



**SUNCOR ENERGY PRODUCTS PARTNERSHIP
HYDROGEOLOGICAL INVESTIGATION REPORT**

**623 Yonge Street and 515 Big Bay Point Road
Barrie, Ontario**

Outlet Number: 33659

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1.0 BACKGROUND

Terrapex Environmental Ltd. (Terrapex) was retained by Suncor Energy Products Partnership (Suncor) to carry out a hydrogeological investigation for the proposed commercial development located at municipal addresses 623 Yonge Street and 515 Big Bay Point Road, Barrie, Ontario (hereafter, also referred to as the “Site”). Authorization to proceed with this study was given by Kelly Klassen of Suncor.

The purpose of this hydrogeological investigation was to characterize the subsurface groundwater conditions as part of submissions within the development application process. The hydrogeological investigation is required for applying for a Private Water Discharge Agreement (PWDA) for short-term discharge to the City sewer system, or to obtain an exemption to allow long-term discharge of foundation drainage containing groundwater.

This hydrogeological investigation was prepared in reference to the Ontario Water Resources Act, Ontario Regulation 387/04 “Water Taking Regulation” from the Ministry of the Environment, Conservation and Parks (MECP), and Barrie Sewer Use By-Law 2021-002.

This report is intended for the guidance of the client to and the design architects or engineers only. It is assumed that the design will be in accordance with the applicable building codes and standards.

2.0 LOCATION AND SETTING

2.1 LOCATION AND PROPERTY DIMENSIONS

The Site is located on the north side of Yonge Street, at the intersection of Yonge Street and Big Bay Point Road in Barrie, Ontario. The Site is comprised of municipal addresses 623 Yonge Street and 515 Big Bay Point Road, Barrie, Ontario. The Site is irregular in shape with area of approximately 6,409 m². The general location is mapped on **Figure 1**.

2.2 PRESENT LAND USE

The Site is currently being used as a Petro-Canada retail fuel outlet with an underground storage tank nest, fuel distribution lines, pump islands with canopy, a convenience store, and a carwash facility.

Land use in the site's vicinity within approximately 500 m is primarily residential to the north and east, and commercial to the south, west and northwest. An institutional property is also located northwest of the Site.

2.3 PROPOSED DEVELOPMENT

We understand that it is proposed to re-develop the property with a retail fuel outlet and restaurant.

2.4 SITE TOPOGRAPHY

The general topography of the area surrounding the Site is gently sloped to the west towards Lovers Creek, which flows north towards Lake Simcoe. Relief on Site is generally flat, with corresponding elevation of approximately 251.0 metres above sea level (masl) (First Base Solutions 1 metre contours; accessed 2024).

2.5 DRAINAGE

No watercourses, ponds, or other surface water features are located on the Site. The nearest water body, Lovers Creek, is located approximately 400 m to the west (Google Earth Imagery; accessed 2024). This water body flows north and discharges into Lake Simcoe, a known regional groundwater discharge zone. The Site is located within the regional Lake Simcoe Watershed (MNRF, 2024).

The site itself, local roads and adjacent properties manage stormwater through catch basins and the piped municipal storm sewer system.

2.6 REGIONAL GEOLOGY

Available mapping indicates that the subject property is located over stone-poor, sandy silt to silty sand-textured till on Paleozoic terrain (MRD128, 2010).

The bedrock beneath the reported overburden is reported to be composed of nodular to black laminated limestone of the Lindsay Formation (MRD219, 2011).

2.7 REGULATORY CONTEXT

The site is understood to be within the purview of the Lake Simcoe Region Conservation Authority (LSRCA) and Lakes Simcoe and Couchiching/Black River Source Protection Authority (SPA).

Available MECP mapping indicates that the Site is not located over a Highly Vulnerable Aquifer. The Site is designated in the municipal Official Plan as being within Intake Protection Zone 2.

2.8 GROUNDWATER SUPPLY WELLS

A review of the available well records shows that there are 159 reported wells within the Site boundary or within approximately 500 m of the Site. Of the known wells, 111 were reported to be for water supply use, with 109 listed for domestic supply use, one for commercial use, and one for public use. The wells were drilled between October 1958 and March 1989 and no records exist of their abandonment. The location of the wells on site and located within 500 m of the site are provided on **Figure 2**, and a summary of the MECP Well Records report is provided in **Appendix I**.

It is noted that older wells may no longer be operational, and that historically there was not a requirement to register dug wells with the MECP; as such, they can be under-represented in the water well record database.

3.0 DRILLING

A drilling program was conducted during 7 to 14 November 2023 to serve the purposes of this hydrogeological investigation and environmental investigations. The boreholes were advanced using conventional drilling techniques to depths ranging from 6.7 mbg to 9.5 mbg.

Soils were logged in the field by a qualified technician and descriptions were confirmed by a Professional Engineer at Terrapex's Toronto facilities. Drilling services were provided by Pontil Drilling Services Inc. of Mount Albert, Ontario.

Standard Penetration Testing (SPT N-values) and sampling were carried out at regular depth intervals in the boreholes using conventional nominal 35 mm internal diameter split spoon sampling equipment.

3.1 GROUNDWATER MONITORING WELL CONSTRUCTION

Monitoring wells at seven borehole locations: MW402, MW403, MW406, and MW408 to MW411 were used for the monitoring program, shown on **Figure 3**. The locations provide broad distribution across the site. A summary of well construction details is presented in **Table 1**, below.

Table 1. Summary of Groundwater Monitoring Conditions

Well ID	Date of Construction	Approximate Location ¹ (UTM Zone 17T)		Approximate Ground Surface Elevation	Screened Interval	Soils at Screened Interval	SPT N-Value at Screened Interval
		metres east	metres north	masl	mbg		
MW402	8-Nov-2023	607874	4912408	251.006	3.0 to 6.1	Sandy silt to silty sand	21 to 53
MW403	8-Nov-2023	607851	4912416	250.835	3.0 to 6.1	Sandy silt to silty sand	18 to 40
MW406	7-Nov-2023	607867	4912380	251.356	3.0 to 6.1	Sandy silt to silty sand	9 to 31
MW408	9-Nov-2023	607893	4912365	251.903	3.0 to 6.1	Sandy silt to silty sand	17 to 41
MW409	9-Nov-2023	607829	4912418	250.444	3.0 to 6.1	Sandy silt to silty sand	14 to 24
MW410	10-Nov-2023	607884	4912434	251.210	3.0 to 6.1	Sandy silt to silty sand	16 to 66
MW411	14-Nov-2023	607889	4912417	251.252	3.0 to 6.1	Sandy silt to silty sand	20 to 30

The monitoring wells were constructed using environmental grade, 50 mm diameter, Schedule 40 PVC piping with machine slotted (10 slot) screens at the bottom. Each well was installed under a protective flush-mount casing or monument casing.

The well locations and elevations were measured using a Trimble DA2 CATALYST global navigation satellite system (GNSS) Receiver.

Monitoring wells, when no longer useful, must eventually be abandoned by a licensed water well contractor. Abandonment must proceed in accordance with Regulation 903 and amendments issued under the Ontario Water Resources Act. The monitoring wells should remain until the time of construction to be available for observing groundwater conditions closer to the time of construction for dewatering planning.

3.2 SUBSURFACE MATERIALS AND HYDROSTRATIGRAPHY

The subsurface conditions encountered at each borehole are shown in detail on the borehole records provided in **Appendix II**. Review of the borehole reports indicate that the encountered overburden is generally comprised of loose to very dense sandy silt to silty sand till. The soil throughout the site is overlain by loose to dense sand and gravel, sand, silt, sandy clayey silt, sandy silt, silty sand, and silty clay fill, with occasional asphalt chunks and organics. Boreholes were capped by either topsoil (BH407, MW408, MW410, and MW411) or asphaltic concrete (BH401, MW402, MW403, BH404, BH405, and MW406). Bedrock was not encountered during the investigation. The observed stratigraphic sequence corroborates the available mapping information summarized above that generally characterize local native soils as tills.

It is noted that the boundaries between the strata have been inferred from observations of non-continuous samples taken during drilling carried out by Terrapex. They generally represent a transition from one soil type to another and should not be inferred to represent an exact plane of geological change. Further, conditions will vary between and beyond the boreholes.

4.0 CHARACTERIZATION OF SUBJECT AREA

4.1 WATER LEVEL MONITORING

4.1.1 METHODOLOGY

Suites of groundwater levels were measured in the monitoring well network from the middle of November to early-December 2023, at approximately one-week intervals. Groundwater levels were measured using an electric sounder device with graduated tape.

4.1.2 RESULTS

The recorded water levels for the weekly monitoring events are provided in **Table 2**, below. These water levels reflect the groundwater conditions on the dates they were measured.

Table 2. Measured Groundwater Levels

Location Identification	Top of Pipe	Ground Surface Elevation	Groundwater Measurements			
			2023			2024
			Nov. 17	Nov. 23	Dec. 1	Apr. 15
	mbg	masl	mbg (masl)	mbg (masl)	mbg (masl)	mbg (masl)
MW402	-0.110	251.006	5.03 (245.98)	5.12 (245.89)	5.18 (245.82)	3.23 (247.78)
MW403	-0.050	250.835	4.77 (246.07)	4.79 (246.04)	4.74 (246.10)	3.35 (247.49)
MW406	-0.060	251.356	5.11 (246.25)	5.24 (246.11)	5.30 (246.06)	3.51 (247.84)
MW408	-0.080	251.903	5.72 (246.19)	5.78 (246.12)	5.86 (246.04)	2.69 (249.22)
MW409	-0.070	250.444	4.32 (246.13)	4.39 (246.05)	4.49 (245.95)	2.64 (247.80)
MW410	1.030	251.21	4.87 (246.34)	4.38 (246.83)	5.00 (246.21)	2.28 (248.93)
MW411	0.990	251.252	5.33 (245.92)	5.38 (245.87)	5.45 (245.80)	2.57 (248.69)

Elevations measured by Trimble DA2 CATALYST GNSS Receiver

masl = metres above sea level

mbg = metres below ground

Bold numbers indicate high/low values.

As summarized in **Table 2**, *in-situ* measurements of the static groundwater level ranged from approximately 2.28 mbg to 5.86 mbg, water table elevations ranging from 249.22 masl to

245.80 masl. The average depth to the water table was 4.5 mbg. The average groundwater elevation was 246.6 masl.

Based on visual examination of the soil samples collected during drilling operations, the native soil was grey in appearance beginning at approximate depths of 1.8 mbg to 4.5 mbg, indicating that groundwater may be present for long periods of time during the year. The native grey soil consisted of sand fill and sandy silt to silty sand till.

It should be noted that groundwater levels are subject to seasonal fluctuations.

4.2 HYDRAULIC CONDUCTIVITY

4.2.1 METHODOLOGY

Hydraulic conductivity is a parameter for quantifying the ability of a soil unit to transmit water. This parameter is necessary for predicting the rate of seepage into excavations to be intercepted or collected by dewatering efforts during construction.

In situ single well response tests (commonly referred to as “slug tests”) were performed on monitoring wells MW408, MW409, MW410, and MW411 to assess the hydraulic conductivity of adjacent formations. In addition to considering the diameter of grains in the soil (i.e., Hazen Testing), *in situ* testing also considers compaction, effective porosity (as opposed to simple porosity), and existing sedimentary feature factors. The single well response test method applied was a slug test, which is a rapid introduction of a volume of water.

The ensuing falling recovery to static level is observed over time using a water level meter for approximately five hours.

Test data were analysed with the Aqtesolv software package using the Bouwer and Rice (1976) unconfined solution method.

4.2.2 RESULTS

A summary of the single well response tests and infiltration tests are presented below in **Table 3**. Analysis curves from the single well response tests are provided in **Appendix III**.

Table 3. Hydraulic Conductivity Estimates

Location Identification	Description of Soil Moisture Conditions	Soils at Screened Interval	Screened Interval	SPT N-Value at Screened Interval	Estimated Hydraulic Conductivity
			mbg (masl)		K (m/s)
MW408	Saturated	Sandy silt to silty sand	3.0 to 6.1 (248.9 to 245.8)	17 to 41	2.93×10^{-9}
MW409	Saturated	Sandy silt to silty sand	3.0 to 6.1 (247.4 to 244.3)	14 to 24	3.66×10^{-8}
MW410	Saturated	Sandy silt to silty sand	3.0 to 6.1 (248.2 to 245.1)	16 to 66	3.71×10^{-8}
MW411	Saturated	Sandy silt to silty sand	3.0 to 6.1 (248.2 to 245.2)	20 to 30	8.87×10^{-9}

mbg– indicates ‘metres below ground.

masl– indicates ‘metres above sea level.

As summarized in **Table 3**, hydraulic conductivities ranged from approximately 2.93×10^{-9} m/s to 3.71×10^{-8} m/s in the locations tested. These results indicate relatively impervious materials and are consistent with values expected for unweathered marine clay, glacial till and silt, loess (Bear, 1972; Freeze and Cherry, 1979).

Based on the information compiled from the borehole reports and the hydraulic analyses above, groundwater appears to reside within an unconfined aquifer of sandy silt to silty sand till.

4.3 INTERPRETED GROUNDWATER FLOW DIRECTION

Groundwater flow directions were estimated using manual piezometric head measurements recorded on November 23, 2023. As shown on **Figure 4**, groundwater was interpreted to be flowing in a generally variable direction, with a notable low groundwater feature in the centre of the Site. Although the exact reason is undetermined at this time, it is noted that there is an underground fuel storage tank nest near the centre of the Site, which may be influencing groundwater flow direction.

4.4 HYDROCHEMICAL ANALYSES

4.4.1 METHODOLOGY

Analytical laboratory testing was carried out to characterize the hydrochemical conditions of the groundwater at location MW409. The well was purged on 17 November 2023 and sampled with a low-flow peristaltic pump on 23 November and 15 December 2023. Groundwater was discharged to pre-cleaned bottles supplied by the laboratory with preservatives as appropriate for

parameters. These bottles were iced and held in a cooler under Chain of Custody protocols prior to delivery.

The samples were submitted to AGAT Laboratories (AGAT) of Mississauga, which is an independent laboratory that is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA). Groundwater quality was compared to storm- and sanitary- combined sewer criteria of City of Barrie By-Law 2021-002 on the 15 December 2023 sampling event and the generic full-depth Ministry of the Environment, Conservation and Parks (MECP) Site Condition Standards (SCS) applicable to commercial property use in a potable groundwater condition with coarse-textured soil (the “Table 2 SCS”) on the 23 November 2023 sampling event.

4.4.2 RESULTS

The reported concentrations of tested parameters identified as not meeting the municipal sewer by-laws for the sample obtained from MW409 are provided in **Table 4**, below. The Certificate of Analysis issued by AGAT is provided in **Appendix IV**.

Table 4. Summary of Tested Parameters Identified as Not Meeting Applicable Sewer By-Law Criteria

Parameter	Units	Sanitary Sewers By-law Criteria ¹	Storm Sewers By-law Criteria ²	MW409 15-Dec-23
Chloride	mg/L	1500	-	5270

¹ City of Barrie Sewer Use By-Law 2021-002

² City of Barrie Sewer Use By-Law 2021-002

Bold parameter values do not meet storm sewer criteria

As summarized in **Table 4** above, chloride exceeds sanitary sewer guideline limits. All other reported results for the tested parameters complied with the sanitary/combined sewer and storm sewer criteria.

The reported concentrations of tested parameters identified as not meeting the Table 2 SCS criteria applicable to commercial property use in a potable groundwater condition with coarse-textured soil for the sample obtained from MW409 are provided in **Table 5**, below. The Certificate of Analysis issued by AGAT is provided in **Appendix IV**.

Table 5. Summary of Tested Parameters Identified as Not Meeting Applicable Table 2 SCS Criteria

Parameter	Units	SCS Table 2 Commercial Coarse-textured soil ¹	MW409 23-Nov-23
Dissolved Copper	mg/L	0.0038	0.0087
Chloride	mg/L	790	9860
Sodium	mg/L	490	6330

¹ Generic full-depth MECP Site Condition Standards (SCS) applicable to commercial property use in a potable groundwater condition with coarse-textured soil

Bold parameter values do meet Table 2 SCS criteria

As summarized in **Table 4** above, dissolved copper, chloride, and sodium exceed Table 2 SCS criteria applicable to commercial property use in a potable groundwater condition with coarse-textured soil. All other reported results, including PAHs, BTEX and PHCs in the groundwater sample was below the applicable SCS.

Given that chloride and sodium in groundwater were identified on-site in areas of surface parking, the elevated levels of these parameters are attributed to the use of salt for winter maintenance. With the absence of any other documented potential source of such impacts at or in the vicinity of the Site during the Phase One ESA, the chloride and sodium impacts in groundwater have been determined to arise from the application of a substance (specifically, salt) to ground surfaces for the safety of pedestrian and vehicle traffic under conditions of snow or ice. As per Section 49.1 of O. Reg. 153/04, such impacts are not deemed to represent an exceedance of a Site Condition Standard for the purposes of Part XV.1 of the Environmental Protection Act.

5.0 DEWATERING ASSESSMENT

Groundwater will move toward the construction excavation so it must be controlled to provide dry and safe working conditions. Disposal of accumulated water generated by incident precipitation will occasionally be required as well.

The dewatering calculations are limited to the excavation and information provided in drawing Proposed Site Layout (K Paul Architect Inc., November 27, 2023).

The planned development may require buried municipal infrastructure, such as piped sanitary sewer, storm sewer and other utilities. The depths of excavation trenches associated with the construction of that infrastructure are presently not determined. Where below the water table, seepage management should be anticipated for installing of this infrastructure under dry and safer working conditions.

5.1 BUILDING GEOMETRY AND HYDROGEOLOGY

It is understood that the proposed building will be built slab-on-grade. It is anticipated that the footings will be approximately 1.5 metres below existing grade. This is also the general depth for some utility trenching.

Measurements of static groundwater level ranged from approximately 2.28 mbg to 5.86 mbg, water table elevations ranging from 249.22 masl to 245.80 masl. Based on available measurements from November to December 2023 and April 2024, and an approximate grade of 251.0 masl, the proposed excavation depth and foundation would be expected to cut into the saturated zone and dewatering should be anticipated during construction.

5.2 ESTIMATED CONSTRUCTION DEWATERING VOLUMES

The hydraulic conductivities derived from soils on site were used to estimate a worst-case scenario for temporary construction dewatering rates for the proposed building. Dewatering estimates were carried out with the understanding that the building dimensions are approximately 16.47m by 17.66 m, based on drawing Proposed Site Layout (K Paul Architect Inc., November 27, 2023).

The following assumptions were made, but can be refined when footing dimensions or trench dimensions are provided:

Excavation Footprint:	17.66 m x 16.47 m
Target dewatering depth:	1.5 m + 1 m = 2.5 m
Highest measured hydraulic conductivity:	3.71×10^{-8} m/sec
Highest measured groundwater elevation:	249.22 masl (April 15, 2024)
Estimated Drawdown:	0.72 m

To estimate the steady state dewatering rate, the modified Jacob's equation was applied, as presented in Powers et. al. (2007), using the groundwater conditions summarized above. Calculations are based on anticipation of response similar to an unconfined hydraulic aquifer. The results of calculations for groundwater seepage for temporary construction dewatering are summarized on **Table 6**, below. Details of the calculations made as part of the estimates are provided in the Construction Dewatering Worksheet (**Appendix III**).

Table 6. Summary of Estimated Construction Dewatering Volumes for Concept Development

		(A)	(B)	(C)	(D)	
Excavation Concept	Dimensions ²	Estimated Dewatering Volume	Incident Precipitation ¹	Total Dewatering Volume (A+B)	Design Dewatering Volume (A x 2) + B	Zone of Influence (ZOI)
	(length / width / depth)	(L/day)	(L/day)	(L/day)	(L/day)	(m radius)
Provided footprint ²	17.66 m / 16.47 m / 2.5 mbg	5,725	7,272	12,997	18,722	1

¹ Based on a storm with a precipitation of 25 mm.

² Proposed Site Layout; K Paul Architect Inc., November 27, 2023

5.3 ESTIMATED CONSTRUCTION DEWATERING ZONE OF INFLUENCE (ZOI)

The radius of influence is the distance range beyond which the drawdown on groundwater caused by dewatering is not expected to be detectable. The dewatering zone of influence was estimated for the excavation area using the groundwater elevations and hydraulic conductivities provided above and using the empirical Sichart and Kyrielis relationship described in Powers (2007).

