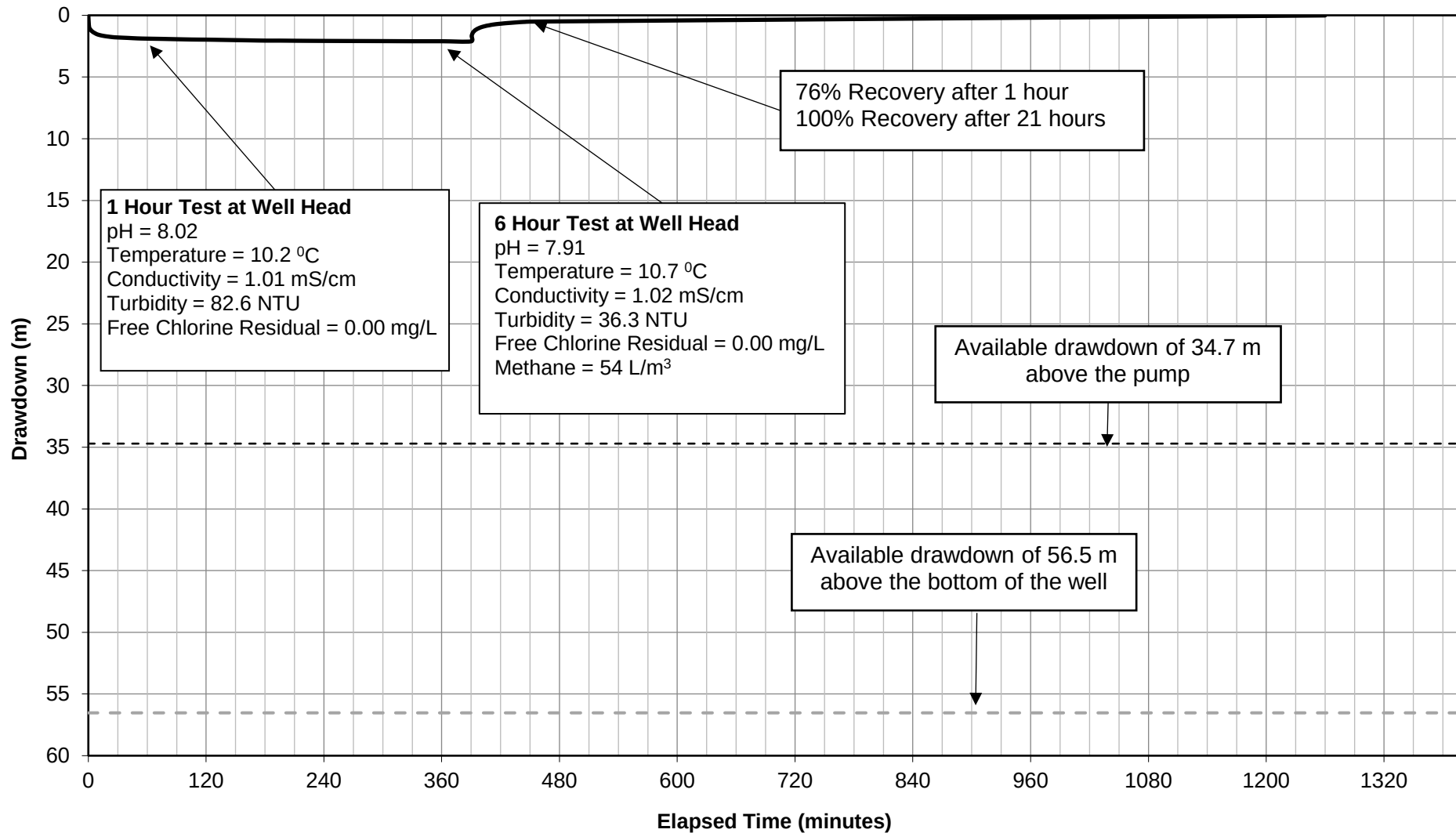
JOB NUMBER: 12612058

DRAWING NUMBER: D-10



347 PIDO ROAD, UNIT 29
PETERBOROUGH, ON K9J 6X7
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CONSTANT RATE DRAWDOWN, RECOVERY AND TESTING DETAILS
TW-3 (Tag #A310856): Tested on May 8, 2023



CONSTANT RATE DRAWDOWN

Drilled Well - TW-3
 MECP Well Tag A310856
 Static Level = 15.29 mbtp (14.69 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.60 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