Based on the hydraulic conductivity and proposed excavation dimensions with consideration for slab-on-grade construction, the dewatering operations are estimated to have a Zone of Influence (ZOI) equivalent to a 1-metre radius from the dewatering locations. The estimated ZOI is provided in **Table 6**, above, and as part of the analyses provided in **Appendix III**.

No off-site ecologically sensitive receivers, structures or private water supply wells are present within the radius of influence that could be negatively affected by dewatering. It is possible that groundwater impacted by contaminants could be collected or diverted by pumping. The retained specialist dewatering contractor must ensure that there will be no impact on municipal supply wells within 300 m of the Site.

5.4 INCIDENT PRECIPITATION

Open excavations will capture incident precipitation. The volume as produced by a relatively large storm was estimated using the excavation area and a precipitation event of 25 mm. As summarized in **Table 6**, the excavation will collect approximately 7,272 litres per event. Such precipitation events statistically recur four to five times per year. Obviously, larger precipitation events would produce larger amounts to manage, although occurring less frequently. Stormwater runoff from adjacent lands to excavations should be prevented by means of temporary surface grades, berms or ditches to the extent possible.

5.5 TOTAL CONSTRUCTION DEWATERING RATE FOR CONCEPT DIMENSIONS

As summarized in **Table 6**, based on the conditions encountered during the hydrogeological field investigations, the excavation is anticipated to require temporary construction dewatering (inclusive of incident precipitation and with a Factor of Safety of 2.0 for groundwater contributions) equivalent to approximately 18,722 L/day.

5.6 ANTICIPATED PERMITTING NEEDS

Water takings in excess of 50,000 L/day are regulated by the Ministry of Environment, Conservation and Parks (MECP). Certain construction dewatering activities up to 400,000 L/day may qualify for a self-registration process under the Environmental Activity Sector Registry ("EASR"). A Category 3 Permit to Take Water (PTTW) is required where the proposed water taking is greater than 400,000 L/day. It is understood that a PTTW registered with the province no longer requires the contribution of incident rainfall (July 1, 2022).

The volumes summarized in **Table 6** indicate that the temporary construction dewatering rate is **anticipated to be less than 50,000 L/day**. As such, no permitting is anticipated during construction for the concept excavation dimensions. It is noted that dewatering operations will need to draw the groundwater to at least one meter below the trench floor (CFEM 2006).

A Private Water Discharge Agreement is required for discharge of construction dewatering to City sewers.

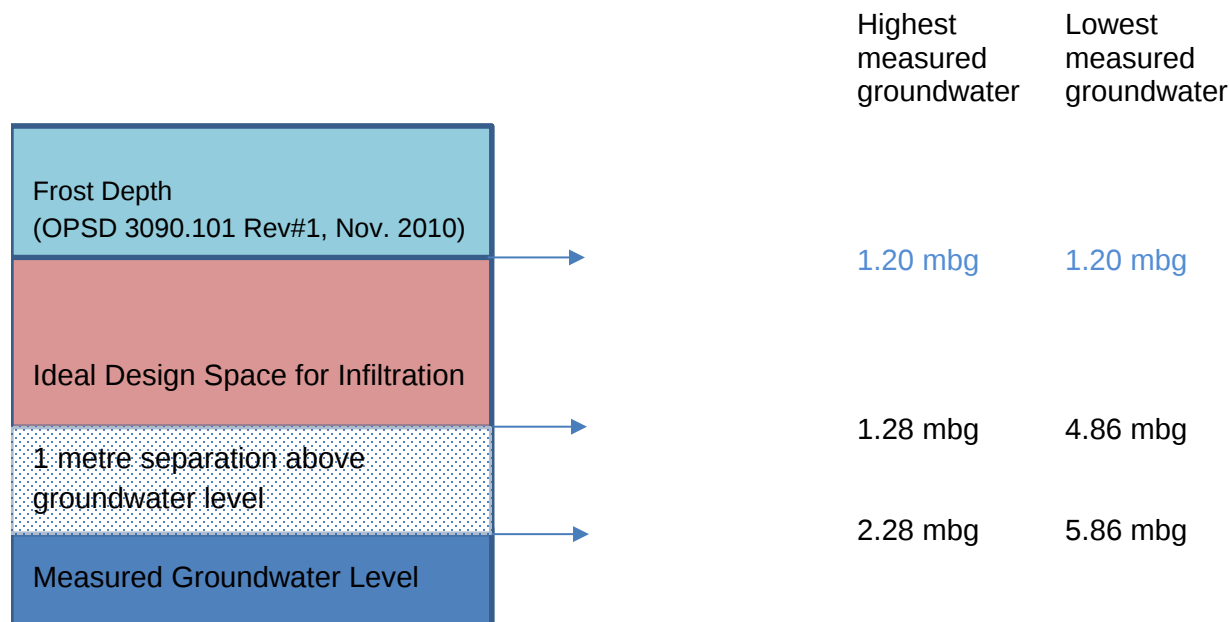
6.0 LOW IMPACT DEVELOPMENT (LID) MEASURES

In general principles, precipitation incident to a pervious soil surface may infiltrate downward to move through the unsaturated zone, to then recharge the shallow groundwater aquifer. From there, shallow groundwater moves toward a watercourse to contribute to baseflow or percolates downward to replenish deeper aquifers. Impervious surfaces, such as buildings or paving, prevent infiltration and so precipitation instead becomes runoff that, in urban settings, is typically directed to storm water sewers.

Low impact development (LID) measures promote infiltration by providing space for precipitation to infiltrate downward through the unsaturated zone. LIDs generally require there to be at least one metre of soil above the seasonal high groundwater level and should generally reside lower than the understood frost depth (OPSD3090.101 Rev#1 Nov2010). LID infiltration measures should not be located above or within 4 m from the footprint of the basement.

As summarized in **Table 2**, above, *in-situ* measurements of the static groundwater depths from these monitoring wells ranged from approximately 2.28 mbg to 5.86 mbg. Based on these measurements, there is accommodation space for infiltration measures between maximum frost depth and maximum infiltration depth.

Based on these measurements, conditions are considered to be challenging for the design of LID measures. These conditions are summarized visually in the drawing, below.



7.0 SITE SPECIFIC WATER BALANCE ASSESSMENTS

A comparative site-specific global water balance (WB) assessment was carried out for the subject property.

Estimates for existing conditions, proposed conditions, and proposed conditions with low impact development methods are compared below.

7.1 METHODS

Pre-development and post-development groundwater recharge (infiltration) and surface water run-off parameters were estimated at monthly resolutions to characterize the hydrological and hydrogeological dynamics of the subject property. The estimates take into account the following seven components:

“Inputs”	(P) Precipitation
	(S _i) Surface water inflow
	(G _i) Groundwater inflow
“Outputs”	(S _o) Surface water outflow
	(G _o) Groundwater outflow
	(ET) Evapotranspiration
Available Storage	(SMC) soil moisture holding capacity

The basic water balance for a particular area can be expressed as:

$$P = Q_s + ET + RE + \Delta S$$

(Thornthwaite and Mather 1955)

where,

P	= Precipitation (rain and snow)
Q _s	= Runoff
ET	= Evapotranspiration
RE	= Recharge
ΔS	= Change in Storage (assumed to be zero under steady state conditions)

Climate data was sourced from historical Environment Canada data available for Barrie-Oro weather station, located approximately 15.8 km from the subject property (approximately 44.48 °N, -79.55 °W, 289 masl). An average of four years (January 1, 2021 through January 29, 2024) were used for meteorological estimates.

Local solar radiation, incoming solar radiation, sunset hour angles, and solar declination conditions used to estimate the evapotranspiration rate were sourced from the National Aeronautical and Space Administration Langley Research Center (NASA 2018). An average of

four years (January 1, 2021 through January 29, 2024) were used for astro-meteorological estimates.

Standard soil water holding capacities and infiltration coefficients used were provided in the *Stormwater Management Planning and Design Manual* (MOECC 2003). The infiltration coefficients used in the estimate calculations were based on the sum of topography, surficial soil classification and cover factors, provided in the *Stormwater Management Planning and Design Manual* (MOECC 2003).

The parameters used for the calculations are provided in **Table 7**, below, based on the above descriptions and assumptions, as well as proposed conditions.

7.2 EVALUATION OF CONDITIONS

The water balance assessments were carried for the subject property. The purpose of the water balance assessment is to compare the hydrological conditions of the proposed development conditions with the hydrological conditions of the existing conditions. The proposed surface area of the subject property is noted to change with the addition of fill, grading, and with roofed areas dedicated to directing rainwater to proposed storage tanks.

Land areas are divided into Permeable Area and Impermeable Area, based on the runoff coefficient provided to Terrapex for each sub-catchment area. Impermeable Areas contribute to runoff, but do not contribute to evapotranspiration or to infiltration. Permeable area within each sub-catchment area is assessed using the appropriate Infiltration Ratio (per SWM Planning & Design Manual, 2003), and infiltration and runoff volumes are estimated. Runoff from permeable areas is added to the runoff from impermeable areas. Asphalt areas contribute to runoff, but do not contribute to evapotranspiration or to infiltration.

7.2.1 EVALUATION OF CONDITIONS – FULL SITE

Pre-Development Area Constraints

Pre-development conditions for the subject property were based on MECP mapping, and design drawings provided to Terrapex. Based on these drawings, **the existing area of the subject property used in the calculations was approximately 6,585 m² in area.**

For the purposes of evaluating the pre-development conditions, the existing conditions were generalized into four (4) land use areas, with hydrological parameters summarized in **Table 7**, below.

Post-Development Area Constraints

Post-development conditions for the subject property were based on MECP mapping and design drawings provided to Terrapex. Based on these drawings, **the proposed area of the subject property used in the calculations was approximately 6,585 m² in area.**

For the purposes of evaluating the pre-development conditions, the existing conditions were generalized into five (5) land use areas. Hydrological parameters for these land use areas are summarized in **Table 8**, below.

Table 7. Existing Pre-Development Conditions – Full Site ¹

Land Uses	Approximate Pervious Land Area (m ²)	Approximate Impervious Land Area (m ²)	Cover Co-Efficient ⁽²⁾ (unitless)	Soil Co-Efficient ⁽²⁾ (unitless)	Topographic Co-Efficient ⁽²⁾ (unitless)	Infiltration Ratio ⁽³⁾ (unitless)	Water Holding Capacity ⁽²⁾ (mm)
Landscaped	613	-	0.1	0.2	0.3	0.6	125
Landscaped	335	-	0.1	0.2	0.3	0.6	125
Landscaped	2,057	-	0.1	0.2	0.3	0.6	125
Paved / Roof	-	3,579	-	-	-	-	-
Sub-Totals	3,005	3,579					
Total		6,585					

¹ Figure 1, Groundwater Analysis Results, March 28, 2017, 623 Yonge Street, Barrie, ON, Outlet 33659 (prepared by PGL for Suncor; dated Jul 2018)

² SWM Planning & Design Manual (2003)

³ = (Cover Co-Efficient) + (Soil Co-Efficient) + (Topographic Co-Efficient)

Table 8. Proposed Post-Development Conditions – Full Site ¹

Land Uses	Approximate Pervious Land Area (m ²)	Approximate Impervious Land Area (m ²)	Cover Co-Efficient ⁽²⁾ (unitless)	Soil Co-Efficient ⁽²⁾ (unitless)	Topographic Co-Efficient ⁽²⁾ (unitless)	Infiltration Ratio ⁽³⁾ (unitless)	Water Holding Capacity ⁽²⁾ (mm)
Landscaped	201	-	0.1	0.2	0.3	0.6	125
Landscaped	246	-	0.1	0.2	0.3	0.6	125
Landscaped	851	-	0.1	0.2	0.3	0.6	125
Paved / Roof	5,088	5,088	-	-	-	-	-
Brick Patio	199	199	-	-	-	-	-
Sub-Totals	1,298	5,287					
Total		6,585					

¹ Drawing No. SP1, Proposed Site Layout, 623 Yonge Street @ Big Bay Point, Barrie, ON (prepared by K Paul Architect Inc. for Petro Canada; dated November 27, 2023)

² SWM Planning & Design Manual (2003)

³ = (Cover Co-Efficient) + (Soil Co-Efficient) + (Topographic Co-Efficient)

7.3 COMPARISON OF PRE-DEVELOPMENT AND POST-DEVELOPMENT WATER BALANCE CONDITIONS

The pre-development hydrologic budgets for the subject property were estimated based on the existing catchment conditions summarized above, and the post-development hydrologic budgets were estimated based on the provided designs. The estimated pre-development conditions are compared to anticipated post-development conditions in **Table 9**, below. **A more detailed analysis of the proposed conditions are provided at monthly resolutions in Appendix V.**

Table 9. Comparison of Theoretical Water Balance Budget – Full Site

Component	Pre-Development Conditions	Proposed Post-Development Conditions	Annual Variation	
	(m ³ per annum)	(m ³ per annum)	(m ³ per annum)	(% per annum)
(P) Precipitation	5,569	5,569	-	-
(ET) Evapotranspiration	1,510	652	▼ 858	56%
(Q _G) Infiltration	763	329	▼ 434	56%
(Q _S) Run-off	3,278	4,563	▲ 1,285	39%

Site Specific Global Site Water Balance:

Annual Variances

Based on the summary of analyses provided in **Table 9** it is noted that the proposed changes to the subject property are anticipated to result in an annual decrease in infiltration of approximately 434 m³/year (-56%) in comparison to existing conditions, and an increase in run-off of approximately 1,285 m³/year (+39%) in comparison to existing conditions.

8.0 GLOBAL SITE-SPECIFIC PHOSPHOROUS BALANCE

Phosphorus loading and removal strategies were assessed in accordance with the policies of the Lake Simcoe Conservation Authority (LSRCA) and the Ministry of Environment, Conservation and Parks (MECP). Estimates were quantified using the Phosphorus Budget Tool in Support of Sustainable Development for the Lake Simcoe Watershed (Ontario Ministry of the Environment, 30 March 2012, the Phosphorus Budget Tool). The objective is a net reduction in phosphorous loading post-construction. The Ministry of Environment Conservation and Parks (MECP) will recommend that municipalities approve development as site-specific appropriate if:

- 1) Post-development load is $\leq$ to the pre-development load; and,
- 2) (Post-development + amortized construction phase) load is $\leq$ to the pre-development load;

OR

- 3) (Post-development + amortized construction phase) load is $\leq$ to the pre-development load; and that all reasonable and feasible construction phase Best Management Processes have been identified for implementation, documented, and accounted for in the application.

(Ontario Ministry of the Environment, 2012)

It is noted that phosphorous balances are generally recommended for properties with footprint areas greater than 2 ha (20,000 m²) in size.

8.1 PRE-CONSTRUCTION CONSTRAINTS

The existing pre-construction condition of the subject property was based the drawing entitled *Figure 1, Groundwater Analysis Results, March 28, 2017, 623 Yonge Street, Barrie, ON, Outlet 33659*, prepared by PGL for Suncor, dated Jul 2018. The approximate area and coefficients for the pre-construction condition are summarized in **Table 10**.

Table 10. Existing Pre-Construction Conditions

Existing Land Use	Approximate Land Area (ha)	Phosphorous Export Co-efficient ¹ (kg/ha/annum)
High Intensity – Comm/Industrial	0.6	1.82

Based on information interpreted from:
Figure 1, Groundwater Analysis Results, March 28, 2017, 623 Yonge Street, Barrie, ON, Outlet 33659, prepared by PGL for Suncor, dated Jul 2018

¹ Based on location in Lovers Creek Sub-watershed

8.2 POST-CONSTRUCTION CONSTRAINTS

The post-construction condition of the subject property was based on the drawing entitled *Drawing No. SP1, Proposed Site Layout, 623 Yonge Street @ Big Bay Point, Barrie, ON* prepared by K Paul Architect Inc. for Petro Canada, dated November 27, 2023. For the purposes of this assessment, the mitigation method for the purpose of phosphorous removal was assumed to be the installation of an oil/grit separator with a phosphorus removal efficiency of 20%. The approximate area and coefficients for the post-construction condition are summarized in **Table 11**.

Table 11. Proposed Post-Construction Conditions

Proposed Land Use	Approximate Land Area (ha)	Phosphorous Co-efficient ¹ (kg/ha/annum)	Applied MBP Method	Phosphorous Removal Efficiency ²
High Intensity - Comm/Industrial	0.6	1.82	Oil/Grit Separator	20%

¹ Ministry of the Environment, 2012

² Phosphorous removal efficiency based on *Assignment of Percent Removal Efficiencies for Total Phosphorus*, prepared by the Commonwealth of Virginia, Department of Environmental Quality, for Hydroworks LLC, dated August 29, 2014.

8.3 COMPARISON OF PRE-CONSTRUCTION AND POST-CONSTRUCTION CONDITIONS

The estimated pre-construction conditions are compared to anticipated post-construction conditions in **Table 12**, below.

For the purposes of this assessment, the temporary construction phase conditions assumed that the entire Site having exposed clay loam soil, sloped at 0% and exposed for 1 month over a construction period of 4 months. The conditions also assumed that a temporary silt fence, with a phosphorus removal efficiency of 70%, would be erected around the entire site perimeter should runoff be a potential concern.

Table 12. Theoretical Phosphorus Budget Estimates – Comparison

Component	Phosphorous Load	Phosphorous Deficit (Post-construction Load – Pre-construction Load)
	(kg per annum)	(kg per annum)
Pre-Construction	1.09	-
Temporary Construction Phase (8-year amortization)	0.03	-
Post-Construction (sans BMP)	1.09	0.00
Post-Construction (with BMP)	.87	0.22

Based on the summary of analyses provided in **Table 12**, it is noted that the proposed changes to the subject property are anticipated to result in an annual reduction in phosphorous concentration of approximately 20%.

It is acknowledged that the values and coefficients presented above are standardized estimates. As such, the resulting phosphorous balance estimates inherit potentially large margins of error. These margins of error are recognized, but for the purposes of this assessment, the numbers used in the phosphorous balance calculations are considered reasonable estimates based on the site-specific conditions and useful for comparison of pre- to post- construction conditions. Based on the comparison of pre-development and post-development conditions provided above, post development conditions achieve the sought-after policy target of 'zero phosphorus'.

A copy of the Phosphorus Budget Tool Project Development Summary is provided in **Appendix V**.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The following summarizes the information above, obtained during the review of the Site:

Hydrogeological Findings

- **The subsurface stratigraphy** is generally comprised of loose to very dense sandy silt to silty sand till. The soil throughout the site is overlain by loose to dense sand and gravel, sand, silt, sandy clayey silt, sandy silt, silty sand, and silty clay fill, with occasional asphalt chunks and organics. Boreholes were capped by either topsoil or asphaltic concrete. Bedrock was not encountered during the investigation.
- **In-situ measurements** of the static groundwater level ranged from approximately 2.28 mbg to 5.86 mbg, water table elevations ranging from 249.22 masl to 245.80 masl. The average depth to the water table was 4.5 mbg. The average groundwater elevation was 246.6 masl.
- **Hydraulic conductivities** ranged from approximately 2.93×10^{-9} m/s to 3.71×10^{-8} m/s in the locations tested.
- **Analytical hydrochemical analyses** indicate that tested groundwater does not meet the criteria for discharge to sanitary sewers, due to elevated concentrations of chloride.

All other reported results for the tested parameters complied with the sanitary/combined sewer and storm sewer criteria.

- **Analytical hydrochemical analyses** indicate that tested groundwater does not meet the Table 2 SCS criteria applicable to commercial property use in a potable groundwater condition with coarse-textured soil, due to elevated concentrations of dissolved copper, chloride, and sodium.

All other reported results, including PAHs, BTEX and PHCs in the groundwater sample was below the applicable SCS.

- **The Design Dewatering Volume was estimated to be 18,722 L/day**, (inclusive of incident rainfall and with a Factor of Safety of 2.0 for groundwater contributions)

The Temporary Construction Dewatering Rate is anticipated to be less than 50,000 L/day. As such, no permitting is anticipated during construction for the concept excavation dimensions.

A Private Water Discharge Agreement is required for discharge of construction dewatering to City sewers.

- Measured water-level conditions are considered challenging for the design of **LID measures**.

Site-Specific Global Water Balance Findings

- The proposed changes to the full subject property are anticipated to result in an annual decrease in infiltration of approximately 434 m³/year (-56%) in comparison to existing conditions, and an increase in run-off of approximately 1,285 m³/year (+39%) in comparison to existing conditions.