JOB NUMBER: 12612058

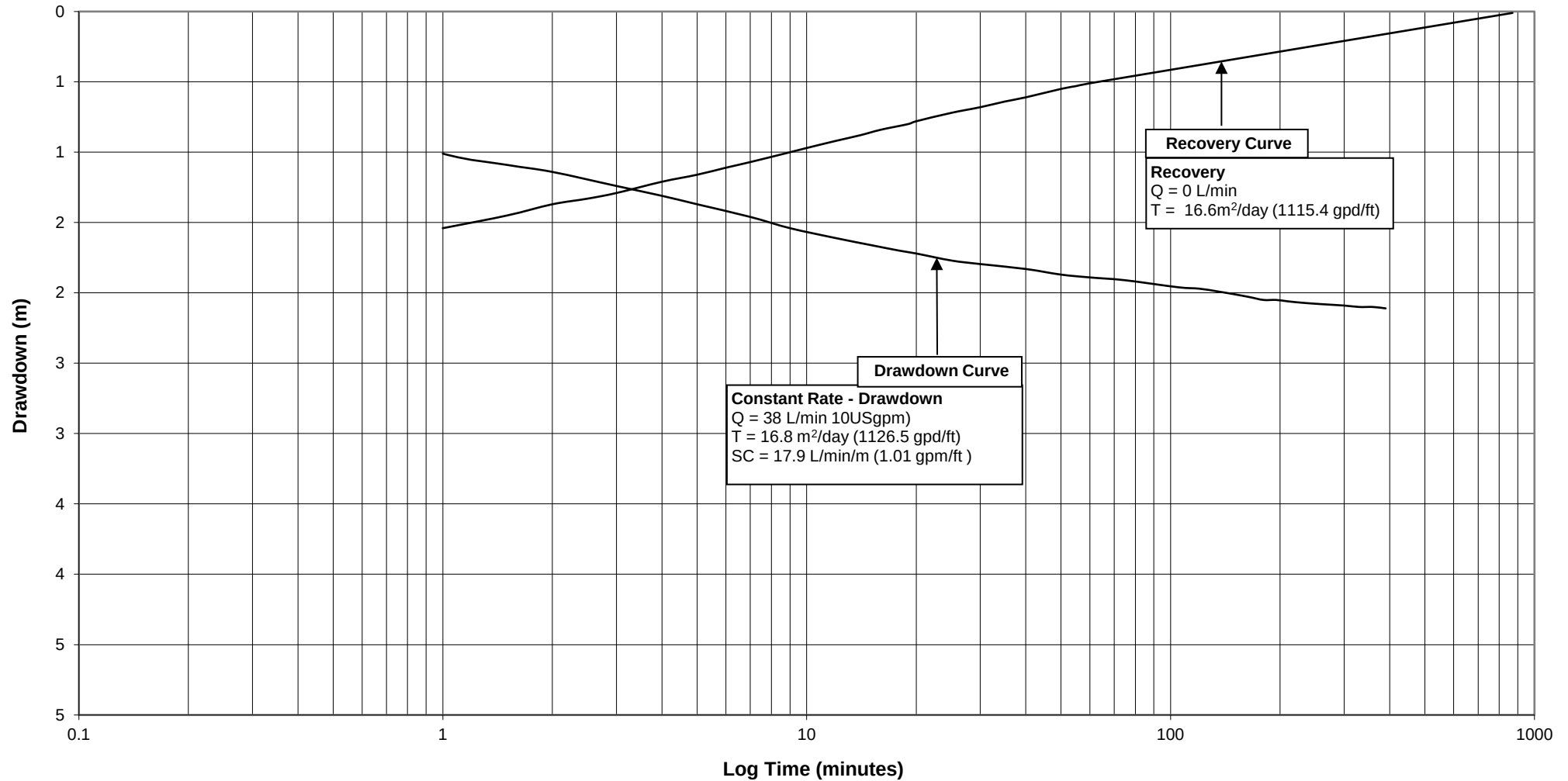
DRAWING NUMBER: D-11



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7

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CONSTANT RATE: DRAWDOWN and RECOVERY VS LOG TIME TW-3: May 8, 2023



TRANSMISSIVITY

Drilled Well - TW-3
MECP Well Tag A310856
Static Level = 15.29 mbtp (14.69 mbgs)

Note: m = metres; mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.60 m

DATE: MAY 2025

LOCATION: Whitfield Road, Port Perry, ON

JOB NUMBER: 12612058

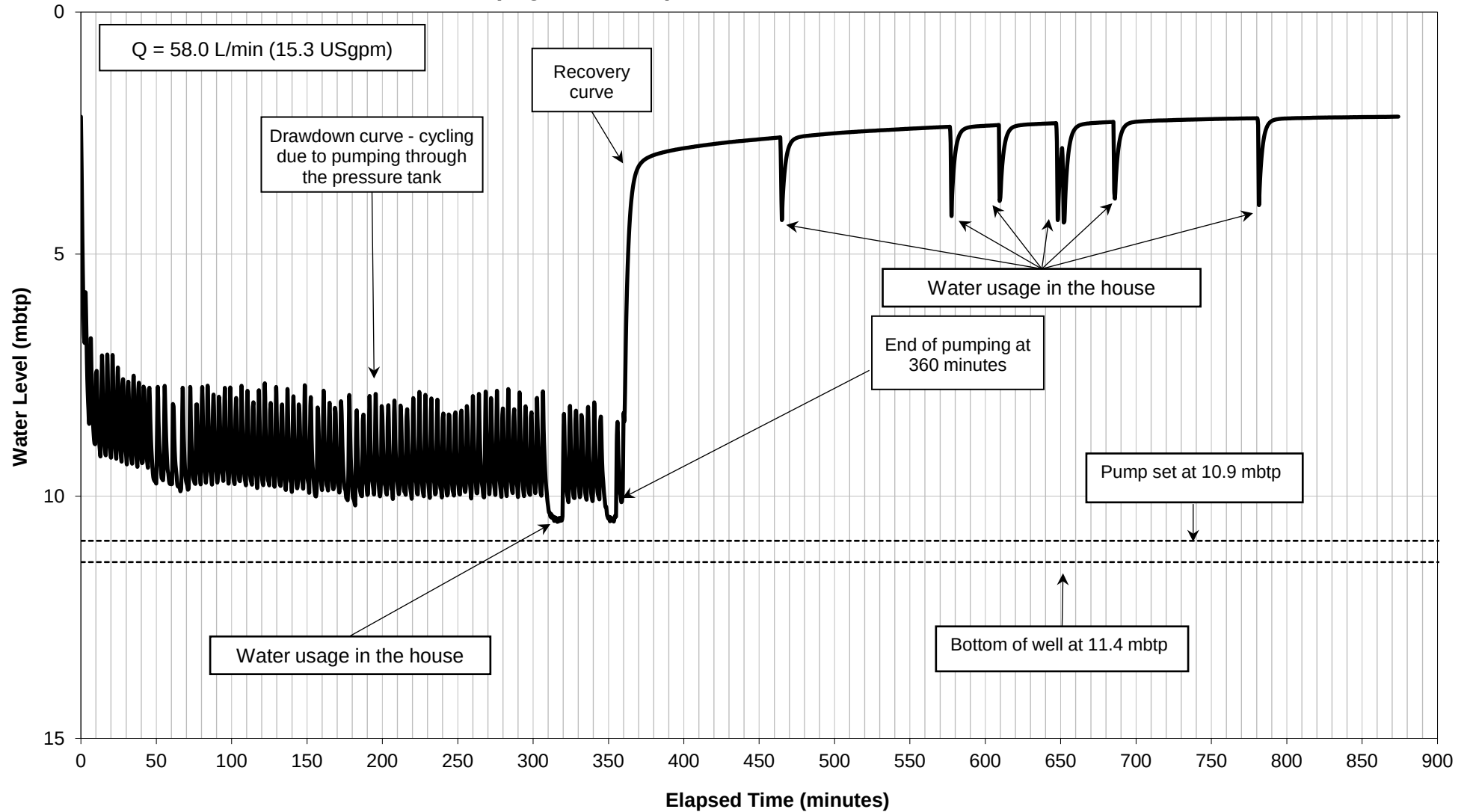
DRAWING NUMBER: D-12



347 PIDO ROAD, UNIT 29
PETERBOROUGH, ON K9J 6X7

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PUMP HISTORY CURVE **TW-4 (Tag # A124742): Tested on March 17, 2025**



PUMP HISTORY CURVE

Drilled Well - TW-4
 MECP Tag #: A124742

Static Water Level = 2.16 mbtp (1.76 mbgs)

Note: mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.40 m

DATE: MAY 2025

LOCATION: Indian Way, Port Perry, ON

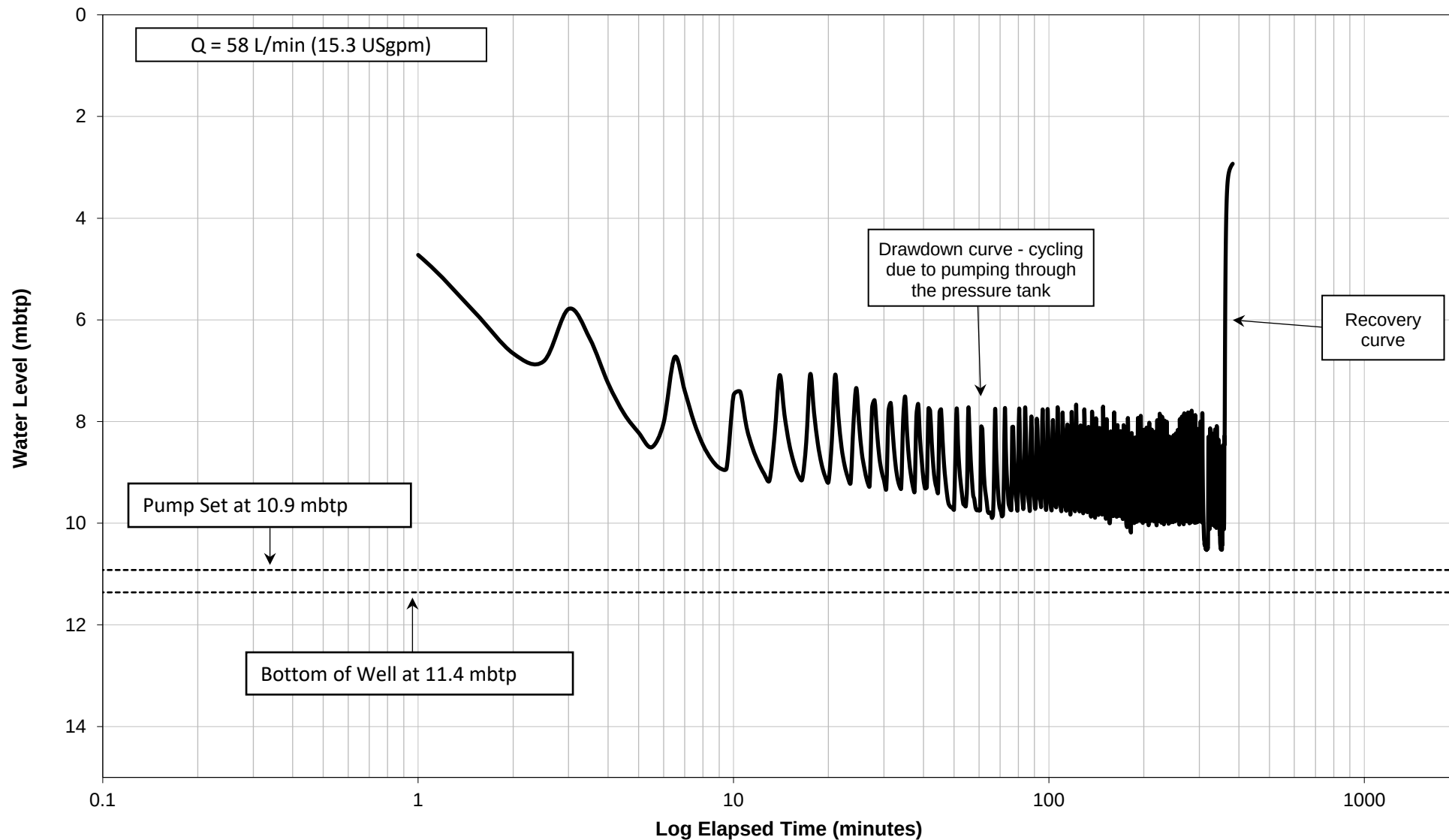
JOB NUMBER: 12656921

DRAWING NUMBER: D-13



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7
www.ghd.com

CONSTANT RATE TEST: WATER LEVEL vs. LOG ELAPSED TIME
TW-4 (Tag # A124742): Tested on March 17, 2025



CONSTANT RATE

Drilled Well - TW-4

MECP Tag #: A124742

Static Water Level = 2.16 mbtp (1.76 mbgs)