Site-Specific Phosphorus Balance Findings

- The proposed changes to the full subject property are anticipated to result in an annual reduction in phosphorous concentration of approximately 20%.

10.0 CLOSURE

This report has been completed in accordance with the terms of reference for this project as agreed upon by Suncor Energy Products Partnership (the Client) and Terrapex Environmental Ltd. (Terrapex) and generally accepted hydrogeological consulting practices in this area.

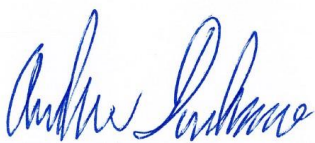
The reported information is believed to provide a reasonable representation of the general hydrogeological conditions at the site; however, studies of this nature have inherent limitations. The data were collected at specific locations and conditions may vary at other locations, or with the passage of time. Where applicable, the assessment of the environmental quality of groundwater was limited to a study of those chemical parameters specifically addressed in this report.

Terrapex has relied in good faith on information and representations obtained from the Client and third parties and, except where specifically identified, has made no attempt to verify such information. Terrapex accepts no responsibility for any deficiency or inaccuracy in this report as a result of any misstatement, omission, misrepresentation, or fraudulent act of those providing information. Terrapex shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time of the study.

This report has been prepared for the sole use of Suncor Energy Products Partnership. Terrapex accepts no liability for claims arising from the use of this report, or from actions taken or decisions made as a result of this report, by parties other than Suncor Energy Products Partnership.

Respectfully submitted,

TERRAPEX ENVIRONMENTAL LTD.



Andrew Durbano, P.Geo.
Hydrogeologist



Zen Keizars, P.Geo., FGC.
Senior Hydrogeologist



FIGURES



LEGEND



SITE LOCATION

CLIENT:



SITE LOCATION:

623 YONGE STREET AND 515 BIG BAY ROAD
BARRIE, ONTARIO



TITLE:

SITE LOCATION

DRAWN BY: SW/JS

PROJECT NO.: CH321.01

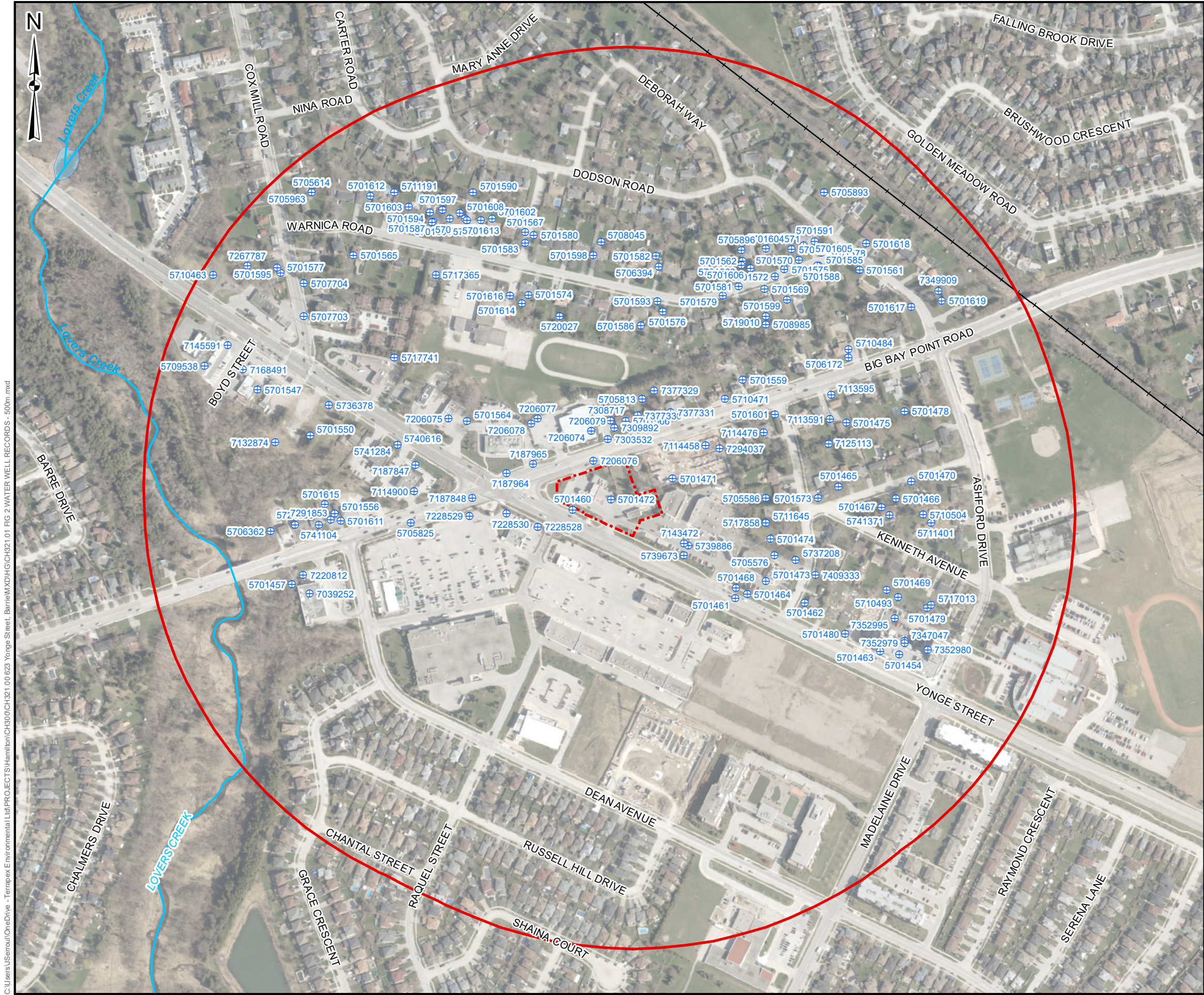
CHECKED BY: ZK

REVISION: 00

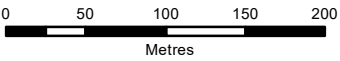
DATE: FEBRUARY 2024

FIGURE: 1

DATA SOURCE: ESRI
MAP PROJECTION: NAD 1983 UTM Zone 17N



- LEGEND**
- [Red dashed line] SITE BOUNDARY
 - [Red solid line] 500m RADIUS FROM SITE BOUNDARY
 - [Black line with cross-ticks] GO TRANSIT RAILWAY
 - [Blue line] WATERCOURSE
 - [Blue circle with cross] MECP WATER WELL LOCATION



DATA SOURCE: CITY OF BARRIE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SITE LOCATION:
623 YONGE STREET AND 515 BIG BAY ROAD
BARRIE, ONTARIO

TITLE:
WATER WELL RECORDS - 500m

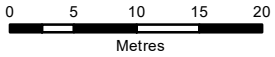
DRAWN BY: SW/JS	PROJECT NO.: CH321.01	CHECKED BY: ZK
REVISION: 00	DATE: FEBRUARY 2024	FIGURE: 2

C:\Users\JSerrouil\OneDrive - Terrapex Environmental Ltd\PROJECTS\Hamilton\CH300\CH321.00 623 Yonge Street, Barrie\MXD\H\G\CH321.01 FIG 3 GENERAL SITE LAYOUT.mxd



LEGEND

-  SITE BOUNDARY
-  BOREHOLE
-  MONITORING WELL



DATA SOURCE: CITY OF BARRIE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:



SITE LOCATION:
623 YONGE STREET AND 515 BIG BAY ROAD
BARRIE, ONTARIO



TITLE:
GENERAL SITE LAYOUT

DRAWN BY: SW/JS	PROJECT NO.: CH321.01	CHECKED BY: ZK
REVISION: 00	DATE: FEBRUARY 2024	FIGURE: 3

C:\Users\JSerrouil\OneDrive - Terrapex Environmental Ltd\PROJECTS\Hamilton\CH30\CH321.00\623 Yonge Street, Barrie\MXD\H\G\CH321.01 FIG 4 GWP\PIEZOMETRIC HEAD.mxd



LEGEND

- SITE BOUNDARY
- MONITORING WELL
- INTERPRETED GROUNDWATER CONTOURS
- INTERPRETED GROUNDWATER FLOW DIRECTION

05101520

Metres

DATA SOURCE: CITY OF BARRIE
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

SITE LOCATION:

623 YONGE STREET AND 515 BIG BAY ROAD
BARRIE, ONTARIO

TITLE: **GROUNDWATER PIEZOMETRIC HEAD
CONTOURS (AS OF NOVEMBER 23, 2023)**

DRAWN BY: JS	PROJECT NO.: CH321.01	CHECKED BY: ZK
REVISION: 00	DATE: FEBRUARY 2024	FIGURE: 4

APPENDIX I
MECP WELL RECORD REPORT

MECP Water Well Records

Well Record

5701454		Lot 014		Conc	12	INNISFIL TOWNSHIP / SIMCOE						Flowing? N			
Date	1964-10-08	Elev			(masl)	Easting	608225	Northing	4912213	SWL	3.7	(mbgs)		(masl)	
DD/MM/YYYY		/ Domestic				Water Supply		UTM RC 5		margin of error : 100 m - 300 m		Pumping WL	12.2	(mbgs)	(masl)
		Water Found		14.0	(mbgs)	(masl)		FRESH				Pump Rate	18.2	(LPM)	2 / 0
												Spec. Cap.	2.13	(LPM/m)	Hour / Minute
Casing Diameter		4	inch	Casing Material:		STEEL		Depth (m)		Elev (masl)		Color		Soil Descriptions	
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)		0.0					
Screen Interval				(m)		Contractor									
								2.1				CLAY /		/	
								13.7				HARDPAN /		STONES /	
								14.3				STONES /		GRAVEL /	

5701457		Lot 012		Conc	12	INNISFIL TOWNSHIP / SIMCOE						Flowing? N			
Date	1962-10-04	Elev			(masl)	Easting	607490	Northing	4912298	SWL	4.6	(mbgs)		(masl)	
DD/MM/YYYY		/ Domestic				Water Supply		UTM RC 5		margin of error : 100 m - 300 m		Pumping WL		(mbgs)	(masl)
		Water Found		9.1	(mbgs)	(masl)		FRESH				Pump Rate	9.1	(LPM)	/
												Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter		30	inch	Casing Material:		STEEL		Depth (m)		Elev (masl)		Color		Soil Descriptions	
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)		0.0					
Screen Interval				(m)		Contractor		2024257 Ontario Ltd.							
								9.1		BLUE		CLAY /		/	
								10.7				MEDIUM SAND /		/	

5701460		Lot 013		Conc	12	INNISFIL TOWNSHIP / SIMCOE						Flowing? N			
Date	1956-08-08	Elev			(masl)	Easting	607830	Northing	4912389	SWL	3.7	(mbgs)		(masl)	
DD/MM/YYYY		/ Domestic				Water Supply		UTM RC 9		unknown UTM		Pumping WL	9.1	(mbgs)	(masl)
		Water Found		14.0	(mbgs)	(masl)		FRESH				Pump Rate	22.7	(LPM)	5 / 0
												Spec. Cap.	4.14	(LPM/m)	Hour / Minute
Casing Diameter		4	inch	Casing Material:		STEEL		Depth (m)		Elev (masl)		Color		Soil Descriptions	
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)		0.0					
Screen Interval				(m)		Contractor									
								3.7				CLAY /		/	
								14.0				HARDPAN /		/	
								14.6				GRAVEL /		/	

5701461		Lot 013		Conc	12	INNISFIL TOWNSHIP / SIMCOE						Flowing?			
Date	1958-10-02	Elev			(masl)	Easting	608027	Northing	4912281	SWL		(mbgs)		(masl)	
DD/MM/YYYY		/				Unfinished		UTM RC 5		margin of error : 100 m - 300 m		Pumping WL		(mbgs)	(masl)
		Water Found				(mbgs)		(masl)				Pump Rate		(LPM)	/
												Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter		2	inch	Casing Material:				Depth (m)		Elev (masl)		Color		Soil Descriptions	
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)		0.0					
Screen Interval				(m)		Contractor									
								4.6		BROWN		CLAY /		STONES /	

Well Record #

5701462		Lot 013		Conc 12		INNISFIL TOWNSHIP / SIMCOE					Flowing? N						
Date	1960-12-16	Elev		(masl)		Easting		608111	Northing		4912276	SWL	3.0	(mbgs)	(masl)		
DD/MM/YYYY				/ Domestic		Water Supply			UTM RC		5	margin of error : 100 m - 300 m			Pumping WL	(mbgs)	(masl)
		Water Found		6.1	(mbgs)			(masl)	FRESH			Pump Rate	13.6	(LPM)	/		
												Spec. Cap.		(LPM/m)	Hour / Minute		
		Casing Diameter		30	inch	Casing Material:		CONCRETE				Depth (m)	Elev (masl)				
												0.0		Color	Soil Descriptions		
		Top of Screen			(mbgs)	Bottom of Screen					(mbgs)						
		Screen Interval			(m)	Contractor		2024257 Ontario ltd.									
												6.1		CLAY /	MEDIUM SAND	/	
												8.5		GRAVEL /		/	

5701463		Lot 013		Conc 12		INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1961-06-08	Elev		(masl)		Easting	608202	Northing	4912217	SWL	1.5	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC		5	margin of error : 100 m - 300 m		Pumping WL	(mbgs)	(masl)
		Water Found		4.6	(mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM)	/
										Spec. Cap.		(LPM/m)	Hour / Minute
		Casing Diameter		30	inch	Casing Material:		CONCRETE		Depth (m)	Elev (masl)	Color	Soil Descriptions
										0.0			
		Top of Screen		(mbgs)		Bottom of Screen		(mbgs)					
		Screen Interval		(m)		Contractor		2024257 Ontario ltd.					
										4.6	BLUE	CLAY /	/
										6.1	GREY	MEDIUM SAND /	/

5701464		Lot 013		Conc 12		INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1961-06-10	Elev		(masl)		Easting	608041	Northing	4912286	SWL	1.5	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC		5	margin of error : 100 m - 300 m		Pumping WL	(mbgs)	(masl)
		Water Found		4.6	(mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM)	/
										Spec. Cap.		(LPM/m)	Hour / Minute
		Casing Diameter		30	inch	Casing Material:		CONCRETE		Depth (m)	Elev (masl)	Color	Soil Descriptions
										0.0			
		Top of Screen		(mbgs)		Bottom of Screen		(mbgs)					
		Screen Interval		(m)		Contractor		2024257 Ontario ltd.					
										4.6	BLUE	CLAY /	/
										6.1	GREY	COARSE SAND /	/

5701465		Lot 013		Conc 12		INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1961-11-01	Elev		(masl)		Easting	608152	Northing	4912417	SWL	3.0	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC		5	margin of error : 100 m - 300 m		Pumping WL	(mbgs)	(masl)
		Water Found		10.1	(mbgs)	(masl)		FRESH		Pump Rate	13.6	(LPM)	/
										Spec. Cap.		(LPM/m)	Hour / Minute
		Casing Diameter		30	inch	Casing Material:		CONCRETE		Depth (m)	Elev (masl)	Color	Soil Descriptions
										0.0			
		Top of Screen		(mbgs)		Bottom of Screen		(mbgs)					
		Screen Interval		(m)		Contractor		2024257 Ontario ltd.					
										2.4	BROWN	CLAY /	/
										9.8	BLUE	CLAY /	STONES /
										10.7		GRAVEL /	MEDIUM SAND /

Well Record

5701466		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1962-06-21	Elev	(masl)	Easting	608221	Northing	4912402	SWL	4.6	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			
		Water Found	8.5 (mbgs)	(masl)		FRESH		Pumping WL		(mbgs)	(masl)
								Pump Rate	9.1	(LPM)	/
								Spec. Cap.		(LPM/m)	Hour / Minute
		Casing Diameter	30 inch	Casing Material: CONCRETE			Depth (m)	Elev (masl)			
						0.0		Color	Soil Descriptions		
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)					
		Screen Interval	(m)	Contractor 2024257 Ontario ltd.							
						4.6		BROWN	CLAY /	/	
						8.5		BLUE	CLAY /	/	
						9.1			GRAVEL /	/	

5701467		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1962-06-21	Elev	(masl)	Easting	608204	Northing	4912392	SWL	3.0	(mbgs)	(masl)	
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m				(masl)
		Water Found	3.0 (mbgs)	(masl)		FRESH		Pumping WL		(mbgs)		
								Pump Rate	9.1	(LPM)	/	
								Spec. Cap.		(LPM/m)	Hour / Minute	
Casing Diameter	30	inch	Casing Material: CONCRETE			Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen		(mbgs)	Bottom of Screen		(mbgs)	0.0						
Screen Interval		(m)	Contractor		2024257 Ontario Ltd.							
						3.0		BROWN	CLAY /	/		
						4.3			GRAVEL /	/		

5701468		Lot 013	Conc 12	INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1962-09-06	Elev	(masl)	Easting	608028	Northing	4912294	SWL	2.4	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			(masl)
		Water Found	15.8 (mbgs)	(masl)		FRESH		Pumping WL	14.6	(mbgs)	
								Pump Rate	31.8	(LPM)	2 / 0
								Spec. Cap.	2.61	(LPM/m)	Hour / Minute
Casing Diameter	6	inch	Casing Material: STEEL			Depth (m)	Elev (masl)	Color Soil Descriptions			
						0.0					
Top of Screen		(mbgs)	Bottom of Screen		(mbgs)						
Screen Interval		(m)	Contractor								
						0.3		TOPSOIL /		/	
						6.4		BROWN	CLAY /	BOULDERS	/
						15.5		BLUE	CLAY /	BOULDERS	/
						15.8			COARSE SAND /	GRAVEL	/

5701469		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1963-11-15	Elev	(masl)	Easting	608210	Northing	4912292	SWL	1.5	(mbgs)	(masl)
DD/MM/YYYY		/ Commerical		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			
		Water Found	12.5 (mbgs)	(masl)		FRESH		Pumping WL		(mbgs)	(masl)
								Pump Rate	45.5	(LPM)	/
								Spec. Cap.		(LPM/m)	Hour / Minute
		Casing Diameter	30 inch	Casing Material: CONCRETE		Depth (m)		Elev (masl)			
						0.0		Color	Soil Descriptions		
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)					
		Screen Interval	(m)	Contractor		2024257 Ontario ltd.					
						2.1		BROWN	CLAY /		/
						12.2		BLUE	CLAY /		/
						12.5			GRAVEL /		/

5701470		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1964-12-03	Elev	(masl)	Easting	608240	Northing	4912423		SWL	4.6	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m	Pumping WL	9.1	(mbgs)	(masl)
		Water Found	11.3 (mbgs)	(masl)		FRESH			Pump Rate	31.8	(LPM)	2 / 0
		Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Spec. Cap.	6.96	(LPM/m)	Hour / Minute
								0.0				
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)			Color			Soil Descriptions
		Screen Interval	(m)	Contractor								
								4.6				PREVIOUSLY DUG /
								11.0				MEDIUM SAND / CLAY
								11.3				GRAVEL /

5701472		Lot 013 Conc 12		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1967-06-15	Elev	(masl)	Easting	607876	Northing	4912401	SWL	4.6	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	17.7	(mbgs)	(masl)
		Water Found	18.0 (mbgs)	(masl)		FRESH		Pump Rate	36.4	(LPM)	1 / 30
		Casing Diameter	6 inch	Casing Material:	STEEL	Depth (m)		Spec. Cap.	2.77	(LPM/m)	Hour / Minute
		Top of Screen	18.0 (mbgs)	Bottom of Screen	18.9 (mbgs)	0.0		Color		Soil Descriptions	
		Screen Interval	0.9 (m)	Contractor							
						0.3			TOPSOIL /	/	
						18.0		BROWN	CLAY /	MEDIUM SAND	/ BOULDERS
						18.9			GRAVEL /	/	

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Well Record

5701474		Lot 013 Conc 12	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1967-12-14	Elev	(masl)	Easting	608069	Northing	4912353	SWL	2.1	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	10.7	(mbgs)	(masl)
		Water Found	13.4	(mbgs)	(masl)	FRESH		Pump Rate	22.7	(LPM)	1 / 0
								Spec. Cap.	2.66	(LPM/m)	Hour / Minute
Casing Diameter	4	inch	Casing Material:	STEEL		Depth (m)	Elev (masl)	Color	Soil Descriptions		
Top of Screen		(mbgs)	Bottom of Screen		(mbgs)	0.0					
Screen Interval		(m)	Contractor								
				1.2			FILL /				
				13.4			CLAY /	MEDIUM SAND	/	GRAVEL	
				13.7			MEDIUM SAND /	GRAVEL			

5701475		Lot 014 Conc 12		INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1959-08-26	Elev	(masl)	Easting	608161	Northing	4912494	SWL	3.0	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			
Water Found		9.1	(mbgs)	(masl)		FRESH		Pumping WL		(mbgs)	(masl)
Water Found		9.1	(mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM)	/
Water Found		9.1	(mbgs)	(masl)		FRESH		Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter	30	inch	Casing Material: CONCRETE			Depth (m)	Elev (masl)	Color	Soil Descriptions		
Top of Screen		(mbgs)	Bottom of Screen			(mbgs)	0.0				
Screen Interval		(m)	Contractor			2024257 Ontario Ltd.					
						9.1	BLUE	CLAY /	STONES	/	

5701478		Lot 014 Conc 12		INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1964-10-15	Elev	(masl)	Easting	608232	Northing	4912508	SWL	8.2	(mbgs)	(masl)	
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	15.2	(mbgs)	(masl)	
		Water Found	15.8 (mbgs)	(masl)		FRESH		Pump Rate	18.2	(LPM)	3 / 0	
								Spec. Cap.	2.59	(LPM/m)	Hour / Minute	
Casing Diameter	4 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)		0.0							
Screen Interval	(m)	Contractor										
						1.8			CLAY /	TOPSOIL	/	
						15.2			HARDPAN /	STONES	/	
						15.8			GRAVEL /		/	

5701479		Lot 014 Conc 12		INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1967-07-29	Elev	(masl)	Easting	608259	Northing	4912269	SWL	0.0	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	10.7	(mbgs)	(masl)
		Water Found	14.3 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM)	2 / 0
								Spec. Cap.	2.13	(LPM/m)	Hour / Minute
		Casing Diameter	4 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)	Color	Soil Descriptions		
		Top of Screen	14.3 (mbgs)	Bottom of Screen	15.2 (mbgs)	0.0					
		Screen Interval	0.9 (m)	Contractor							
						14.3			CLAY /	GRAVEL	/ BOULDERS
						15.2			FINE SAND /	MEDIUM SAND	/
						15.5			CLAY /		/

Well Record #

5701480		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1964-10-26	Elev	(masl)	Easting	608160	Northing	4912238	SWL	3.0	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL	15.2	(mbgs)	(masl)
		Water Found	15.8 (mbgs)	(masl)		FRESH		Pump Rate	18.2	(LPM)	1 / 0
								Spec. Cap.	1.49	(LPM/m)	Hour / Minute
Casing Diameter	4	inch	Casing Material: STEEL		Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen		(mbgs)	Bottom of Screen		0.0						
Screen Interval		(m)	Contractor								
						2.1		CLAY /			
						15.2		HARDPAN /			
						15.8		STONES /			

5701547		Lot 012	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1958-08-16	Elev	(masl)	Easting	607448	Northing	4912534	SWL	3.4	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 9		Pumping WL	40.2	(mbgs)	(masl)
		Water Found	43.9 (mbgs)	(masl)		FRESH		Pump Rate	31.8	(LPM)	3 / 0
								Spec. Cap.	0.86	(LPM/m)	Hour / Minute
Casing Diameter		inch	Casing Material:		Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen		(mbgs)	Bottom of Screen		0.0						
Screen Interval		(m)	Contractor								
						10.7		PREVIOUSLY DUG /			
						43.0	BLUE	CLAY /			
						43.9		MEDIUM SAND /			

5701550		Lot 012	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1964-09-27	Elev	(masl)	Easting	607512	Northing	4912478	SWL	2.7	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL		(mbgs)	(masl)
		Water Found	6.7 (mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM)	/
								Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter	30	inch	Casing Material: CONCRETE		Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen		(mbgs)	Bottom of Screen		0.0						
Screen Interval		(m)	Contractor								
						9.1		CLAY /			
								MEDIUM SAND /			

5701556		Lot 012	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1966-09-19	Elev	(masl)	Easting	607542	Northing	4912384	SWL	5.5	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL		(mbgs)	(masl)
		Water Found	5.5 (mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM)	/
								Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter	30	inch	Casing Material: CONCRETE		Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen		(mbgs)	Bottom of Screen		0.0						
Screen Interval		(m)	Contractor								
						5.5	BROWN	CLAY /			
						10.7	GREY	CLAY /			

Well Record

5701559		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1957-08-08	Elev	(masl)	Easting	608036	Northing	4912546		SWL	5.2	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	9	unknown UTM	Pumping WL	13.1	(mbgs)	(masl)
		Water Found	17.4 (mbgs)	(masl)		FRESH			Pump Rate	27.3	(LPM)	4 / 0
									Spec. Cap.	3.44	(LPM/m)	Hour / Minute
Casing Diameter	6	inch		Casing Material:	STEEL	Depth (m)		Elev (masl)				
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0			Color		Soil Descriptions	
Screen Interval		(m)		Contractor								
						0.3				TOPSOIL /		/
						16.5			BROWN	CLAY /	GRAVEL	/
						17.4				MEDIUM SAND /	GRAVEL	/

5701561		Lot 014	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1960-06-23	Elev	(masl)	Easting	608177	Northing	4912679		SWL	19.2	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m	Pumping WL	23.5	(mbgs)	(masl)
		Water Found	29.6 (mbgs)	(masl)		FRESH			Pump Rate	36.4	(LPM)	2 / 0
									Spec. Cap.	8.52	(LPM/m)	Hour / Minute
Casing Diameter	4	inch		Casing Material:	STEEL	Depth (m)		Elev (masl)				
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0			Color		Soil Descriptions	
Screen Interval		(m)		Contractor								
						3.0				CLAY /	MEDIUM SAND	/
						16.8				FINE SAND /	CLAY	/ STONES
						19.8				CLAY /	BOULDERS	/
						29.6				GRAVEL /		/

5701562		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1961-01-06	Elev	(masl)	Easting	608036	Northing	4912690		SWL	9.1	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m	Pumping WL		(mbgs)	(masl)
		Water Found	10.7 (mbgs)	(masl)		FRESH			Pump Rate	4.5	(LPM)	/
									Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter	30	inch		Casing Material:	CONCRETE	Depth (m)		Elev (masl)				
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0			Color		Soil Descriptions	
Screen Interval		(m)		Contractor	2024257 Ontario Ltd.							
						4.6				MEDIUM SAND /		/
						9.1			WHITE	CLAY /		/
						10.7			BLUE	CLAY /	STONES	/
						12.2				GRAVEL /		/

5701563		Lot 014	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1961-05-10	Elev	(masl)	Easting	608095	Northing	4912704		SWL	6.1	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m	Pumping WL		(mbgs)	(masl)
		Water Found	9.1 (mbgs)	(masl)		FRESH			Pump Rate	9.1	(LPM)	/
									Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter	30	inch		Casing Material:	CONCRETE	Depth (m)		Elev (masl)				
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0			Color		Soil Descriptions	
Screen Interval		(m)		Contractor	2024257 Ontario Ltd.							
						9.1			BROWN	CLAY /		/
						12.8				GRAVEL /		/

Well Record

5701564		Lot 014	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1961-08-04	Elev	(masl)	Easting	607702	Northing	4912496	SWL	6.1	(mbgs)	(masl)	
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m				
Water Found		8.5	(mbgs)	(masl)		FRESH		Pumping WL	9.1	(LPM)	(masl)	
Casing Diameter		30	inch	Casing Material: CONCRETE		Depth (m)	Elev (masl)	Pump Rate	9.1	(LPM/m)	/	
Top of Screen		(mbgs)	Bottom of Screen		(mbgs)	0.0		Spec. Cap.		(LPM/m)	Hour / Minute	
Screen Interval		(m)	Contractor		2024257 Ontario Ltd.							
						8.5		BROWN	CLAY /	STONES	/	
						9.1			MEDIUM SAND /		/	

5701565		Lot 013		Conc 13		INNISFIL TOWNSHIP / SIMCOE					Flowing? N							
Date	1961-11-24	Elev		(masl)		Easting	607564	Northing	4912697	SWL	3.0	(mbgs)		(masl)				
DD/MM/YYYY				/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m					(mbgs)		(masl)	
Water Found		6.1	(mbgs)		(masl)		FRESH				Pumping WL	9.1	(LPM)		/			
Casing Diameter		30	inch		Casing Material: CONCRETE		Depth (m)		Elev (masl)	Spec. Cap.	(LPM/m)		Hour / Minute					
Top of Screen		(mbgs)		Bottom of Screen		(mbgs)		0.0		Color			Soil Descriptions					
Screen Interval		(m)		Contractor		2024257 Ontario Ltd.												
								6.1		BLUE	CLAY /				/			
								8.5			MEDIUM SAND /				/			

5701566		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1962-05-14	Elev	(masl)	Easting	607894	Northing	4912496	SWL	6.1	(mbgs)	(masl)	
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m				
Water Found		20.7	(mbgs)	(masl)		FRESH		Pumping WL	16.8	(mbgs)	(masl)	
Casing Diameter		6	inch	Casing Material: STEEL		Depth (m)	Elev (masl)	Pump Rate	54.6	(LPM)	2 / 0	
Top of Screen			(mbgs)	Bottom of Screen		(mbgs)		Spec. Cap.	5.11	(LPM/m)	Hour / Minute	
Screen Interval			(m)	Contractor								
						0.3		TOPSOIL /			/	
						7.0		BROWN	CLAY /	STONES	/	
						18.3			MEDIUM SAND /	GRAVEL	/ CLAY	
						20.4			COARSE SAND /		/	
						20.7			GRAVEL /		/	

5701567		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1962-06-21	Elev	(masl)	Easting	607772	Northing	4912725	SWL	9.1	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			
Water Found		9.1	(mbgs)	(masl)		FRESH		Pumping WL	9.1	(mbgs)	(masl)
Water Found		9.1	(mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM)	/
Water Found		9.1	(mbgs)	(masl)		FRESH		Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter		30	inch	Casing Material: CONCRETE		Depth (m)	Elev (masl)	Color	Soil Descriptions		
Top of Screen			(mbgs)	Bottom of Screen		(mbgs)	0.0				
Screen Interval			(m)	Contractor		2024257 Ontario ltd.					
						6.1		BROWN	CLAY /		/
						11.0			MEDIUM SAND /		/
						14.0			CLAY /	STONES	/

Well Record

5701568		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N						
Date	1962-06-28	Elev	(masl)	Easting	608034	Northing	4912685	SWL	11.6	(mbgs)	(masl)				
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m				Pumping WL	17.7	(mbgs)	(masl)
		Water Found	20.1 (mbgs)	(masl)		FRESH						Pump Rate	27.3	(LPM)	2 / 0
												Spec. Cap.	4.47	(LPM/m)	Hour / Minute
Casing Diameter	6 inch	Casing Material: STEEL				Depth (m)	Elev (masl)			Color	Soil Descriptions				
Top of Screen	17.4 (mbgs)	Bottom of Screen		20.7 (mbgs)	0.0										
Screen Interval	3.4 (m)	Contractor													
										BROWN					
						0.3					TOPSOIL /				
						7.9					CLAY / MEDIUM SAND / GRAVEL				
						20.1					CLAY / MEDIUM SAND / GRAVEL				
						20.7					MEDIUM SAND / GRAVEL /				

5701569		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1962-06-30	Elev	(masl)	Easting	608062	Northing	4912656	SWL	13.1	(mbgs)	(masl)	
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	18.3	(mbgs)	(masl)	
		Water Found	20.7 (mbgs)	(masl)		FRESH		Pump Rate	36.4	(LPM)	1 / 0	
								Spec. Cap.	7.02	(LPM/m)	Hour / Minute	
Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)					
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)			0.0		Color	Soil Descriptions			
Screen Interval	(m)	Contractor										
						14.0		PREVIOUSLY DUG /		/		
						20.4		BROWN	CLAY /	MEDIUM SAND	/ GRAVEL	
						20.7		COARSE SAND /		GRAVEL /		

5701570		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1962-07-05	Elev	(masl)	Easting	608104	Northing	4912691	SWL	10.7	(mbgs)	(masl)	
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	16.8	(mbgs)	(masl)	
		Water Found	20.1 (mbgs)	(masl)		FRESH		Pump Rate	31.8	(LPM)	2 / 30	
								Spec. Cap.	5.22	(LPM/m)	Hour / Minute	
Casing Diameter	6 inch	Casing Material:	STEEL		Depth (m)	Elev (masl)						
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)		0.0	Color		Soil Descriptions				
Screen Interval	(m)	Contractor										
				0.9			PREVIOUSLY DUG /					
				7.9	BROWN		CLAY /	MEDIUM SAND	/ GRAVEL			
				19.5			CLAY /	MEDIUM SAND	/ STONES			
				20.1			GRAVEL /	COARSE SAND	/			

5701571		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1962-06-16	Elev	(masl)	Easting	608109	Northing	4912709	SWL	7.6	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	13.7	(mbgs)	(masl)
		Water Found	15.8 (mbgs)	(masl)		FRESH		Pump Rate	45.5	(LPM)	1 / 0
								Spec. Cap.	7.46	(LPM/m)	Hour / Minute
Casing Diameter	4 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)				
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)			0.0	Color	Soil Descriptions			
Screen Interval	(m)	Contractor									
						0.9	TOPSOIL /		/		
						8.5	HARDPAN /		STONES /		
						12.8	GRAVEL /		/		
						15.5	HARDPAN /		/		
						15.8	GRAVEL /		/		

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5701572		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1962-08-13	Elev	(masl)	Easting	608075	Northing	4912671	SWL	13.1	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply	UTM RC 5	margin of error : 100 m - 300 m		Pumping WL	15.8	(mbgs)	(masl)
		Water Found	21.3 (mbgs)	(masl)	FRESH			Pump Rate	45.5	(LPM)	2 / 0
								Spec. Cap.	16.57	(LPM/m)	Hour / Minute
		Casing Diameter	4 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)						
		Screen Interval	(m)	Contractor							
						2.7		BROWN		CLAY /	/
						20.7		GREY		CLAY /	BOULDERS / MEDIUM SAND
						21.3				COARSE SAND /	/

5701573		Lot 013	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1962-10-18	Elev	(masl)	Easting	608127	Northing	4912403	SWL	9.4	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply	UTM RC 9	unknown UTM		Pumping WL	13.7	(mbgs)	(masl)
		Water Found	13.4 (mbgs)	(masl)	FRESH			Pump Rate	31.8	(LPM)	1 / 0
								Spec. Cap.	7.46	(LPM/m)	Hour / Minute
		Casing Diameter	6 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	13.4 (mbgs)	Bottom of Screen	14.3 (mbgs)						
		Screen Interval	0.9 (m)	Contractor							
						0.6				TOPSOIL /	/
						12.2		BROWN		CLAY /	MEDIUM SAND /
						14.3				COARSE SAND /	/

5701574		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1962-11-16	Elev	(masl)	Easting	607776	Northing	4912649	SWL	9.4	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply	UTM RC 5	margin of error : 100 m - 300 m		Pumping WL	19.5	(mbgs)	(masl)
		Water Found	22.3 (mbgs)	(masl)	FRESH			Pump Rate	36.4	(LPM)	2 / 0
								Spec. Cap.	3.62	(LPM/m)	Hour / Minute
		Casing Diameter	4 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)						
		Screen Interval	(m)	Contractor							
						2.4		BROWN		CLAY /	/
						21.0		GREY		CLAY /	MEDIUM SAND / BOULDERS
						22.3				COARSE SAND /	/

5701575		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1962-12-19	Elev	(masl)	Easting	608086	Northing	4912680	SWL	9.4	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply	UTM RC 5	margin of error : 100 m - 300 m		Pumping WL	18.3	(mbgs)	(masl)
		Water Found	21.0 (mbgs)	(masl)	FRESH			Pump Rate	18.2	(LPM)	2 / 0
								Spec. Cap.	2.06	(LPM/m)	Hour / Minute
		Casing Diameter	4 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)						
		Screen Interval	(m)	Contractor							
						2.4		BROWN		CLAY /	/
						20.4		GREY		CLAY /	MEDIUM SAND / BOULDERS
						21.0				COARSE SAND /	/

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5701576		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1963-01-28	Elev	(masl)	Easting	607939	Northing	4912629	SWL	13.7	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	15.2	(mbgs)	(masl)
		Water Found	23.5 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM)	3 / 0
								Spec. Cap.	14.91	(LPM/m)	Hour / Minute
Casing Diameter	inch	Casing Material:			Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen	(mbgs)	Bottom of Screen		(mbgs)	0.0						
Screen Interval	(m)	Contractor									
				10.7	PREVIOUSLY DUG /			/			
				23.5	STONES /			HARDPAN		/	
				23.8	GRAVEL /			/			

5701577		Lot 013		Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N													
Date	1963-05-08	Elev		(masl)		Easting		607476		Northing		4912675		SWL		8.2		(mbgs)		(masl)			
DD/MM/YYYY				/ Domestic		Water Supply				UTM RC		5		margin of error : 100 m - 300 m		Pumping WL		15.2		(mbgs)		(masl)	
		Water Found		20.4		(mbgs)		(masl)		FRESH						Pump Rate		81.8		(LPM)		2 / 0	
																Spec. Cap.		11.67		(LPM/m)		Hour / Minute	
Casing Diameter		6		inch		Casing Material:		STEEL		Depth (m)		Elev (masl)				Color				Soil Descriptions			
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)		0.0													
Screen Interval				(m)		Contractor																	
										8.2						PREVIOUSLY DUG /				/			
										9.4				YELLOW		FINE SAND /				/			
										19.5				BROWN		CLAY /		STONES		/			
										20.4						COARSE SAND /		GRAVEL		/			

5701578		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1963-05-07	Elev	(masl)	Easting	608131	Northing	4912700	SWL	8.2	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	19.8	(mbgs)	(masl)
		Water Found	25.9 (mbgs)	(masl)		FRESH		Pump Rate	68.2	(LPM)	2 / 30
								Spec. Cap.	5.89	(LPM/m)	Hour / Minute
Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)	Color	Soil Descriptions		
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)		0.0						
Screen Interval	(m)	Contractor									
				0.3		TOPSOIL /		/			
				25.6		BROWN	CLAY /	STONES	/		
				25.9			COARSE SAND /	GRAVEL	/		

5701579		Lot 013		Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1963-05-31	Elev	(masl)	Easting	608012	Northing	4912648	SWL	11.3	(mbgs)	(masl)		
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		margin of error : 100 m - 300 m		Pumping WL	25.9	(mbgs)	(masl)
		Water Found	25.9 (mbgs)	(masl)		FRESH				Pump Rate	18.2	(LPM)	2 / 30
										Spec. Cap.	1.24	(LPM/m)	Hour / Minute
Casing Diameter		6	inch	Casing Material: STEEL		Depth (m)		Elev (masl)					
Top of Screen		(mbgs)		Bottom of Screen		(mbgs)		0.0		Color	Soil Descriptions		
Screen Interval		(m)		Contractor									
						4.6		BLUE		CLAY /		STONES /	
						9.8		YELLOW		COARSE SAND /		/	
						25.9		BLUE		CLAY /		BOULDERS /	
						27.4				GRAVEL /		MEDIUM SAND /	

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5701580		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1963-07-15	Elev	(masl)	Easting	607783	Northing	4912721	SWL	9.1	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL	15.2	(mbgs)	(masl)
		Water Found	10.7 (mbgs)	(masl)		FRESH		Pump Rate	18.2	(LPM)	1 / 0
								Spec. Cap.	2.98	(LPM/m)	Hour / Minute
		Casing Diameter	4 inch	Casing Material: STEEL		Depth (m)	Elev (masl)				
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)	0.0	Color	Soil Descriptions		
		Screen Interval	(m)	Contractor							
						3.0		BROWN	CLAY /	/	
						9.1			HARDPAN /	BOULDERS	/
						10.7			GRAVEL /	MEDIUM SAND	/
						20.7			HARDPAN /	/	

5701581		Lot 013 Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1963-07-18	Elev (masl)		Easting	608031	Northing	4912659	SWL	7.9	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL	9.1	(mbgs)	(masl)
		Water Found	9.1 (mbgs)	(masl)		FRESH		Pump Rate	18.2	(LPM)	3 / 0
								Spec. Cap.	14.91	(LPM/m)	Hour / Minute
		Casing Diameter	4 inch	Casing Material: STEEL		Depth (m)	Elev (masl)	Color	Soil Descriptions		
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)	0.0				
		Screen Interval	(m)	Contractor							
						3.0		BROWN	CLAY /	/	
						9.1			HARDPAN /	STONES	/
						11.0			GRAVEL /	/	