Note: mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.50 m

DATE: MAY 2025

LOCATION: Indian Way, Port Perry, ON

JOB NUMBER: 12656921

DRAWING NUMBER: D-14



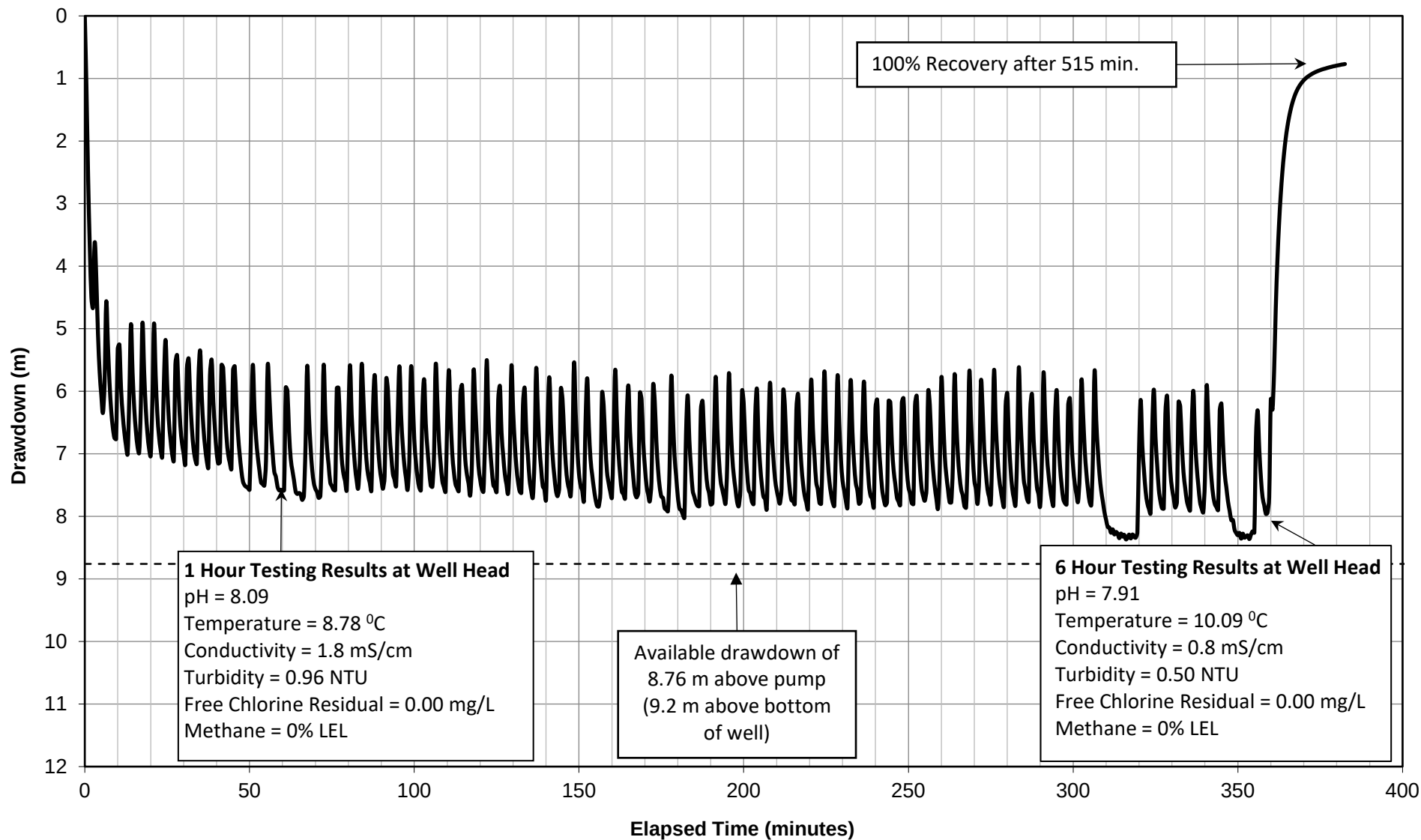
347 PIDO ROAD, UNIT 29

PETERBOROUGH, ON K9J 6X7

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CONSTANT RATE DRAWDOWN, RECOVERY AND TESTING DETAILS

TW-1 (Tag # A124742): Tested on March 17, 2025



CONSTANT RATE DRAWDOWN

Drilled Well - TW-4
 MECP Tag #: A124742

Static Water Level = 2.16 mbtp (1.76 mbgs)