5701582		Lot 013 Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1963-09-16	Elev	(masl)	Easting	607931	Northing	4912696	SWL	12.8	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL	22.9	(mbgs)	(masl)
		Water Found	24.4 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM)	2 / 0
								Spec. Cap.	2.26	(LPM/m)	Hour / Minute
		Casing Diameter	inch	Casing Material:		Depth (m)	Elev (masl)				
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)	0.0	Color	Soil Descriptions		
		Screen Interval	(m)	Contractor							
						1.5			PREVIOUSLY DUG /	/	
						2.7		BROWN	CLAY /	/	
						23.8			MEDIUM SAND /	GRAVEL	/ CLAY
						24.4			GRAVEL /	/	

5701583		Lot 013		Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N							
Date	1963-09-18	Elev		(masl)		Easting		607772		Northing		4912712		SWL	12.8	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC		5		margin of error : 100 m - 300 m				Pumping WL	26.5	(mbgs)	(masl)
		Water Found		29.3 (mbgs)		(masl)		FRESH						Pump Rate	36.4	(LPM)	2 / 30
														Spec. Cap.	2.65	(LPM/m)	Hour / Minute
		Casing Diameter		6 inch		Casing Material:		STEEL		Depth (m)		Elev (masl)					
		Top of Screen		(mbgs)		Bottom of Screen		(mbgs)		0.0		Color		Soil Descriptions			
		Screen Interval		(m)		Contractor											
										1.5				PREVIOUSLY DUG / /			
										18.3		BROWN		CLAY /		MEDIUM SAND / GRAVEL	
										19.5		BROWN		CLAY /		GRAVEL / BOULDERS	
										29.0		BROWN		CLAY /		MEDIUM SAND / GRAVEL	
										29.3				COARSE SAND /		GRAVEL /	

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5701584		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1963-09-28	Elev	(masl)	Easting	607661	Northing	4912738	SWL	13.1	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			
		Water Found	31.7 (mbgs)	(masl)		FRESH					
Casing Diameter	6 inch	Casing Material:	STEEL		Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)		0.0						
Screen Interval	(m)	Contractor									
						0.6		FILL /	/		
						4.6	BROWN	CLAY /	/		
						7.0		FINE SAND /	/		
						19.5		MEDIUM SAND /	GRAVEL	/	
						20.7	BLUE	CLAY /	BOULDERS	/	
						31.7		MEDIUM SAND /	GRAVEL	/	

5701585		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1963-12-06	Elev	(masl)	Easting	608128	Northing	4912684	SWL	10.7	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			
		Water Found	16.5 (mbgs)	(masl)		FRESH					
Casing Diameter	inch	Casing Material:			Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen	16.8 (mbgs)	Bottom of Screen	17.7	(mbgs)	0.0						
Screen Interval	0.9 (m)	Contractor									
						1.5		PREVIOUSLY DUG /	/		
						16.5	BROWN	CLAY /	STONES	/	
						17.7		COARSE SAND /	GRAVEL	/	

5701586		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1964-03-19	Elev	(masl)	Easting	607912	Northing	4912612	SWL	11.6	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			
		Water Found	23.2 (mbgs)	(masl)		FRESH					
Casing Diameter	6 inch	Casing Material:	STEEL		Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)		0.0						
Screen Interval	(m)	Contractor									
						2.4	BROWN	CLAY /	/		
						8.5	RED	MEDIUM SAND /	/		
						19.8		MEDIUM SAND /	GRAVEL	/ BOULDERS	
						23.2		GRAVEL /	/		

5701587		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1964-03-24	Elev	(masl)	Easting	607659	Northing	4912737	SWL	20.1	(mbgs)	(masl)
DD/MM/YYYY		/ Public		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			
		Water Found	89.6 (mbgs)	(masl)		FRESH					
Casing Diameter	6 inch	Casing Material:	STEEL		Depth (m)	Elev (masl)	Color	Soil Descriptions			
Top of Screen	89.6 (mbgs)	Bottom of Screen	91.4	(mbgs)	0.0						
Screen Interval	1.8 (m)	Contractor									
						0.3		TOPSOIL /	/		
						5.8	BROWN	CLAY /	/		
						13.7		MEDIUM SAND /	/		
						31.7	BROWN	CLAY /	MEDIUM SAND	/ GRAVEL	

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										89.3	BLUE	CLAY /	MEDIUM SAND	/ GRAVEL					
										91.4		COARSE SAND /	GRAVEL	/					
5701588										Lot 013 Conc 13 INNISFIL TOWNSHIP / SIMCOE					Flowing? N				
Date	1964-03-26	Elev	(masl)	Easting	608126	Northing	4912684				SWL	12.2	(mbgs)	(masl)					
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			Pumping WL	18.3	(mbgs)	(masl)					
		Water Found	21.3 (mbgs)	(masl)		FRESH					Pump Rate	54.6	(LPM)	1 / 0					
											Spec. Cap.	8.95	(LPM/m)	Hour / Minute					
		Casing Diameter	4 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)										
								0.0		Color				Soil Descriptions					
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)													
		Screen Interval	(m)	Contractor															
										1.8		CLAY /		/					
										20.1		MEDIUM SAND /	GRAVEL	/ BOULDERS					
										20.7		MEDIUM SAND /		/					
										21.3		GRAVEL /		/					
5701589										Lot 013 Conc 13 INNISFIL TOWNSHIP / SIMCOE					Flowing? N				
Date	1964-05-13	Elev	(masl)	Easting	607699	Northing	4912741				SWL	12.2	(mbgs)	(masl)					
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			Pumping WL	25.9	(mbgs)	(masl)					
		Water Found	28.7 (mbgs)	(masl)		FRESH					Pump Rate	68.2	(LPM)	3 / 0					
								Depth (m)	Elev (masl)		Spec. Cap.	4.97	(LPM/m)	Hour / Minute					
		Casing Diameter	inch	Casing Material:				0.0		Color				Soil Descriptions					
		Top of Screen	28.7 (mbgs)	Bottom of Screen	29.6	(mbgs)													
		Screen Interval	0.9 (m)	Contractor															
										14.6		PREVIOUSLY DUG /		/					
										28.7		MEDIUM SAND /	CLAY	/ BOULDERS					
										29.6		COARSE SAND /		/					
										29.9	BLUE	CLAY /	MEDIUM SAND	/					
5701590										Lot 013 Conc 13 INNISFIL TOWNSHIP / SIMCOE					Flowing? N				
Date	1964-05-19	Elev	(masl)	Easting	607709	Northing	4912773				SWL	12.2	(mbgs)	(masl)					
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			Pumping WL	21.3	(mbgs)	(masl)					
		Water Found	23.5 (mbgs)	(masl)		FRESH					Pump Rate	18.2	(LPM)	2 / 0					
								Depth (m)	Elev (masl)		Spec. Cap.	1.99	(LPM/m)	Hour / Minute					
		Casing Diameter	6 inch	Casing Material:	STEEL			0.0		Color				Soil Descriptions					
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)													
		Screen Interval	(m)	Contractor															
										22.9	BROWN	CLAY /	STONES	/					
										23.5		COARSE SAND /	GRAVEL	/					
5701591										Lot 013 Conc 13 INNISFIL TOWNSHIP / SIMCOE					Flowing? N				
Date	1964-07-31	Elev	(masl)	Easting	608123	Northing	4912714				SWL	12.8	(mbgs)	(masl)					
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m			Pumping WL	21.3	(mbgs)	(masl)					
		Water Found	28.7 (mbgs)	(masl)		FRESH					Pump Rate	90.9	(LPM)	3 / 30					
								Depth (m)	Elev (masl)		Spec. Cap.	10.65	(LPM/m)	Hour / Minute					
		Casing Diameter	6 inch	Casing Material:	STEEL			0.0		Color				Soil Descriptions					
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)													
		Screen Interval	(m)	Contractor															
										1.2		FILL /		/					
										4.6	BROWN	CLAY /		/					
										11.6	YELLOW	MEDIUM SAND /		/					
										28.3	BROWN	CLAY /	MEDIUM SAND	/ GRAVEL					
										28.7		GRAVEL /		/					

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5701593		Lot 013 Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1964-09-04	Elev	(masl)	Easting	607932	Northing	4912641	SWL	10.7	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	24.4	(mbgs)	(masl)
		Water Found	27.4 (mbgs)	(masl)		FRESH		Pump Rate	31.8	(LPM)	2 / 30
								Spec. Cap.	2.32	(LPM/m)	Hour / Minute
Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)				
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)			0.0		Color	Soil Descriptions		
Screen Interval	(m)	Contractor									
				4.6		BROWN	CLAY /		/		
				12.2			MEDIUM SAND /		STONES /		
				26.8		BROWN	CLAY /		GRAVEL /		
				27.4			GRAVEL /		/		

5701594		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1964-09-15	Elev	(masl)	Easting	607657	Northing	4912749	SWL	5.5	(mbgs)	(masl)	
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	12.2	(mbgs)	(masl)	
		Water Found	18.6 (mbgs)	(masl)		FRESH		Pump Rate	45.5	(LPM)	4 / 0	
								Spec. Cap.	6.78	(LPM/m)	Hour / Minute	
Casing Diameter		6 inch	Casing Material: STEEL		Depth (m)		Elev (masl)	Color	Soil Descriptions			
Top of Screen		(mbgs)	Bottom of Screen		(mbgs)		0.0					
Screen Interval		(m)	Contractor									
						0.3			TOPSOIL /	/		
						18.3		BROWN	CLAY /	GRAVEL	/ BOULDERS	
						18.6			GRAVEL /	/		

5701595		Lot 013		Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1964-09-29	Elev	(masl)	Easting	607472	Northing	4912682	SWL	6.1	(mbgs)	(masl)		
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL	17.4	(mbgs)	(masl)		
		Water Found	23.8 (mbgs)	(masl)		FRESH		Pump Rate	45.5	(LPM)		2 / 0	
								Spec. Cap.	4.03	(LPM/m)		Hour / Minute	
Casing Diameter		6	inch	Casing Material: STEEL		Depth (m)		Elev (masl)			Color	Soil Descriptions	
Top of Screen		(mbgs)		Bottom of Screen		(mbgs)		0.0					
Screen Interval		(m)		Contractor									
								6.7			PREVIOUSLY DUG /		/
								7.9			FINE SAND /		/
								22.9		BLUE	CLAY /	STONES	/
								23.8			COARSE SAND /	GRAVEL	/

5701597		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1964-12-02	Elev	(masl)	Easting	607672	Northing	4912752	SWL	11.3	(mbgs)	(masl)	
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	20.1	(mbgs)	(masl)	
		Water Found	22.6 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM)	1 / 0	
								Spec. Cap.	2.57	(LPM/m)	Hour / Minute	
Casing Diameter	4 inch	Casing Material:	STEEL	Depth (m)		Elev (masl)						
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions				
Screen Interval	(m)	Contractor										
				2.1				CLAY /		TOPSOIL /		
				17.1				GRAVEL /		MUCK / STONES		
				19.2				HARDPAN /		STONES /		
				21.6				MEDIUM SAND /		MUCK /		
				22.6				GRAVEL /		/		

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5701598		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1964-12-07	Elev	(masl)	Easting	607855	Northing	4912697	SWL	9.1	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	19.8	(mbgs) (masl)
		Water Found	19.8 (mbgs)	(masl)		FRESH		Pump Rate	18.2	(LPM) 3 / 0
		Casing Diameter	inch	Casing Material:		Depth (m)	Elev (masl)	Spec. Cap.	1.70	(LPM/m) Hour / Minute
		Top of Screen	(mbgs)	Bottom of Screen		0.0	Color	Soil Descriptions		
		Screen Interval	(m)	Contractor						
						8.8		PREVIOUSLY DUG /		/
						21.6		MEDIUM SAND /		GRAVEL / CLAY

5701599		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1964-12-31	Elev	(masl)	Easting	608089	Northing	4912643	SWL	10.7	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	24.4	(mbgs) (masl)
		Water Found	15.2 (mbgs)	(masl)		Not stated		Pump Rate	13.6	(LPM) 3 / 0
		Casing Diameter	6 inch	Casing Material: STEEL		Depth (m)	Elev (masl)	Spec. Cap.	0.99	(LPM/m) Hour / Minute
		Top of Screen	(mbgs)	Bottom of Screen		0.0	Color	Soil Descriptions		
		Screen Interval	(m)	Contractor						
						0.3		TOPSOIL /		/
						9.1	BROWN	CLAY /		GRAVEL / BOULDERS
						27.4	BLUE	CLAY /		GRAVEL / BOULDERS

5701601		Lot 013	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1965-02-23	Elev	(masl)	Easting	608075	Northing	4912504	SWL	7.6	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	9	Pumping WL	10.7	(mbgs) (masl)
		Water Found	9.1 (mbgs)	(masl)		FRESH		Pump Rate	36.4	(LPM) 2 / 0
		Casing Diameter	inch	Casing Material:		Depth (m)	Elev (masl)	Spec. Cap.	11.93	(LPM/m) Hour / Minute
		Top of Screen	(mbgs)	Bottom of Screen		0.0	Color	Soil Descriptions		
		Screen Interval	(m)	Contractor						
						9.1		PREVIOUSLY DUG /		/
						14.6		MEDIUM SAND /		GRAVEL /
						16.8		MEDIUM SAND /		GRAVEL / CLAY

5701602		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1965-03-06	Elev	(masl)	Easting	607732	Northing	4912741	SWL	14.9	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	21.3	(mbgs) (masl)
		Water Found	25.6 (mbgs)	(masl)		FRESH		Pump Rate	31.8	(LPM) 4 / 30
		Casing Diameter	4 inch	Casing Material: STEEL		Depth (m)	Elev (masl)	Spec. Cap.	4.97	(LPM/m) Hour / Minute
		Top of Screen	(mbgs)	Bottom of Screen		0.0	Color	Soil Descriptions		
		Screen Interval	(m)	Contractor						
						2.1		CLAY /		STONES /
						6.7		GRAVEL /		CLAY /
						24.4		MEDIUM SAND /		MUCK / CLAY
						25.3		MEDIUM SAND /		GRAVEL /
						25.6		GRAVEL /		/

5701603		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1965-03-21	Elev	(masl)	Easting	607631	Northing	4912755	SWL	10.4	(mbgs)	(masl)	
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	Pumping WL	26.2	(mbgs)	(masl)	
		Water Found	27.7 (mbgs)	(masl)	FRESH			Pump Rate	36.4	(LPM)	4 / 0	
								Spec. Cap.	2.29	(LPM/m)	Hour / Minute	
		Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)			
								0.0		Color	Soil Descriptions	
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor								
								0.3		TOPSOIL /	/	
								14.6		MEDIUM SAND /	CLAY /	
								27.4		CLAY /	MEDIUM SAND / BOULDERS	
								27.7		COARSE SAND /	GRAVEL /	
								28.0		GRAVEL /	/	

5701604		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1965-03-25	Elev	(masl)	Easting	608064	Northing	4912705	SWL	14.0	(mbgs)	(masl)	
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	Pumping WL	19.8	(mbgs)	(masl)	
		Water Found	27.7 (mbgs)	(masl)	FRESH			Pump Rate	31.8	(LPM)	2 / 0	
								Spec. Cap.	5.49	(LPM/m)	Hour / Minute	
		Casing Diameter	4 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)			
								0.0		Color	Soil Descriptions	
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor								
								2.1		CLAY /	STONES /	
								6.7		GRAVEL /	CLAY /	
								24.4		MEDIUM SAND /	MUCK / BOULDERS	
								27.1		MEDIUM SAND /	MUCK / GRAVEL	
								27.7		GRAVEL /	/	

5701605		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1965-03-26	Elev	(masl)	Easting	608115	Northing	4912705	SWL	11.6	(mbgs)	(masl)	
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	Pumping WL	24.7	(mbgs)	(masl)	
		Water Found	24.4 (mbgs)	(masl)	FRESH			Pump Rate	9.1	(LPM)	3 / 0	
								Spec. Cap.	0.69	(LPM/m)	Hour / Minute	
		Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)			
								0.0		Color	Soil Descriptions	
		Top of Screen	24.7 (mbgs)	Bottom of Screen	30.2 (mbgs)							
		Screen Interval	5.5 (m)	Contractor								
								0.3		TOPSOIL /	/	
								21.3	BROWN	CLAY /	MEDIUM SAND / BOULDERS	
								30.2	BLUE	CLAY /	MEDIUM SAND / GRAVEL	

5701606		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1965-08-05	Elev	(masl)	Easting	608045	Northing	4912681	SWL	12.8	(mbgs)	(masl)	
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	Pumping WL	15.8	(mbgs)	(masl)	
		Water Found	20.4 (mbgs)	(masl)	FRESH			Pump Rate	45.5	(LPM)	1 / 0	
								Spec. Cap.	14.91	(LPM/m)	Hour / Minute	
		Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)			
								0.0		Color	Soil Descriptions	
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor								
								0.9		FILL /	/	
								11.3		MEDIUM SAND /	STONES / CLAY	
								13.4		MEDIUM SAND /	CLAY /	
								20.4		STONES /	CLAY / GRAVEL	

	20.7	MEDIUM SAND /	/
	21.3	GRAVEL /	/

5701608		Lot 013 Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1965-10-12	Elev	(masl)	Easting	607693	Northing	4912748	SWL	11.9	(mbgs)	(masl)
	DD/MM/YYYY		/ Domestic	Water Supply		UTM RC	5	Pumping WL	18.0	(mbgs)	(masl)
		Water Found	21.9 (mbgs)	(masl)	FRESH			Pump Rate	36.4	(LPM)	3 / 0
								Spec. Cap.	5.97	(LPM/m)	Hour / Minute
		Casing Diameter	4 inch	Casing Material:	STEEL		Depth (m)	Elev (masl)			
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)		0.0	Color		Soil Descriptions	
		Screen Interval	(m)	Contractor							
							0.3		TOPSOIL /		/
							3.0	YELLOW	CLAY /		/
							4.9	YELLOW	CLAY /	MEDIUM SAND	/
							10.1	YELLOW	MEDIUM SAND /		/
							20.7	GREY	MEDIUM SAND /		/
							21.9		CLAY /	MEDIUM SAND	/ CLAY
							23.8		MEDIUM SAND /		/
							24.4		GRAVEL /		/
							24.7		CLAY /		/

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5701611		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1966-02-10	Elev	(masl)	Easting	607549	Northing	4912375	SWL	36.6	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	42.7	(mbgs)	(masl)
		Water Found	53.6 (mbgs)	(masl)		FRESH		Pump Rate	13.6	(LPM)	5 / 0
								Spec. Cap.	2.24	(LPM/m)	Hour / Minute
Casing Diameter	5 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)	Color		Soil Descriptions			
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0							
Screen Interval	(m)	Contractor									
				0.3				TOPSOIL	/	/	
				5.5		YELLOW		CLAY	/	/	
				10.1		BLUE		CLAY	/	/	
				10.4				MEDIUM SAND	/	/	
				19.8				MEDIUM SAND	/	GRAVEL	/ CLAY
				33.2				CLAY	/	STONES	/
				46.9				GRAVEL	/	/	
				53.6				SILT	/	CLAY	/ GRAVEL
				53.9				FINE SAND	/	/	
				54.6		BLUE		CLAY	/	/	

5701612		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1966-02-25	Elev	(masl)	Easting	607585	Northing	4912769	SWL	13.7	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	16.8	(mbgs)	(masl)
		Water Found	18.9 (mbgs)	(masl)		Not stated		Pump Rate	22.7	(LPM)	2 / 0
								Spec. Cap.	7.46	(LPM/m)	Hour / Minute
Casing Diameter	5 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)	Color		Soil Descriptions			
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0							
Screen Interval	(m)	Contractor									
				0.3				TOPSOIL	/	/	
				3.7				CLAY	/	MEDIUM SAND	/
				15.8				MEDIUM SAND	/	/	
				18.9				CLAY	/	STONES	/
				20.7				MEDIUM SAND	/	GRAVEL	/
				21.3				GRAVEL	/	/	
				21.6				STONES	/	/	

5701613		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1966-08-20	Elev	(masl)	Easting	607719	Northing	4912739	SWL	13.1	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	22.3	(mbgs)	(masl)
		Water Found	25.0 (mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM)	2 / 0
								Spec. Cap.	0.99	(LPM/m)	Hour / Minute
Casing Diameter	5 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)	Color		Soil Descriptions			
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0							
Screen Interval	(m)	Contractor									
				1.5				FILL	/	/	
				18.0		BROWN		MEDIUM SAND	/	/	
				21.0				MEDIUM SAND	/	STONES	/ CLAY
				25.0				MEDIUM SAND	/	CLAY	/
				25.6		GREY		MEDIUM SAND	/	/	
				25.9		GREY		MEDIUM SAND	/	CLAY	/

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5701614		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1967-03-10	Elev	(masl)	Easting	607768	Northing	4912638	SWL	13.7	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	21.3	(mbgs)	(masl)
		Water Found	21.9 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM)	3 / 0
				margin of error : 100 m - 300 m				Spec. Cap.	2.98	(LPM/m)	Hour / Minute
Casing Diameter	5 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)						
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions			
Screen Interval	(m)	Contractor									
				5.8		YELLOW		CLAY /		STONES	/
				17.1		YELLOW		MEDIUM SAND /			/
				18.0		GREY		MEDIUM SAND /		CLAY	/
				21.0		GREY		MEDIUM SAND /		STONES	/
				21.9				GRAVEL /		CLAY	/
				22.6				GRAVEL /			/
				23.5				CLAY /		GRAVEL	/

5701615		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1967-08-08	Elev	(masl)	Easting	607530	Northing	4912395	SWL	3.0	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL		(mbgs)	(masl)
		Water Found	7.6 (mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM)	/
				margin of error : 100 m - 300 m				Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter	30 inch	Casing Material:	CONCRETE	Depth (m)	Elev (masl)						
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions			
Screen Interval	(m)	Contractor									
				3.7		BROWN		CLAY /		STONES	/
				7.6		GREY		CLAY /		STONES	/

5701616		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1967-09-16	Elev	(masl)	Easting	607754	Northing	4912648	SWL	7.9	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	21.0	(mbgs)	(masl)
		Water Found	25.0 (mbgs)	(masl)		FRESH		Pump Rate	13.6	(LPM)	2 / 0
				margin of error : 100 m - 300 m				Spec. Cap.	1.04	(LPM/m)	Hour / Minute
Casing Diameter	4 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)						
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions			
Screen Interval	(m)	Contractor									
				25.0				CLAY /		MEDIUM SAND	/
				26.5				CLAY /		MEDIUM SAND	/ GRAVEL

5701617		Lot 014	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1967-12-07	Elev	(masl)	Easting	608240	Northing	4912634	SWL	18.3	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	28.0	(mbgs)	(masl)
		Water Found	32.0 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM)	3 / 0
				margin of error : 100 m - 300 m				Spec. Cap.	2.33	(LPM/m)	Hour / Minute
Casing Diameter	5 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)						
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions			
Screen Interval	(m)	Contractor									
				0.6		YELLOW		CLAY /			/
				5.5		YELLOW		CLAY /		STONES	/
				14.0		GREY		CLAY /		MEDIUM SAND	/
				16.5				MEDIUM SAND /		CLAY	/
				18.0				CLAY /		MEDIUM SAND	/
				32.0				CLAY /		STONES	/

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										32.6	GRAVEL /		/
										32.9	CLAY /		/
										Flowing? N			
										SWL	12.2	(mbgs)	(masl)
										Pumping WL	15.2	(mbgs)	(masl)
										Pump Rate	22.7	(LPM)	2 / 0
										Spec. Cap.	7.46	(LPM/m)	Hour / Minute
										Depth (m)	Elev (masl)		
										0.0			
												Soil Descriptions	
										0.3		TOPSOIL /	/
										5.5	YELLOW	CLAY /	/
										18.9	GREY	CLAY /	MEDIUM SAND /
										20.1	GREY	MEDIUM SAND /	/
										24.4	GREY	CLAY /	STONES /

5701619		Lot 014 Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1959-01-15	Elev	(masl)	Easting	608277	Northing	4912642	SWL	7.3	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL	13.1	(mbgs)	(masl)
		Water Found	17.7 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM)	3 / 0
								Spec. Cap.	3.92	(LPM/m)	Hour / Minute
		Casing Diameter	6 inch	Casing Material: STEEL		Depth (m)		Elev (masl)			
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)		0.0		Color	Soil Descriptions
		Screen Interval	(m)	Contractor							
						8.5		PREVIOUSLY DUG /		/	
						10.4		BROWN	CLAY /	/	
						14.6		BLUE	CLAY /	/	
						17.7		MEDIUM SAND /		GRAVEL	/

5705576		Lot 013		Conc 12		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1968-11-12	Elev	(masl)	Easting	608074	Northing	4912333	SWL	0.9	(mbgs)	(masl)		
	DD/MM/YYYY		/ Domestic	Water Supply		UTM RC	4	Pumping WL	9.1	(mbgs)	(masl)		
		Water Found	11.6 (mbgs)	(masl)	FRESH			Pump Rate	31.8	(LPM)		2 / 0	
								Spec. Cap.	3.87	(LPM/m)		Hour / Minute	
		Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)		Elev (masl)			
								0.0					
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)			Color				Soil Descriptions	
		Screen Interval	(m)	Contractor									

5705586		Lot 013 Conc 12		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1968-11-20	Elev	(masl)	Easting	608064	Northing	4912403	SWL	7.9	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	4	Pumping WL	16.8	(mbgs)	(masl)
		Water Found	52.4 (mbgs)	(masl)		FRESH		Pump Rate	31.8	(LPM)	6 / 0
								Spec. Cap.	3.60	(LPM/m)	Hour / Minute
		Casing Diameter	4 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	52.4 (mbgs)	Bottom of Screen	53.3 (mbgs)						
		Screen Interval	0.9 (m)	Contractor							
						13.7		PREVIOUSLY DUG	/	/	
						52.4		CLAY	/	MEDIUM SAND	/ GRAVEL
						53.3		FINE SAND	/	/	

Well Record

5705614		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1968-02-19	Elev	(masl)	Easting	607514	Northing	4912773	SWL	9.1	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	4	Pumping WL	14.6	(mbgs)	(masl)
		Water Found	18.9 (mbgs)	(masl)	FRESH			Pump Rate	18.2	(LPM)	2 / 0
								Spec. Cap.	3.31	(LPM/m)	Hour / Minute
Casing Diameter	5	inch		Casing Material:	STEEL	Depth (m)	Elev (masl)				
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions	
Screen Interval		(m)		Contractor							
						0.6			FILL /		/
						4.9		BROWN	CLAY /	MEDIUM SAND	/
						11.0		BROWN	MEDIUM SAND /		/
						18.9		GREY	CLAY /	MEDIUM SAND	/
						19.5			MEDIUM SAND /	GRAVEL	/
						21.3		GREY	CLAY /		/

5705813		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1968-09-17	Elev	(masl)	Easting	607914	Northing	4912523	SWL	4.6	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	4	Pumping WL		(mbgs)	(masl)
		Water Found	4.6 (mbgs)	(masl)	FRESH			Pump Rate		(LPM)	/
								Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter	30	inch		Casing Material:	CONCRETE	Depth (m)	Elev (masl)				
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions	
Screen Interval		(m)		Contractor							
						7.6		GREY	CLAY /	STONES	/
						9.1		GREY	CLAY /		/

5705825		Lot 012	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1968-09-20	Elev	(masl)	Easting	607634	Northing	4912373	SWL	4.6	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	4	Pumping WL		(mbgs)	(masl)
		Water Found	4.6 (mbgs)	(masl)	FRESH			Pump Rate		(LPM)	/
								Spec. Cap.		(LPM/m)	Hour / Minute
Casing Diameter	30	inch		Casing Material:	CONCRETE	Depth (m)	Elev (masl)				
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions	
Screen Interval		(m)		Contractor							
						4.6		BROWN	CLAY /	STONES	/
						9.1		GREY	CLAY /	STONES	/

5705893		Lot 014	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1968-07-09	Elev	(masl)	Easting	608134	Northing	4912773	SWL	10.7	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	4	Pumping WL	13.7	(mbgs)	(masl)
		Water Found	16.8 (mbgs)	(masl)	FRESH			Pump Rate	22.7	(LPM)	2 / 0
								Spec. Cap.	7.46	(LPM/m)	Hour / Minute
Casing Diameter	5	inch		Casing Material:	STEEL	Depth (m)	Elev (masl)				
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions	
Screen Interval		(m)		Contractor							
						1.2			FILL /	MEDIUM SAND	/
						4.0			CLAY /	MEDIUM SAND	/
						11.0			MEDIUM SAND /		/
						16.8			CLAY /	MEDIUM SAND	/
						18.3			MEDIUM SAND /	GRAVEL	/

Well Record

5705896		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1968-06-25	Elev	(masl)	Easting	608034	Northing	4912703	SWL	11.3	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	Pumping WL	12.8	(mbgs) (masl)
		Water Found	18.6 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM) 2 / 0
								Spec. Cap.	14.91	(LPM/m) Hour / Minute
Casing Diameter	5	inch		Casing Material:	STEEL	Depth (m)	Elev (masl)			
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0		Color	Soil Descriptions	
Screen Interval		(m)		Contractor						
						0.3		TOPSOIL	/	/
						4.9		CLAY	/	MEDIUM SAND /
						11.9		MEDIUM SAND	/	/
						18.3		MEDIUM SAND	/	CLAY /
						18.6		MEDIUM SAND	/	/
						18.9		GRAVEL	/	/

5705963		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1968-06-21	Elev	(masl)	Easting	607514	Northing	4912773	SWL	9.1	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	Pumping WL	21.3	(mbgs) (masl)
		Water Found	30.2 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM) 2 / 0
								Spec. Cap.	1.86	(LPM/m) Hour / Minute
Casing Diameter	5	inch		Casing Material:	STEEL	Depth (m)	Elev (masl)			
Top of Screen	30.8	(mbgs)		Bottom of Screen	31.7 (mbgs)	0.0		Color	Soil Descriptions	
Screen Interval	0.9	(m)		Contractor						
						19.2		PREV. DRILLED	/	/
						29.6		SILT	/	CLAY / GRAVEL
						31.7		MEDIUM SAND	/	/

5706172		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1969-01-03	Elev	(masl)	Easting	608164	Northing	4912573	SWL	6.1	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	Pumping WL	7.3	(mbgs) (masl)
		Water Found	11.3 (mbgs)	(masl)		FRESH		Pump Rate	9.1	(LPM) 1 / 0
								Spec. Cap.	7.46	(LPM/m) Hour / Minute
Casing Diameter	5	inch		Casing Material:	STEEL	Depth (m)	Elev (masl)			
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0		Color	Soil Descriptions	
Screen Interval		(m)		Contractor						
						0.6		FILL	/	/
						5.5		CLAY	/	STONES /
						7.3		MEDIUM SAND	/	/
						11.3		CLAY	/	MEDIUM SAND / STONES
						11.6		GRAVEL	/	STONES /

5706362		Lot 012	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1969-06-10	Elev	(masl)	Easting	607464	Northing	4912363	SWL	6.4	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	Pumping WL	9.1	(mbgs) (masl)
		Water Found	9.8 (mbgs)	(masl)		FRESH		Pump Rate	18.2	(LPM) 1 / 0
								Spec. Cap.	6.63	(LPM/m) Hour / Minute
Casing Diameter	30	inch		Casing Material:	CONCRETE	Depth (m)	Elev (masl)			
Top of Screen		(mbgs)		Bottom of Screen	(mbgs)	0.0		Color	Soil Descriptions	
Screen Interval		(m)		Contractor						
						0.3		BLACK	TOPSOIL	/
						4.6		BROWN	CLAY	/ STONES /
						10.1		GREY	CLAY	/

Well Record

5706394		Lot 013 Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1969-05-29	Elev	(masl)	Easting	607934	Northing	4912683	SWL	14.3	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	Pumping WL	19.2	(mbgs)	(masl)
		Water Found	23.2 (mbgs)	(masl)		FRESH		Pump Rate	18.2	(LPM)	2 / 0
				(masl)		FRESH		Spec. Cap.	3.73	(LPM/m)	Hour / Minute
Casing Diameter	5 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)	Color	Soil Descriptions		
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)			0.0					
Screen Interval	(m)	Contractor									
						0.6					
						7.0					
						17.7		YELLOW	CLAY /	/	
						23.2			CLAY /	MEDIUM SAND	/ STONES
						23.5			MEDIUM SAND /	CLAY	/ STONES
									CLAY /	STONES	/
									GRAVEL /		/
5707703		Lot 013 Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1970-09-28	Elev	(masl)	Easting	607504	Northing	4912623	SWL	5.5	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	Pumping WL	21.0	(mbgs)	(masl)
		Water Found	25.0 (mbgs)	(masl)		FRESH		Pump Rate	31.8	(LPM)	1 / 0
				(masl)		FRESH		Spec. Cap.	2.05	(LPM/m)	Hour / Minute
Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)	Color	Soil Descriptions		
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)			0.0					
Screen Interval	(m)	Contractor									
						2.4					
						7.3					
						14.3	BROWN	CLAY /	/		
						25.0	GREY	CLAY /	MEDIUM SAND	/ GRAVEL	
						25.3	BLUE	CLAY /	GRAVEL	/ BOULDERS	
							GREY	CLAY /	MEDIUM SAND	/ GRAVEL	
								GRAVEL /		/	
5707704		Lot 013 Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1970-11-06	Elev	(masl)	Easting	607504	Northing	4912663	SWL	3.7	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	Pumping WL	21.9	(mbgs)	(masl)
		Water Found	26.2 (mbgs)	(masl)		FRESH		Pump Rate	36.4	(LPM)	2 / 30
				(masl)		FRESH		Spec. Cap.	1.99	(LPM/m)	Hour / Minute
Casing Diameter	6 inch	Casing Material:	STEEL			Depth (m)	Elev (masl)	Color	Soil Descriptions		
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)			0.0					
Screen Interval	(m)	Contractor									
						0.6					
						4.0					
						8.8	BROWN	TOPSOIL /	/		
						18.0	GREY	CLAY /	BOULDERS	/	
						26.2	GREY	CLAY /	MEDIUM SAND	/ BOULDERS	
						26.5	GREY	CLAY /	MEDIUM SAND	/ GRAVEL	
								GRAVEL /	GRAVEL	/ BOULDERS	
									SILT	/	
5708045		Lot 013 Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N			
Date	1971-06-24	Elev	(masl)	Easting	607864	Northing	4912713	SWL	3.0	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	Pumping WL	9.4	(mbgs)	(masl)
		Water Found	9.1 (mbgs)	(masl)		FRESH		Pump Rate	22.7	(LPM)	1 / 0
				(masl)		FRESH		Spec. Cap.	3.55	(LPM/m)	Hour / Minute
Casing Diameter	30 inch	Casing Material:	CONCRETE			Depth (m)	Elev (masl)	Color	Soil Descriptions		
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)			0.0					
Screen Interval	(m)	Contractor									
						4.6					
							GREY	CLAY /	/		

Well Record

		10.7		BROWN		CLAY /		/	
5708985		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N	
Date	1972-07-18	Elev	(masl)	Easting	608064	Northing	4912613	SWL	6.1 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 4		Pumping WL	13.1 (mbgs) (masl)
		Water Found	16.2 (mbgs)	(masl)		FRESH		Pump Rate	81.8 (LPM) 6 / 0
								Spec. Cap.	11.67 (LPM/m) Hour / Minute
		Casing Diameter	5 inch	Casing Material: STEEL		Depth (m)		Elev (masl)	Color
		Top of Screen	14.0 (mbgs)	Bottom of Screen 14.9 (mbgs)		0.0		Soil Descriptions	
		Screen Interval	0.9 (m)	Contractor					
						2.4			CLAY /
						4.3		CLAY /	SAND /
						12.2		CLAY /	SAND / STONES
						15.5		HARDPAN /	/
						16.2		SAND /	GRAVEL /

5709538		Lot 012	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N	
Date	1972-07-14	Elev	(masl)	Easting	607384	Northing	4912563	SWL	6.1 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 4		Pumping WL	39.6 (mbgs) (masl)
		Water Found		(masl)		FRESH		Pump Rate	22.7 (LPM) 2 / 0
								Spec. Cap.	0.68 (LPM/m) Hour / Minute
Casing Diameter	5 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)	Color		Soil Descriptions	
Top of Screen	48.2 (mbgs)	Bottom of Screen	49.1 (mbgs)	0.0					
Screen Interval	0.9 (m)	Contractor							
				0.6		BLACK	TOPSOIL /	/	
				3.0		BROWN	SAND /	CLAY	/ STONES
				13.7		BROWN	SAND /	CLAY	/ BOULDERS
				48.2		GREY	SAND /	CLAY	/ GRAVEL
				49.1		GREY	SAND /	/	

5710463		Lot 012	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N	
Date	1973-07-27	Elev	(masl)	Easting	607394	Northing	4912673	SWL	3.0 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 4		Pumping WL	3.7 (mbgs) (masl)
		Water Found		(masl)		FRESH		Pump Rate	18.2 (LPM) 0 / 30
								Spec. Cap.	29.83 (LPM/m) Hour / Minute
Casing Diameter	30 inch	Casing Material:	CONCRETE	Depth (m)	Elev (masl)	Color		Soil Descriptions	
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0					
Screen Interval	(m)	Contractor							
				1.5				TOPSOIL /	SAND /
				7.0		GREY	CLAY /	/	

5710471		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N	
Date	1973-11-04	Elev	(masl)	Easting	608014	Northing	4912523	SWL	6.1 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL	(mbgs) (masl)
		Water Found		(masl)		FRESH		Pump Rate	13.6 (LPM) 0 / 30
								Spec. Cap.	(LPM/m) Hour / Minute
Casing Diameter	30 inch	Casing Material:	CONCRETE	Depth (m)	Elev (masl)	Color		Soil Descriptions	
Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0					
Screen Interval	(m)	Contractor							
				3.7		BROWN	CLAY /	/	
				10.7		GREY	CLAY /	/	

Well Record

5710484		Lot 014 Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1973-09-26	Elev	(masl)	Easting	608164	Northing	4912583	SWL	3.0 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m	
		Water Found	3.0 (mbgs)	(masl)		FRESH		Pumping WL	(mbgs) (masl)
								Pump Rate	13.6 (LPM) 0 / 30
								Spec. Cap.	(LPM/m) Hour / Minute
		Casing Diameter	30 inch	Casing Material: CONCRETE		Depth (m)	Elev (masl)		
						0.0		Color	Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen (mbgs)					
		Screen Interval	(m)	Contractor					
						6.1		SAND /	/

5710493		Lot 014 Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1973-08-26	Elev	(masl)	Easting	608224	Northing	4912283	SWL	3.7 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	margin of error : 30 m - 100 m	
		Water Found	4.6 (mbgs)	(masl)		FRESH		Pumping WL	(mbgs) (masl)
								Pump Rate	13.6 (LPM) 0 / 30
								Spec. Cap.	(LPM/m) Hour / Minute
		Casing Diameter	30 inch	Casing Material: CONCRETE		Depth (m)	Elev (masl)		
						0.0		Color	Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen (mbgs)					
		Screen Interval	(m)	Contractor					
						8.2		BROWN	CLAY / STONES /

5710504		Lot 014 Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1973-09-05	Elev	(masl)	Easting	608254	Northing	4912383	SWL	1.5 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	4	margin of error : 30 m - 100 m	
		Water Found	4.9 (mbgs)	(masl)		FRESH		Pumping WL	(mbgs) (masl)
								Pump Rate	22.7 (LPM) 1 / 0
								Spec. Cap.	(LPM/m) Hour / Minute
		Casing Diameter	30 inch	Casing Material: CONCRETE		Depth (m)	Elev (masl)		
						0.0		Color	Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen (mbgs)					
		Screen Interval	(m)	Contractor					
						7.0		GREY	SAND / /

5711191		Lot 013 Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1974-02-21	Elev	(masl)	Easting	607614	Northing	4912773	SWL	10.7 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m	
		Water Found	32.9 (mbgs)	(masl)		FRESH		Pumping WL	(mbgs) (masl)
								Pump Rate	22.7 (LPM) 22 / 30
								Spec. Cap.	(LPM/m) Hour / Minute
		Casing Diameter	5 inch	Casing Material: STEEL		Depth (m)	Elev (masl)		
						0.0		Color	Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen (mbgs)					
		Screen Interval	(m)	Contractor					
						1.2		BROWN	FILL / /
						3.0		BROWN	CLAY / SAND / STONES
						32.9		GREY	CLAY / GRAVEL /
						33.8		GREY	GRAVEL / /

5711401		Lot 014 Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1974-08-24	Elev	(masl)	Easting	608264	Northing	4912373	SWL	3.0 (mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	margin of error : 100 m - 300 m	
		Water Found	6.1 (mbgs)	(masl)		FRESH		Pumping WL	(mbgs) (masl)
								Pump Rate	(LPM) /
								Spec. Cap.	(LPM/m) Hour / Minute
		Casing Diameter	30 inch	Casing Material: CONCRETE		Depth (m)	Elev (masl)		
						0.0		Color	Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen (mbgs)					
		Screen Interval	(m)	Contractor		2024257 Ontario Ltd.			