Note: mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.40 m

DATE: MAY 2025

LOCATION: Indian Way, Port Perry, ON

JOB NUMBER: 12656921

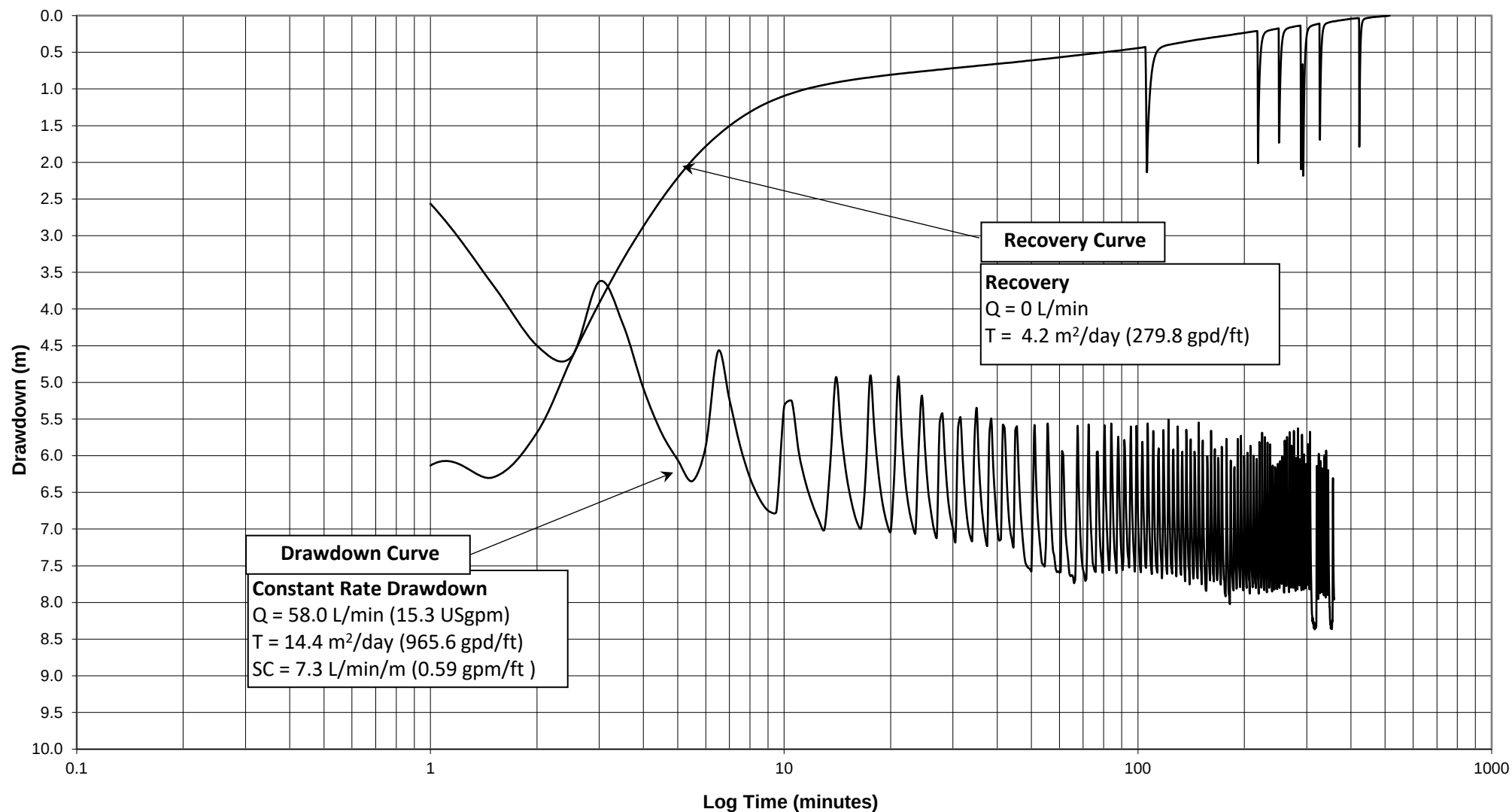
DRAWING NUMBER: D-15



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7

www.ghd.com

CONSTANT RATE: DRAWDOWN and RECOVERY VS LOG TIME
TW-1 (Tag # A124742): Tested on March 17, 2025



TRANSMISSIVITY

Drilled Well - TW-4

MECP Tag #: A124742

Static Water Level = 2.16 mbtp (1.76 mbgs)

Note: mbtp = metres below top of pipe; mbgs = metres below ground surface; Stick up = 0.40 m

DATE: MAY 2025

LOCATION: Indian Way, Port Perry, ON

JOB NUMBER: 12656921

DRAWING NUMBER: D-16



347 PIDO ROAD, UNIT 29
 PETERBOROUGH, ON K9J 6X7

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Appendix E

Laboratory Certificates of Analysis

C.O.C.: DW

REPORT No: 23-010227 - Rev. 0

Report To:

GHD Limited
455 Phillip Street
Waterloo, ON N2L 3X2

CADUCEON Environmental Laboratories

285 Dalton Ave
Kingston, ON K7K 6Z1

Attention: Gus Bolin

DATE RECEIVED: 2023-May-09
DATE REPORTED: 2023-May-19
SAMPLE MATRIX: Drinking Water

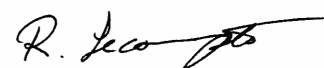
CUSTOMER PROJECT: 1261058 Port Perry
P.O. NUMBER:

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	2	OTTAWA	PCURIEL	2023-May-15	A-IC-01	SM 4110B
Colour (Liquid)	2	OTTAWA	MDON	2023-May-12	A-COL-01	SM 2120C
Cond/pH/Alk Auto (Liquid)	2	OTTAWA	SBOUDREAU	2023-May-12	COND-02/PH-02/A LK-02	SM 2510B/4500H/ 2320B
Coliforms - DC Media (Liquid)	1	KINGSTON	BBURTCH	2023-May-10	ECTC-001	MECP E3407
DOC/DIC (Liquid)	2	OTTAWA	VKASYAN	2023-May-18	C-OC-01	EPA 415.2
Fecal Coliforms (Liquid)	1	KINGSTON	BBURTCH	2023-May-10	FC-001	SM 9222D
ICP/OES (Liquid)	2	OTTAWA	NHOGAN	2023-May-16	D-ICP-01	SM 3120B
Methane Liquid (Subcontracted)	1	SGS_LAKEFIELD	SCAMPBELL	2023-May-15		Subcontracted
Ammonia (Liquid)	2	KINGSTON	KDIBBITS	2023-May-12	NH3-001	SM 4500NH3
Organic Nitrogen (Liquid)	2	KINGSTON	KDIBBITS	2023-May-15	TPTKN-001	MECP E3516.2
Phenols (Liquid)	2	KINGSTON	JMACINNES	2023-May-16	PHEN-01	MECP E3179
Sulphide (Liquid)	2	KINGSTON	KWELCH	2023-May-15	H2S-001	SM 4500-S2
Tannins (Liquid)	2	KINGSTON	KWELCH	2023-May-15	TAN-001	SM 5550
TP/TKN (Liquid)	2	KINGSTON	KDIBBITS	2023-May-15	TPTKN-001	MECP E3516.2
Turbidity (Liquid)	2	OTTAWA	MDON	2023-May-12	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 *



Richard Lecompte
Laboratory Supervisor

CADUCEON Environmental Laboratories Certificate of Analysis

Final Report
REPORT No: 23-010227 - Rev. 0

			Client I.D.	A310856 2 Hours	A310856 6 Hours
			Sample I.D.	23-010227-1	23-010227-2
			Date Collected	2023-05-08	2023-05-08
Parameter	Units	R.L.		-	-
Total Coliform (DC Media)	CFU/100mL	1			0
E coli (DC Media)	CFU/100mL	1			0
Fecal Coliform	CFU/100mL	1			0
Alkalinity(CaCO3) to pH4.5	mg/L	5		360	355
pH @25°C	pH units	-		8.02	7.91
Conductivity @25°C	µmho/cm	1		1010	1020
Colour	TCU	2		11	10
Turbidity	NTU	0.1		82.6	36.3
Fluoride	mg/L	0.1		0.4	0.4
Chloride	mg/L	0.5		131	132
Nitrate (N)	mg/L	0.05		<0.05	<0.05
Nitrite (N)	mg/L	0.05		<0.05	<0.05
Sulphate	mg/L	1		<1	<1
Total Kjeldahl Nitrogen	mg/L	0.1		3.1	3.4
Ammonia (N)-Total (NH3+NH4)	mg/L	0.05		2.83	2.87
Organic Nitrogen	mg/L	0.1		0.2	0.5
Dissolved Organic Carbon	mg/L	0.2		3.8	3.3
Tannin & Lignin	mg/L	0.5		1.6	0.8
Sulphide	mg/L	0.01		< 0.2 (EI)	0.02
Phenolics	mg/L	0.001		<0.001	<0.001
Hardness (as CaCO3)	mg/L	0.02		277	276



Richard Lecompte
Laboratory Supervisor

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

CADUCEON Environmental Laboratories Certificate of Analysis

Final Report
REPORT No: 23-010227 - Rev. 0

			Client I.D.	A310856 2 Hours	A310856 6 Hours
			Sample I.D.	23-010227-1	23-010227-2
			Date Collected	2023-05-08	2023-05-08
Parameter	Units	R.L.		-	-
Calcium	mg/L	0.02		59.6	59.4
Copper	mg/L	0.002		<0.002	<0.002
Iron	mg/L	0.005		2.95	2.72
Magnesium	mg/L	0.02		31.1	31.0
Manganese	mg/L	0.001		0.083	0.069
Potassium	mg/L	0.1		2.9	2.9
Silica	mg/L	2		20	20
Sodium	mg/L	0.2		107	107
Zinc	mg/L	0.005		0.478	0.206

Subcontracted Analyses

			Client I.D.	A310856 6 Hours
			Sample I.D.	23-010227-2
			Date Collected	2023-05-08
Parameter	Units	R.L.		-
Methane	L/m³	-		54

Comments:

Elevated RL due to sample matrix interferences



Richard Lecompte
Laboratory Supervisor

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

**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Project : 12612058

31-October-2023

GHD Limited - 735**Attn :** Jonathan Scott

347 Pido Rd., Unit #29
Peterborough, ON
K9J 6Z8, Canada

Phone: 705-931-4855
Fax:

Date Rec. : 27 October 2023
LR Report: CA14699-OCT23
Reference: PO#:735-006810,
12612058, Jonathan Scott

Copy: 1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: A231205-EOT
Sample Date & Time					26-Oct-23 15:32
Temp Upon Receipt [°C]	---	---	---	---	12.0
Ecoli [cfu/100mL]	27-Oct-23	16:37	30-Oct-23	12:03	0
Total Coliform [cfu/100mL]	27-Oct-23	16:37	30-Oct-23	12:03	0
Fecal Coliform [cfu/100mL]	27-Oct-23	16:37	30-Oct-23	12:03	0

Temperature of Sample upon Receipt: 12 degrees C
Cooling Agent Present: Yes
Custody Seal Present: Yes

Chain of Custody Number: 039512

Jill Campbell, B.Sc., GISAS
Project Specialist,
Environment, Health & Safety

**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
 Lakefield - Ontario - K0L 2H0
 Phone: 705-652-2000 FAX: 705-652-6365

Project : 12612058

08-November-2023

GHD Limited - 735

Attn : Jonathan Scott

347 Pido Rd., Unit #29
 Peterborough, ON
 K9J 6Z8, Canada

Phone: 705-931-4855

Fax:

Date Rec. : 27 October 2023**LR Report:** CA14700-OCT23**Reference:** PO#:735-006810,
12612058, Jonathan Scott**Copy:** 1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	3: Analysis Completed Date	5: RL	8: A231205-EOT	9: A231205-1hr
Sample Date & Time				26-Oct-23 15:32	26-Oct-23 10:32
Temp Upon Receipt [°C]	***	***	***	***	***
UV Transmittance [%T]	31-Oct-23	02-Nov-23	---	59.5	58.3
Alkalinity [mg/L as CaCO ₃]	28-Oct-23	01-Nov-23	2	363	361
Colour [TCU]	30-Oct-23	31-Oct-23	3	7	13
Conductivity [uS/cm]	28-Oct-23	01-Nov-23	2	1100	1080
pH [No unit]	28-Oct-23	01-Nov-23	0.05	8.19	8.10
TSS [mg/L]	02-Nov-23	02-Nov-23	2	5	14
TDS [mg/L]	02-Nov-23	03-Nov-23	30	591	594
Turbidity [NTU]	27-Oct-23	30-Oct-23	0.1	12	13
Organic N [mg/L]	31-Oct-23	07-Nov-23	0.05	0.22	0.09
TKN [as N mg/L]	31-Oct-23	03-Nov-23	0.05	2.32	2.43
NH ₃ +NH ₄ [as N mg/L]	31-Oct-23	07-Nov-23	0.04	2.10	2.34
TOC [mg/L]	30-Oct-23	31-Oct-23	1	6	6
DOC [mg/L]	30-Oct-23	31-Oct-23	1	6	6
Cl [mg/L]	03-Nov-23	03-Nov-23	0.04	180	180
F [mg/L]	30-Oct-23	30-Oct-23	0.06	0.43	0.40
NO ₂ [as N mg/L]	31-Oct-23	02-Nov-23	0.003	< 0.003	< 0.003
NO ₃ [as N mg/L]	31-Oct-23	02-Nov-23	0.006	< 0.006	< 0.006
SO ₄ [mg/L]	03-Nov-23	03-Nov-23	0.04	0.08	0.04
Total P [mg/L]	02-Nov-23	03-Nov-23	0.03	< 0.03	< 0.03
Tot.Reactive P [mg/L]	30-Oct-23	31-Oct-23	0.03	< 0.03	< 0.03
Hg (diss) [mg/L]	02-Nov-23	02-Nov-23	1e-005	< 0.00001	< 0.00001
Hardness (dissolved) [mg/L as CaCO ₃]	03-Nov-23	03-Nov-23	0.05	302	305
Al (diss) [mg/L]	03-Nov-23	03-Nov-23	0.001	0.003	0.009
Sb (diss) [mg/L]	03-Nov-23	03-Nov-23	0.0009	< 0.0009	< 0.0009
As (diss) [mg/L]	03-Nov-23	03-Nov-23	0.0002	< 0.0002	0.0002
Ba (diss) [mg/L]	03-Nov-23	03-Nov-23	8e-005	0.429	0.465
B (diss) [mg/L]	03-Nov-23	03-Nov-23	0.002	0.109	0.108