	0.6		TOPSOIL /	/
	3.7	BROWN	CLAY /	POROUS /
	4.6	BLUE	CLAY /	BOULDERS /
	9.8	BLUE	CLAY /	STONES / LAYERED

5717013		Lot 014 Conc 12		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1980-10-10	Elev	(masl)	Easting	608264	Northing	4912273	SWL	0.6	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	5	Pumping WL	17.1	(mbgs)	(masl)
		Water Found	19.8 (mbgs)	(masl)	FRESH			Pump Rate	18.2	(LPM)	1 / 0
								Spec. Cap.	1.10	(LPM/m)	Hour / Minute
		Casing Diameter	5 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)	Color		Soil Descriptions	
		Top of Screen	19.8 (mbgs)	Bottom of Screen	20.7 (mbgs)	0.0					
		Screen Interval	0.9 (m)	Contractor							
						13.7		GREY	CLAY /		/
						19.2		GREY	CLAY /	GRAVEL	/
						19.8		GREY	SAND /	CEMENTED	/
						20.7		BROWN	COARSE SAND /		/
								GREY	CLAY /		/

5717741		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE					Flowing? N		
Date	1981-11-02	Elev	(masl)	Easting	607614	Northing	4912573	SWL	17.4	(mbgs)	(masl)
	DD/MM/YYYY		/ Industrial	Water Supply		UTM RC	5	Pumping WL	51.8	(mbgs)	(masl)
		Water Found	78.0 (mbgs)	(masl)		FRESH		Pump Rate	31.8	(LPM)	1 / 0
								Spec. Cap.	0.92	(LPM/m)	Hour / Minute
		Casing Diameter	5 inch	Casing Material:	STEEL		Depth (m)	Elev (masl)			
							0.0		Color		Soil Descriptions
		Top of Screen	78.0 (mbgs)	Bottom of Screen	78.9 (mbgs)						
		Screen Interval	0.9 (m)	Contractor							

0.9	BROWN	FILL /	/
10.4	BROWN	SAND /	CLAY / STONES
38.4	GREY	SAND /	CLAY / STONES
39.9	BROWN	COARSE SAND /	/
71.6	GREY	CLAY /	GRAVEL /
78.0	GREY	SAND /	CEMENTED /
78.9	GREY	FINE SAND /	/
	GREY	CLAY /	GRAVEL /

5719010		Lot 013 Conc 13		INNISFIL TOWNSHIP / SIMCOE				Flowing? N			
Date	1983-01-07	Elev	(masl)	Easting	608064	Northing	4912623	SWL	6.7	(mbgs)	(masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC 5		Pumping WL	12.2	(mbgs)	(masl)
		Water Found	21.3 (mbgs)	(masl)		FRESH		Pump Rate	27.3	(LPM)	1 / 30
								Spec. Cap.	4.97	(LPM/m)	Hour / Minute
		Casing Diameter	5 inch	Casing Material: STEEL		Depth (m)		Elev (masl)	Color		
						0.0		Soil Descriptions			
		Top of Screen	(mbgs)	Bottom of Screen		(mbgs)					
		Screen Interval	(m)	Contractor							
						1.5		PREVIOUSLY DUG /			
						20.4		CLAY / SAND / GRAVEL			
						21.3		SAND / GRAVEL /			
								GRAVEL /			

Record Count 110

Well Record

5724695		Lot 012	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	1989-03-14	Elev	(masl)	Easting	607494	Northing	4912370	SWL	6.7	(mbgs) (masl)
DD/MM/YYYY		/ Domestic		Water Supply		UTM RC	5	Pumping WL	39.6	(mbgs) (masl)
		Water Found	53.6 (mbgs)	(masl)		FRESH		Pump Rate	68.2	(LPM) 1 / 0
		Casing Diameter	6 inch	Casing Material: STEEL		Depth (m)	Elev (masl)	Spec. Cap.	2.07	(LPM/m) Hour / Minute
		Top of Screen	53.6 (mbgs)	Bottom of Screen 54.9 (mbgs)		0.0		Color		
		Screen Interval	1.2 (m)	Contractor				Soil Descriptions		
						53.6		GREY	SILT /	CLAY / SAND
						54.9		GREY	MEDIUM SAND /	COARSE SAND / SILT

5736378		Lot 012	Conc 13	ESSA TOWNSHIP / SIMCOE				Flowing?		
Date	2001-10-19	Elev	(masl)	Easting	607535	Northing	4912515	SWL		(mbgs) (masl)
DD/MM/YYYY		/		Abandoned-Other		UTM RC	3	Pumping WL		(mbgs) (masl)
		Water Found	(mbgs)	(masl)		margin of error : 10 - 30 m		Pump Rate		(LPM) /
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)	Spec. Cap.		(LPM/m) Hour / Minute
		Top of Screen	(mbgs)	Bottom of Screen (mbgs)		0.0		Color		
		Screen Interval	(m)	Contractor				Soil Descriptions		

5737208		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2002-07-18	Elev	(masl)	Easting	608100	Northing	4912328	SWL		(mbgs) (masl)
DD/MM/YYYY		/ Not Used		Abandoned-Other		UTM RC	5	Pumping WL		(mbgs) (masl)
		Water Found	(mbgs)	(masl)		margin of error : 100 m - 300 m		Pump Rate		(LPM) /
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)	Spec. Cap.		(LPM/m) Hour / Minute
		Top of Screen	(mbgs)	Bottom of Screen (mbgs)		0.0		Color		
		Screen Interval	(m)	Contractor				Soil Descriptions		

5739673		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2005-04-18	Elev	(masl)	Easting	607965	Northing	4912333	SWL		(mbgs) (masl)
DD/MM/YYYY		/		Observation Wells		UTM RC	4	Pumping WL		(mbgs) (masl)
		Water Found	(mbgs)	(masl)		margin of error : 30 m - 100 m		Pump Rate		(LPM) /
		Casing Diameter	2 cm	Casing Material: PLASTIC		Depth (m)	Elev (masl)	Spec. Cap.		(LPM/m) Hour / Minute
		Top of Screen	3.0 (mbgs)	Bottom of Screen 6.0 (mbgs)		0.0		Color		
		Screen Interval	3.0 (m)	Contractor Canadian Soil Drilling				Soil Descriptions		
						0.3		BROWN	TOPSOIL /	/
						0.5		BROWN	FILL /	/
						3.0		BROWN	SILT /	SAND /
						6.0		GREY	SILT /	SAND /

Well Record

5739886		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?				
Date	2005-03-07	Elev	(masl)	Easting	607970	Northing	4912345	SWL	(mbgs)	(masl)		
	DD/MM/YYYY	/ Not Used		Observation Wells		UTM RC	4	Pumping WL	(mbgs)	(masl)		
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter	0.5 cm	Casing Material:	PLASTIC			Depth (m)	Elev (masl)			
								0.0		Color		Soil Descriptions
		Top of Screen	3.0 (mbgs)	Bottom of Screen	7.6 (mbgs)							
		Screen Interval	4.6 (m)	Contractor	Atcost Soil Drilling inc.							
								8.2		BROWN	SILT /	SAND /
5740616		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?				
Date	2006-02-22	Elev	(masl)	Easting	607618	Northing	4912467	SWL	(mbgs)	(masl)		
	DD/MM/YYYY	/ Not Used		Observation Wells		UTM RC	3	Pumping WL	(mbgs)	(masl)		
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter	0.5 cm	Casing Material:				Depth (m)	Elev (masl)			
								0.0		Color		Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor	Atcost Soil Drilling inc.							
								6.1		BROWN	SILT /	SAND /
5741104		Lot 004	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?				
Date	2006-09-05	Elev	(masl)	Easting	607523	Northing	4912370	SWL	(mbgs)	(masl)		
	DD/MM/YYYY	/ Not Used		Observation Wells		UTM RC	3	Pumping WL	(mbgs)	(masl)		
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter		Casing Material:				Depth (m)	Elev (masl)			
								0.0		Color		Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor								
											/	/
5741284		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?				
Date	2006-05-01	Elev	(masl)	Easting	607618	Northing	4912467	SWL	(mbgs)	(masl)		
	DD/MM/YYYY	/		Abandoned-Other		UTM RC	3	Pumping WL	(mbgs)	(masl)		
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter		Casing Material:				Depth (m)	Elev (masl)			
								0.0		Color		Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor	Atcost Soil Drilling inc.							
											/	/
5741371		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?				
Date	2006-11-21	Elev	(masl)	Easting	608214	Northing	4912382	SWL	(mbgs)	(masl)		
	DD/MM/YYYY	/ Not Used		Abandoned-Other		UTM RC	3	Pumping WL	(mbgs)	(masl)		
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter	0.8 cm	Casing Material:	CONCRETE			Depth (m)	Elev (masl)			
								0.0		Color		Soil Descriptions
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor	Fred Constable & Son Ltd.							
											/	/

Well Record

7039252									
Date	2006-09-28	Elev	(masl)	Easting	607512	Northing	4912287	Flowing?	
	DD/MM/YYYY		/ Not Used	Abandoned-Other		UTM RC	3	margin of error : 10 - 30 m	SWL (mbgs) (masl)
		Water Found	(mbgs)	(masl)					Pumping WL (mbgs) (masl)
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)		Pump Rate (LPM) /
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color	Spec. Cap. (LPM/m) Hour / Minute
		Screen Interval	(m)	Contractor					Soil Descriptions
7113591									
Date	2008-01-15	Elev	(masl)	Easting	608142	Northing	4912498	Flowing?	
	DD/MM/YYYY		/			UTM RC	3	margin of error : 10 - 30 m	SWL (mbgs) (masl)
		Water Found	(mbgs)	(masl)					Pumping WL (mbgs) (masl)
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)		Pump Rate (LPM) /
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color	Spec. Cap. (LPM/m) Hour / Minute
		Screen Interval	(m)	Contractor					Soil Descriptions
7113595									
Date	2008-07-22	Elev	(masl)	Easting	608143	Northing	4912528	Flowing?	
	DD/MM/YYYY		/			UTM RC	3	margin of error : 10 - 30 m	SWL (mbgs) (masl)
		Water Found	(mbgs)	(masl)					Pumping WL (mbgs) (masl)
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)		Pump Rate (LPM) /
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color	Spec. Cap. (LPM/m) Hour / Minute
		Screen Interval	(m)	Contractor					Soil Descriptions
7114458									
Date		Elev	(masl)	Easting	607991	Northing	4912466	Flowing?	
	DD/MM/YYYY		/	Abandoned-Other		UTM RC	3	margin of error : 10 - 30 m	SWL (mbgs) (masl)
		Water Found	(mbgs)	(masl)					Pumping WL (mbgs) (masl)
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)		Pump Rate (LPM) /
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color	Spec. Cap. (LPM/m) Hour / Minute
		Screen Interval	(m)	Contractor					Soil Descriptions
7114476									
Date		Elev	(masl)	Easting	608062	Northing	4912482	Flowing?	
	DD/MM/YYYY		/	Abandoned-Other		UTM RC	3	margin of error : 10 - 30 m	SWL (mbgs) (masl)
		Water Found	(mbgs)	(masl)					Pumping WL (mbgs) (masl)
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)		Pump Rate (LPM) /
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Color	Spec. Cap. (LPM/m) Hour / Minute
		Screen Interval	(m)	Contractor					Soil Descriptions

Well Record

7114900		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?				
Date	2007-10-01	Elev	(masl)	Easting	607638	Northing	4912411	SWL	(mbgs)	(masl)		
	DD/MM/YYYY	/		Abandoned-Other		UTM RC	3	Pumping WL	(mbgs)	(masl)		
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter	36 cm	Casing Material:	CONCRETE	Depth (m)	Elev (masl)					
						0.0		Color		Soil Descriptions		
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor								
						15.0			/	/		
7125113		Lot	Conc	BARRIE CITY / SIMCOE				Flowing?				
Date	2008-12-05	Elev	(masl)	Easting	608140	Northing	4912469	SWL	(mbgs)	(masl)		
	DD/MM/YYYY	/ Domestic		Alteration		UTM RC	5	Pumping WL	(mbgs)	(masl)		
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter	6 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)					
						0.0		Color		Soil Descriptions		
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)							
		Screen Interval	(m)	Contractor								
									/	/		
7132874		Lot	012	Conc	13	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2009-09-10	Elev	(masl)	Easting	607470	Northing	4912470	SWL	(mbgs)	(masl)		
	DD/MM/YYYY	/ Monitoring		Observation Wells		UTM RC	3	Pumping WL	(mbgs)	(masl)		
		Water Found	2.7 (mbgs)	(masl)		Untested		Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter	2 inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)					
						0.0		Color		Soil Descriptions		
		Top of Screen	3.0 (mbgs)	Bottom of Screen	6.1 (mbgs)							
		Screen Interval	3.0 (m)	Contractor	London Soil Test Ltd.							
						0.9		BROWN	TOPSOIL /	/		
						1.2		BROWN	SAND /	CLAY	/ PACKED	
						2.3		BROWN	SAND /	CLAY	/ GRAVEL	
						3.0		GREY	SILT /	SAND	/ WATER-BEARING	
						3.5		BROWN	SILT /	GRAVEL	/ DENSE	
						6.1		GREY	SAND /	SILT	/ GRAVEL	
7143472		Lot	Conc	BARRIE CITY / SIMCOE				Flowing?				
Date	2009-11-10	Elev	(masl)	Easting	607965	Northing	4912348	SWL	3.5 (mbgs)	(masl)		
	DD/MM/YYYY	/ Monitoring				UTM RC	4	Pumping WL	(mbgs)	(masl)		
		Water Found	3.5 (mbgs)	(masl)		Untested		Pump Rate	(LPM)	/		
								Spec. Cap.	(LPM/m)	Hour / Minute		
		Casing Diameter	2 inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)					
						0.0		Color		Soil Descriptions		
		Top of Screen	3.0 (mbgs)	Bottom of Screen	6.1 (mbgs)							
		Screen Interval	3.0 (m)	Contractor								
						1.5		BLUE	SILT /	SAND	/	
						2.1			/		/	
						4.9			/		/	
						6.1			/		/	

Well Record

7145591		Lot	Conc	BARRIE CITY / SIMCOE				Flowing?			
Date	2010-02-11	Elev	(masl)	Easting	607412	Northing	4912588	SWL	(mbgs)	(masl)	
	DD/MM/YYYY	/ Monitoring		Observation Wells		UTM RC	4	Pumping WL	(mbgs)	(masl)	
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/	
								Spec. Cap.	(LPM/m)	Hour / Minute	
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)						
		Screen Interval	(m)	Contractor	Canadian Soil Drilling						
						1.0		BROWN	SAND /	GRAVEL	/ PACKED
						3.0		BROWN	SAND /	GRAVEL	/ PACKED
						5.0		GREY	SAND /	GRAVEL	/ PACKED

7168491		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?			
Date	2011-08-29	Elev	(masl)	Easting	607431	Northing	4912558	SWL	(mbgs)	(masl)	
	DD/MM/YYYY	/ Test Hole		Test Hole		UTM RC	3	Pumping WL	(mbgs)	(masl)	
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/	
								Spec. Cap.	(LPM/m)	Hour / Minute	
		Casing Diameter	2 inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	1.5 (mbgs)	Bottom of Screen	4.6 (mbgs)						
		Screen Interval	3.0 (m)	Contractor	Profile Drilling inc.						
						0.6		BROWN	FILL /		/ LOOSE
						2.1		BROWN	CLAY /		/ SOFT
						4.6		GREY	CLAY /	SAND	/ HARD

7187847		Lot 013	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing?			
Date	2012-08-29	Elev	(masl)	Easting	607640	Northing	4912443	SWL	(mbgs)	(masl)	
	DD/MM/YYYY	/ Monitoring and Te		Test Hole		UTM RC	4	Pumping WL	(mbgs)	(masl)	
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/	
								Spec. Cap.	(LPM/m)	Hour / Minute	
		Casing Diameter	2 inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	3.0 (mbgs)	Bottom of Screen	6.1 (mbgs)						
		Screen Interval	3.0 (m)	Contractor	1793746 Ontario inc. O/A Strata So						
						0.3		BROWN	TOPSOIL /		/ LOOSE
						3.7		BROWN	SILT /	SAND	/ LOOSE
						6.1		GREY	SILT /	SAND	/ LOOSE

7187848		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?			
Date	2012-08-29	Elev	(masl)	Easting	607709	Northing	4912403	SWL	(mbgs)	(masl)	
	DD/MM/YYYY	/ Monitoring and Te		Test Hole		UTM RC	4	Pumping WL	(mbgs)	(masl)	
		Water Found	(mbgs)	(masl)				Pump Rate	(LPM)	/	
								Spec. Cap.	(LPM/m)	Hour / Minute	
		Casing Diameter	2 inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)				
						0.0		Color		Soil Descriptions	
		Top of Screen	3.0 (mbgs)	Bottom of Screen	6.1 (mbgs)						
		Screen Interval	3.0 (m)	Contractor	1793746 Ontario inc. O/A Strata So						
						0.3		BROWN	TOPSOIL /		/ LOOSE
						3.7		BROWN	SILT /	SAND	/ LOOSE
						6.1		GREY	SILT /	SAND	/ LOOSE

Well Record

7187964		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2012-08-29	Elev	(masl)	Easting	607750	Northing	4912433	SWL	(mbgs)	(masl)
	DD/MM/YYYY	/ Monitoring and Te		Test Hole		UTM RC	4	Pumping WL	(mbgs)	(masl)
		Water Found	(mbgs)	(masl)		margin of error : 30 m - 100 m				
		Casing Diameter	2 inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)	Pump Rate	(LPM)	/
		Top of Screen	3.0 (mbgs)	Bottom of Screen	6.1 (mbgs)	0.0		Spec. Cap.	(LPM/m)	Hour / Minute
		Screen Interval	3.0 (m)	Contractor	1793746 Ontario inc. O/A Strata So					
						0.3		BROWN	TOPSOIL /	/ LOOSE
						3.7		BROWN	SILT /	/ LOOSE
						6.1		GREY	SILT /	/ LOOSE

7187965		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2012-08-29	Elev	(masl)	Easting	607782	Northing	4912444	SWL	(mbgs)	(masl)
	DD/MM/YYYY	/ Monitoring and Te		Test Hole		UTM RC	4	Pumping WL	(mbgs)	(masl)
		Water Found	(mbgs)	(masl)		margin of error : 30 m - 100 m				
		Casing Diameter	2 inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)	Pump Rate	(LPM)	/
		Top of Screen	3.7 (mbgs)	Bottom of Screen	6.7 (mbgs)	0.0		Spec. Cap.	(LPM/m)	Hour / Minute
		Screen Interval	3.0 (m)	Contractor	1793746 Ontario inc. O/A Strata So					
						0.3		BROWN	TOPSOIL /	/ LOOSE
						3.7		BROWN	SILT /	/ LOOSE
						6.7		GREY	SILT /	/ LOOSE

7206074		Lot	Conc	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2013-07-05	Elev	(masl)	Easting	607853	Northing	4912484	SWL	(mbgs)	(masl)
	DD/MM/YYYY	/		Abandoned-Other		UTM RC	4	Pumping WL	(mbgs)	(masl)
		Water Found	(mbgs)	(masl)		margin of error : 30 m - 100 m				
		Casing Diameter	36 inch	Casing Material:	CONCRETE	Depth (m)	Elev (masl)	Pump Rate	(LPM)	/
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Spec. Cap.	(LPM/m)	Hour / Minute
		Screen Interval	(m)	Contractor	R & B Well Drilling ltd.					
									/	/