**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
 Lakefield - Ontario - K0L 2H0
 Phone: 705-652-2000 FAX: 705-652-6365

Project : 12612058**LR Report : CA14700-OCT23**

Analysis	1: Analysis Start Date	3: Analysis Completed Date	5: RL	8: A231205-EOT	9: A231205-1hr
Cd (diss) [mg/L]	03-Nov-23	03-Nov-23	3e-006	< 0.000003	< 0.000003
Ca (diss) [mg/L]	03-Nov-23	03-Nov-23	0.01	57.7	58.9
Cr (diss) [mg/L]	03-Nov-23	03-Nov-23	8e-005	0.00011	0.00013
Cu (diss) [mg/L]	03-Nov-23	03-Nov-23	0.0002	< 0.0002	0.0006
Fe (diss) [mg/L]	03-Nov-23	03-Nov-23	0.007	1.21	4.42
Pb (diss) [mg/L]	03-Nov-23	03-Nov-23	9e-005	0.00009	0.00030
Mg (diss) [mg/L]	03-Nov-23	03-Nov-23	0.001	38.5	38.5
Mn (diss) [mg/L]	03-Nov-23	03-Nov-23	1e-005	0.0173	0.0290
K (diss) [mg/L]	03-Nov-23	03-Nov-23	0.009	4.00	4.02
Na (diss) [mg/L]	03-Nov-23	03-Nov-23	0.01	127	126
Se (diss) [mg/L]	03-Nov-23	03-Nov-23	4e-005	0.00008	0.00009
U (diss) [mg/L]	03-Nov-23	03-Nov-23	2e-006	< 0.000002	0.000004
Zn (diss) [mg/L]	03-Nov-23	03-Nov-23	0.002	0.134	0.344
Cation Sum [meq/L]	---	---	---	11.86	12.07
Anion Sum [meq/L]	---	---	---	12.43	12.30
Anion-Cation Balance [% difference]	---	---	---	-2.33	-0.96
Ion Ratio	---	---	---	0.95	0.98
TDS (calculated) [mg/L]	---	---	---	628	624
Conductivity (calc) [uS/cm]	---	---	---	1214	1218
Langelier's Index [@ 4° C]	---	---	---	0.52	0.44
Saturation pH [pHs @ 4°C]	---	---	---	7.67	7.66

MAC - Maximum Acceptable Concentration

AO/OG - Aesthetic Objective / Operational Guideline

NR - Not reportable under applicable Provincial drinking water regulations as per client.

Total phosphorous includes all Ortho-phosphates as well as Organics and hydrolyzable Phosphorous.

Temperature of Sample upon Receipt: 12 degrees C

Cooling Agent Present: Yes

Custody Seal Present: Yes

Chain of Custody Number: 039511

Jill Campbell, B.Sc., GISAS
Project Specialist,
Environment, Health & Safety

C.O.C.: 1261058 Port Perry

REPORT No: 23-011194 - Rev. 0

Report To:

GHD Limited
455 Phillip Street
Waterloo, ON N2L 3X2

CADUCEON Environmental Laboratories

285 Dalton Ave
Kingston, ON K7K 6Z1

Attention: Gus Bolin

DATE RECEIVED: 2023-May-19
DATE REPORTED: 2023-Jun-07
SAMPLE MATRIX: Drinking Water

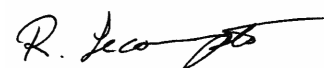
CUSTOMER PROJECT: 1261058 Port Perry
P.O. NUMBER:

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	2	OTTAWA	PCURIEL	2023-May-23	A-IC-01	SM 4110B
Colour (Liquid)	2	OTTAWA	MDON	2023-May-25	A-COL-01	SM 2120C
Cond/pH/Alk Auto (Liquid)	2	OTTAWA	SBOUDREAU	2023-May-23	COND-02/PH-02/A LK-02	SM 2510B/4500H/ 2320B
DOC/DIC (Liquid)	2	OTTAWA	VKASYAN	2023-May-25	C-OC-01	EPA 415.2
ICP/OES (Liquid)	2	OTTAWA	NHOGAN	2023-May-24	D-ICP-01	SM 3120B
Methane Liquid (Subcontracted)	1	SGS_LAKEFIELD	SCAMPBELL	2023-Jun-29		Subcontracted
Ammonia (Liquid)	2	KINGSTON	VWATTS	2023-May-30	NH3-001	SM 4500NH3
Organic Nitrogen (Liquid)	2	KINGSTON	KDIBBITS	2023-Jun-01	TPTKN-001	MECP E3516.2
Phenols (Liquid)	2	KINGSTON	KWELCH	2023-May-24	PHEN-01	MECP E3179
Sulphide (Liquid)	2	KINGSTON	KWELCH	2023-May-23	H2S-001	SM 4500-S2
TP & TKN (Liquid)	2	KINGSTON	KDIBBITS	2023-May-29	TPTKN-001	MECP E3516.2
Turbidity (Liquid)	2	OTTAWA	MDON	2023-May-25	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 *



Richard Lecompte
Laboratory Supervisor

CADUCEON Environmental Laboratories Certificate of Analysis

Final Report
REPORT No: 23-011194 - Rev. 0

			Client I.D.	A310857 2 Hours	A310857 E.O.T
			Sample I.D.	23-011194-1	23-011194-2
			Date Collected	2023-05-15	2023-05-15
Parameter	Units	R.L.		-	-
Alkalinity(CaCO3) to pH4.5	mg/L	5		524	521
pH @25°C	pH units	-		8.23	8.09
Conductivity @25°C	uS/cm	1		1160	1160
Colour	TCU	2		19	18
Turbidity	NTU	0.1		91.4	67.6
Fluoride	mg/L	0.1		<0.1	<0.1
Chloride	mg/L	0.5		93.0	92.1
Nitrate (N)	mg/L	0.05		<0.05	<0.05
Nitrite (N)	mg/L	0.05		<0.05	<0.05
Sulphate	mg/L	1		<1	<1
Total Kjeldahl Nitrogen	mg/L	0.1		5.4	5.7
Ammonia (N)-Total (NH3+NH4)	mg/L	0.05		5.27	5.30
Organic Nitrogen	mg/L	0.1		0.2	0.4
Dissolved Organic Carbon	mg/L	0.2		7.4	6.2
Sulphide	mg/L	0.01		< 0.2 (E)	< 0.2 (E)
Phenolics	mg/L	0.001		0.004	<0.001
Hardness (as CaCO3)	mg/L as CaCO3	0.02		371	354
Calcium	mg/L	0.02		83.0	76.8
Copper	mg/L	0.002		<0.002	<0.002
Iron	mg/L	0.005		6.96	5.25
Magnesium	mg/L	0.02		39.9	39.3



Richard Lecompte
Laboratory Supervisor

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CADUCEON Environmental Laboratories Certificate of Analysis

Final Report
REPORT No: 23-011194 - Rev. 0

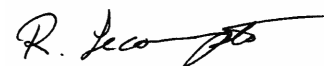
			Client I.D.	A310857 2 Hours	A310857 E.O.T
			Sample I.D.	23-011194-1	23-011194-2
			Date Collected	2023-05-15	2023-05-15
Parameter	Units	R.L.		-	-
Manganese	mg/L	0.001		0.157	0.100
Potassium	mg/L	0.1		2.8	2.7
Silica	mg/L	2		17	17
Sodium	mg/L	0.2		110	110
Zinc	mg/L	0.005		0.005	<0.005

Subcontracted Analyses

			Client I.D.	A310857 2 Hours
			Sample I.D.	23-011194-1
			Date Collected	2023-05-15
Parameter	Units	R.L.		-
Methane	L/m ³	-		43

Comments:

Elevated RL due to sample matrix interferences



Richard Lecompte
Laboratory Supervisor

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**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
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Phone: 705-652-2000 FAX: 705-652-6365

Project : PO# 735-006810 - 12612058

18-May-2023

GHD Limited - 735

Attn : Gus Bolin

347 Pido Rd., Unit #29
Peterborough, ON
K9J 6Z8, Canada

Phone: 705-749-3317
Fax:

Date Rec. : 16 May 2023
LR Report: CA14560-MAY23
Reference: PO# 735-006810 -
12612058, Gus Bolin

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CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	3: Analysis Completed Date	4: Analysis Completed Time	5: A310857-E.O.T
Sample Date & Time				15-May-23 17:00
Temp Upon Receipt [°C]	---	---	---	10.0
Total Coliform [cfu/100mL]	17-May-23	18-May-23	16:02	0
Ecoli [cfu/100mL]	17-May-23	18-May-23	16:02	0
Fecal Coliform [cfu/100mL]	17-May-23	18-May-23	16:02	0

Temperature of Sample upon Receipt: 10 degrees C
Cooling Agent Present: YES
Custody Seal Present: NO
Chain of Custody Number: 024599

Jill Campbell, B.Sc., GISAS
Project Specialist,
Environment, Health & Safety

**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Project : PO#735-013553, 12656921

15-July-2026

GHD Limited - 735**Attn :** Steve Gagne

347 Pido Rd., Unit #29
Peterborough, ON
K9J 6Z8, Canada

Phone: 705-749-3317
Fax:

Date Rec. : 09 July 2026
LR Report: CA12383-JUL26
Reference: PO#735-013553,
12656921, Steve Gagne

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	3: Analysis Completed Date	4: Analysis Completed Time	5: RL	6: MW02-25	7: MW03-25	8: MW04-25
Sample Date & Time				07-Jul-26 10:36	07-Jul-26 11:30	07-Jul-26 11:45
Temp Upon Receipt [°C]	***	***	***	***	***	***
TDS [mg/L]	10-Jul-26	16:40		486	380	523
pH [No unit]	10-Jul-26	14:55		8.04	8.39	7.83
Temperature @ pH [°C]	10-Jul-26	14:55		19.4	20.0	19.6
TN [as N mg/L]	10-Jul-26	15:05	0.5	14.6	1.8	0.8
TKN [as N mg/L]	10-Jul-26	14:00	0.5	< 0.5	< 0.5	0.6
NH3+NH4 [as N mg/L]	10-Jul-26	15:05	0.1	< 0.1	< 0.1	0.4
Unionized NH3 [mg/L as N]	10-Jul-26	15:06		<0.003	<0.005	0.010
NO2 [as N mg/L]	14-Jul-26	20:16	0.03	< 0.03	< 0.03	< 0.03
NO3 [as N mg/L]	14-Jul-26	20:16	0.06	15.2	1.76	0.15
NO2+NO3 [as N mg/L]	14-Jul-26	20:16	0.06	15.2	1.76	0.15

Temperature of Sample upon Receipt: 15.3 degrees C

Cooling Agent Present: No

Custody Seal Present: No

Chain of Custody Number: 035129

Jill Campbell, B.Sc., GISAS
Project Specialist,
Environment, Health & Safety

Appendix F

Nitrate Impact Assessment Calculations

Appendix F

Recharge Calculations for Nitrate Assessment

Recharge Calculations

Total Area Considered	20.40 ha
Recharge rate based on excavation*	170 mm/yr
Average recharge volume	95013.7 L/day

Note: *GHD completed 9 test pits where predominant receiving soil was silty sand / sandy silt. The annual recharge rate is approximately 150 to 200 mm. Selected 175 mm for purposes of this assessment.

Nitrate Assessment Calculations

Background nitrate from shallow well	0.75 mg/L	Average from analytical testing of existing MW's excluding MW02-25.
Nitrate	40 mg/L	Constant
Effluent	26000 L/day	Constant
Lots	26 lots	Number of lots proposed
Onsite dilution	95013.7 L/day	Daily recharge volume

Projected Nitrate Concentration = Background + (Sewage Nitrate+Dilution Nitrate)/(Onsite Dilution+Effluent)

Where: Sewage = Nitrate * Effluent

Dilution Nitrate = Onsite Dilution * Nitrate in precipitation recharge (assumed to be zero)

Projected Nitrate Level = 9.34 mg/L Nitrate



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