7206075		Lot	013	Conc	13	INNISFIL TOWNSHIP / SIMCOE				Flowing?	
Date	2013-07-19	Elev	(masl)	Easting	607680	Northing	4912499	SWL	(mbgs)	(masl)	
	DD/MM/YYYY	/		Abandoned-Other		UTM RC	4	Pumping WL	(mbgs)	(masl)	
		Water Found	(mbgs)	(masl)		margin of error : 30 m - 100 m					
		Casing Diameter	5 inch	Casing Material:	STEEL	Depth (m)	Elev (masl)	Pump Rate	(LPM)	/	
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0		Spec. Cap.	(LPM/m)	Hour / Minute	
		Screen Interval	(m)	Contractor	R & B Well Drilling ltd.						
									/	/	

Well Record

7206076																			
Date		2013-07-05		Elev		(masl)		Easting 607855 Northing 4912448		Flowing?		SWL		(mbgs)		(masl)			
		DD/MM/YYYY		/				Abandoned-Other UTM RC 4		margin of error : 30 m - 100 m		Pumping WL		(mbgs)		(masl)			
		Water Found		(mbgs)		(masl)						Pump Rate		(LPM)		/			
												Spec. Cap.		(LPM/m)		Hour / Minute			
Casing Diameter		42		inch		Casing Material:		CONCRETE		Depth (m)		Elev (masl)							
										0.0				Color		Soil Descriptions			
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)											
Screen Interval				(m)		Contractor		R & B Well Drilling Ltd.											
																/		/	

7206077																			
Date		2013-07-05		Elev		(masl)		Easting 607788 Northing 4912499		Flowing?		SWL		(mbgs)		(masl)			
		DD/MM/YYYY		/				Observation Wells UTM RC 4		margin of error : 30 m - 100 m		Pumping WL		(mbgs)		(masl)			
		Water Found		(mbgs)		(masl)						Pump Rate		(LPM)		/			
												Spec. Cap.		(LPM/m)		Hour / Minute			
Casing Diameter		2		inch		Casing Material:		PLASTIC		Depth (m)		Elev (masl)							
										0.0				Color		Soil Descriptions			
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)											
Screen Interval				(m)		Contractor		R & B Well Drilling Ltd.											
																/		/	

7206078																			
Date		2013-07-05		Elev		(masl)		Easting 607780 Northing 4912493		Flowing?		SWL		(mbgs)		(masl)			
		DD/MM/YYYY		/				Observation Wells UTM RC 4		margin of error : 30 m - 100 m		Pumping WL		(mbgs)		(masl)			
		Water Found		(mbgs)		(masl)						Pump Rate		(LPM)		/			
												Spec. Cap.		(LPM/m)		Hour / Minute			
Casing Diameter		2		inch		Casing Material:		PLASTIC		Depth (m)		Elev (masl)							
										0.0				Color		Soil Descriptions			
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)											
Screen Interval				(m)		Contractor		R & B Well Drilling Ltd.											
																/		/	

7206079																			
Date		2013-07-05		Elev		(masl)		Easting 607853 Northing 4912484		Flowing?		SWL		(mbgs)		(masl)			
		DD/MM/YYYY		/				Observation Wells UTM RC 4		margin of error : 30 m - 100 m		Pumping WL		(mbgs)		(masl)			
		Water Found		(mbgs)		(masl)						Pump Rate		(LPM)		/			
												Spec. Cap.		(LPM/m)		Hour / Minute			
Casing Diameter		2		inch		Casing Material:		PLASTIC		Depth (m)		Elev (masl)							
										0.0				Color		Soil Descriptions			
Top of Screen				(mbgs)		Bottom of Screen		(mbgs)											
Screen Interval				(m)		Contractor		R & B Well Drilling Ltd.											
																/		/	

7220812																	
Date		2013-05-05		Elev		(masl)		Easting 607504 Northing 4912309		Flowing?		SWL		(mbgs)		(masl)	
		DD/MM/YYYY		/				Observation Wells UTM RC 4		margin of error : 30 m - 100 m		Pumping WL		(mbgs)		(masl)	
		Water Found		(mbgs)		(masl)						Pump Rate		(LPM)		/	
												Spec. Cap.		(LPM/m)		Hour / Minute	
Casing Diameter		4		inch		Casing Material:				Depth (m)		Elev (masl)					
										0.0				Color		Soil Descriptions	
Top of Screen		3.0		(mbgs)		Bottom of Screen		4.6 (mbgs)									
Screen Interval		1.5		(m)		Contractor		London Soil Test Ltd.									
										0.6		BLACK		/		/ DENSE	
										1.8		BROWN		GRAVEL /		/ DENSE	
										3.0		BROWN		SAND /		/ DENSE	

Well Record

4.6										GREY	SILT /		/ DENSE										
7228528										INNISFIL TOWNSHIP / SIMCOE										Flowing?			
Date	2014-08-29	Elev	(masl)	Easting	607788	Northing	4912368								SWL	(mbgs)	(masl)						
	DD/MM/YYYY	/ Monitoring and Te		Observation Wells		UTM RC	4	margin of error : 30 m - 100 m						Pumping WL	(mbgs)	(masl)							
		Water Found	(mbgs)	(masl)										Pump Rate	(LPM)	/							
														Spec. Cap.	(LPM/m)	Hour / Minute							
Casing Diameter	2	inch		Casing Material:	PLASTIC			Depth (m)	Elev (masl)														
								0.0		Color						Soil Descriptions							
Top of Screen	3.0	(mbgs)		Bottom of Screen	6.1	(mbgs)																	
Screen Interval	3.0	(m)		Contractor	1793746 Ontario inc.	O/A Strata So																	
								1.5		BLACK	OTHER /	/											
										BROWN	SAND /	GRAVEL	/										
								4.6		BROWN	SILT /	CLAY	/ SAND										
								6.1		BROWN	SILT /	SAND	/ CLAY										
7228529										INNISFIL TOWNSHIP / SIMCOE										Flowing?			
Date	2014-08-29	Elev	(masl)	Easting	607705	Northing	4912381								SWL	(mbgs)	(masl)						
	DD/MM/YYYY	/ Monitoring and Te		Observation Wells		UTM RC	4	margin of error : 30 m - 100 m						Pumping WL	(mbgs)	(masl)							
		Water Found	(mbgs)	(masl)										Pump Rate	(LPM)	/							
														Spec. Cap.	(LPM/m)	Hour / Minute							
Casing Diameter	2	inch		Casing Material:	PLASTIC			Depth (m)	Elev (masl)														
								0.0		Color						Soil Descriptions							
Top of Screen	3.0	(mbgs)		Bottom of Screen	6.1	(mbgs)																	
Screen Interval	3.0	(m)		Contractor	1793746 Ontario inc.	O/A Strata So																	
								1.5		BLACK	OTHER /	/											
										BROWN	SAND /	GRAVEL	/										
								4.6		BROWN	SILT /	CLAY	/ SAND										
								6.1		BROWN	SILT /	SAND	/ CLAY										
7228530										INNISFIL TOWNSHIP / SIMCOE										Flowing?			
Date	2014-08-29	Elev	(masl)	Easting	607750	Northing	4912384								SWL	(mbgs)	(masl)						
	DD/MM/YYYY	/ Monitoring and Te		Observation Wells		UTM RC	4	margin of error : 30 m - 100 m						Pumping WL	(mbgs)	(masl)							
		Water Found	(mbgs)	(masl)										Pump Rate	(LPM)	/							
														Spec. Cap.	(LPM/m)	Hour / Minute							
Casing Diameter	2	inch		Casing Material:	PLASTIC			Depth (m)	Elev (masl)														
								0.0		Color						Soil Descriptions							
Top of Screen	3.0	(mbgs)		Bottom of Screen	6.1	(mbgs)																	
Screen Interval	3.0	(m)		Contractor	1793746 Ontario inc.	O/A Strata So																	
								1.5		BLACK	OTHER /	/											
										BROWN	SAND /	GRAVEL	/										
								4.6		BROWN	SILT /	CLAY	/ SAND										
								6.1		BROWN	SILT /	SAND	/ CLAY										
7267787										INNISFIL TOWNSHIP / SIMCOE										Flowing?			
Date	2016-06-28	Elev	(masl)	Easting	607436	Northing	4912684								SWL	(mbgs)	(masl)						
	DD/MM/YYYY	/ Domestic		Abandoned-Other		UTM RC	4	margin of error : 30 m - 100 m						Pumping WL	(mbgs)	(masl)							
		Water Found	(mbgs)	(masl)										Pump Rate	(LPM)	/							
														Spec. Cap.	(LPM/m)	Hour / Minute							
Casing Diameter	6	inch		Casing Material:	STEEL			Depth (m)	Elev (masl)														
								0.0		Color						Soil Descriptions							
Top of Screen		(mbgs)		Bottom of Screen		(mbgs)																	
Screen Interval		(m)		Contractor	R & B Well Drilling Ltd.																		

Well Record

7291853									
Date 2017-06-28		Lot 012		Conc 13		INNISFIL TOWNSHIP / SIMCOE			
DD/MM/YYYY		Elev		(masl)		Easting 607537		Northing 4912377	
		/				UTM RC 4		margin of error : 30 m - 100 m	
		Water Found		(mbgs)		(masl)			
		Casing Diameter				Casing Material:		Depth (m)	
		Top of Screen		(mbgs)		Bottom of Screen		(mbgs)	
		Screen Interval		(m)		Contractor			

Well Record

7347047		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2019-09-24	Elev	(masl)	Easting	608232	Northing	4912229	SWL	(mbgs)	(masl)
	DD/MM/YYYY	/		UTM RC	4	margin of error : 30 m - 100 m		Pumping WL	(mbgs)	(masl)
		Water Found	(mbgs)		(masl)			Pump Rate	(LPM)	/
		Casing Diameter		Casing Material:		Depth (m)	Elev (masl)	Spec. Cap.	(LPM/m)	Hour / Minute
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0				Soil Descriptions
		Screen Interval	(m)	Contractor	Dbw Drilling Limited					

/ /

7349909		Lot 014	Conc 13	INNISFIL TOWNSHIP / SIMCOE				Flowing? N		
Date	2019-11-28	Elev	(masl)	Easting	608273	Northing	4912654	SWL	(mbgs)	(masl)
	DD/MM/YYYY	/ Domestic		Water Supply		UTM RC	4	Pumping WL	(mbgs)	(masl)
		Water Found	(mbgs)		(masl)	margin of error : 30 m - 100 m		Pump Rate	13.6	(LPM)
		Casing Diameter	6	Casing Material:	STEEL	Depth (m)	Elev (masl)	Spec. Cap.	(LPM/m)	Hour / Minute
		Top of Screen	(mbgs)	Bottom of Screen	(mbgs)	0.0				Soil Descriptions
		Screen Interval	(m)	Contractor	1430867 Ontario Ltd. O/A Drury Well					

PREV. DRILLED / /

7352979		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2020-01-23	Elev	(masl)	Easting	608232	Northing	4912227	SWL	(mbgs)	(masl)
	DD/MM/YYYY	/		Abandoned-Other		UTM RC	4	Pumping WL	(mbgs)	(masl)
		Water Found	4.1		(masl)	Untested		Pump Rate	(LPM)	/
		Casing Diameter	5	Casing Material:	PLASTIC	Depth (m)	Elev (masl)	Spec. Cap.	(LPM/m)	Hour / Minute
		Top of Screen	6.3	Bottom of Screen	7.6	0.0				Soil Descriptions
		Screen Interval	1.3	Contractor						

/ /

7352980		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2020-01-23	Elev	(masl)	Easting	608260	Northing	4912219	SWL	(mbgs)	(masl)
	DD/MM/YYYY	/		Abandoned-Other		UTM RC	4	Pumping WL	(mbgs)	(masl)
		Water Found	4.6		(masl)	Untested		Pump Rate	(LPM)	/
		Casing Diameter	5	Casing Material:	PLASTIC	Depth (m)	Elev (masl)	Spec. Cap.	(LPM/m)	Hour / Minute
		Top of Screen	6.3	Bottom of Screen	7.6	0.0				Soil Descriptions
		Screen Interval	1.3	Contractor						

/ /

7352995		Lot 014	Conc 12	INNISFIL TOWNSHIP / SIMCOE				Flowing?		
Date	2020-01-23	Elev	(masl)	Easting	608220	Northing	4912257	SWL	(mbgs)	(masl)
	DD/MM/YYYY	/		Abandoned-Other		UTM RC	4	Pumping WL	(mbgs)	(masl)
		Water Found	3.6		(masl)	Untested		Pump Rate	(LPM)	/
		Casing Diameter	5	Casing Material:	PLASTIC	Depth (m)	Elev (masl)	Spec. Cap.	(LPM/m)	Hour / Minute
		Top of Screen	6.3	Bottom of Screen	7.8	0.0				Soil Descriptions
		Screen Interval	1.5	Contractor						

/ /

Well Record

7377329									
Lot	013	Conc	13	INNISFIL TOWNSHIP / SIMCOE				Flowing?	
Date	2020-11-09	Elev	(masl)	Easting	607929	Northing	4912533	SWL	0.0 (mbgs) (masl)
	DD/MM/YYYY	/	Monitoring	Observation Wells	UTM RC	4	margin of error : 30 m - 100 m	Pumping WL	(mbgs) (masl)
	Water Found	(mbgs)	(masl)					Pump Rate	(LPM) /
								Spec. Cap.	(LPM/m) Hour / Minute
Casing Diameter	2	inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)			
Top of Screen	4.6	(mbgs)	Bottom of Screen	6.1 (mbgs)	0.0		Color		Soil Descriptions
Screen Interval	1.5	(m)	Contractor	London Soil Test Ltd.					
					0.6		BROWN	SILT /	CLAY / TOPSOIL
					2.7		BROWN	SAND /	SILT / GRAVELLY
					6.1		BROWN	SILT /	SAND /
7377330									
Lot	013	Conc	13	INNISFIL TOWNSHIP / SIMCOE				Flowing?	
Date	2020-11-09	Elev	(masl)	Easting	607909	Northing	4912503	SWL	0.0 (mbgs) (masl)
	DD/MM/YYYY	/	Monitoring	Observation Wells	UTM RC	4	margin of error : 30 m - 100 m	Pumping WL	(mbgs) (masl)
	Water Found	(mbgs)	(masl)					Pump Rate	(LPM) /
								Spec. Cap.	(LPM/m) Hour / Minute
Casing Diameter	2	inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)			
Top of Screen	4.6	(mbgs)	Bottom of Screen	6.1 (mbgs)	0.0		Color		Soil Descriptions
Screen Interval	1.5	(m)	Contractor	London Soil Test Ltd.					
					0.6		BROWN	SILT /	CLAY / TOPSOIL
					2.7		BROWN	SAND /	SILT / GRAVELLY
					6.1		BROWN	SILT /	SAND /
7377331									
Lot	013	Conc	13	INNISFIL TOWNSHIP / SIMCOE				Flowing?	
Date	2020-11-09	Elev	(masl)	Easting	607949	Northing	4912506	SWL	0.0 (mbgs) (masl)
	DD/MM/YYYY	/	Monitoring	Observation Wells	UTM RC	4	margin of error : 30 m - 100 m	Pumping WL	(mbgs) (masl)
	Water Found	(mbgs)	(masl)					Pump Rate	(LPM) /
								Spec. Cap.	(LPM/m) Hour / Minute
Casing Diameter	2	inch	Casing Material:	PLASTIC	Depth (m)	Elev (masl)			
Top of Screen	4.6	(mbgs)	Bottom of Screen	6.1 (mbgs)	0.0		Color		Soil Descriptions
Screen Interval	1.5	(m)	Contractor	London Soil Test Ltd.					
					0.6		BROWN	SILT /	CLAY / TOPSOIL
					2.7		BROWN	SAND /	SILT / GRAVELLY
					6.1		BROWN	SILT /	SAND /
7409333									
Lot	013	Conc	12	INNISFIL TOWNSHIP / SIMCOE				Flowing?	
Date	2021-12-09	Elev	(masl)	Easting	608124	Northing	4912309	SWL	(mbgs) (masl)
	DD/MM/YYYY	/		Observation Wells	UTM RC	4	margin of error : 30 m - 100 m	Pumping WL	(mbgs) (masl)
	Water Found	(mbgs)	(masl)					Pump Rate	(LPM) /
								Spec. Cap.	(LPM/m) Hour / Minute
Casing Diameter			Casing Material:		Depth (m)	Elev (masl)			
Top of Screen		(mbgs)	Bottom of Screen	(mbgs)	0.0		Color		Soil Descriptions
Screen Interval		(m)	Contractor	Ace Environmental Drilling Ltd.					

APPENDIX II
BOREHOLE REPORT RECORDS

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: BH401											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912397.772		EASTING (m): 607854.263		ELEV. (m) 250.872											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: #2		SEALANT TYPE: BENTONITE											
SAMPLE TYPE		☐ AUGER ☒ DRIVEN ☒ CORING ☐ DYNAMIC CONE ☐ SHELBY ☐ SPLIT SPOON																	
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm)				PL W.C. LL										
					40	80	120	160	20	40	60	80							
		ASPHALT (50mm)	0																
		FILL compact, moist, brown sand and gravel some asphalt chunks	0.5	250.5	24								1	80	<5				
		FILL loose, moist, black sand trace asphalt chunks	1	250	9								2	30	<5				
		FILL firm, moist, brown clayey silt some sand	1.5	249.5									3A	80	<5				
			2	249	4								3B						
		compact to dense, moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	2.5	248.5	18								4	100	<5				
			3	248															
			3.5	247.5	43								5	10	<5				
			4	247															
			4.5	246.5	28								6	70	<5	BTEX, PHCS, DUP		DUP BH2000-6	
			5	246	13								7	95	<5				
			5.5	245.5	19								8	95	40				
			6	245															
			6.5	244.5	30								9		<5				
		END OF BOREHOLE																	
					LOGGED BY: DF/AC				DRILLING DATE: 7-NOV-23										
					INPUT BY: SW				MONITORING DATE:										
					REVIEWED BY:				PAGE 1 OF 1										

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: MW402											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912408.108		EASTING (m): 607874.237		ELEV. (m) 251.006											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: #2		SEALANT TYPE: HOLE PLUG											
SAMPLE TYPE		AUGER		DRIVEN		CORING		DYNAMIC CONE		SHELBY		SPLIT SPOON							
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm)				PL W.C. LL										
					40	80	120	160	20	40	60	80							
		ASPHALT (80mm)	0	251															Bentonite
		FILL compact, moist, brown to light brown sand and gravel	0.5	250.5										1	50	<5/0	M&I, PAHs		
		FILL firm, moist, brown sandy clayey silt	1	250										2A	80	<5/0			
			1.5	249.5										2B		<5/0			
		FILL compact, moist, brown sandy silt some clay, trace gravel	2	249										3	87	<5/0			
		FILL moist, brown silty sand	2.5	248.5										4A	89	<5/0			
			3	248										4B		<5/0			
		moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	3.5	247.5										5	44	<5/0			
		very dense compact	4	247										6	100	<5/0	BTEX, PHCs		
			4.5	246.5															
			5	246										7	13	<5/0			
			5.5	245.5										8	100	<5/0			
			6	245															
		very moist	6.5	244.5										9	100	<5/0			
		END OF BOREHOLE																	



LOGGED BY: BW/AC

INPUT BY: SW

REVIEWED BY:

DRILLING DATE: 8-NOV-23

MONITORING DATE: 23-NOV-2023

PAGE 1 OF 1

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: MW403											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912415.702		EASTING (m): 607850.952		ELEV. (m) 250.835											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: #2		SEALANT TYPE: HOLE PLUG											
SAMPLE TYPE		AUGER		DRIVEN		CORING		DYNAMIC CONE		SHELBY									
SPLIT SPOON																			
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm)				PL W.C. LL										
					40	80	120	160	20	40	60	80							
		ASPHALT (100mm)	0																
		FILL dense, moist, light brown sand and gravel	0.5	250.5					2					1	64	<5/0	M&I, PAHs (DUP), BTEX, PHCs		Bentonite
		FILL firm, slightly moist, dark brown silty clay to clayey silt trace coarse sand, trace gravel	1	250										2	100	<5/0			
		moist to wet	1.5	249.5										3	84	<5/0			
		FILL dense, moist to wet, greyish brown silt trace clay, trace gravel	2	249										4	51	<5/0			
		moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	2.5	248.5										5	100	<5/0	BTEX, PHCs		
		dense compact	3	248					8					6	100	<5/0			Sand
		grey	3.5	247.5										7	64	<5/0			Screen + Sand
		very moist	4	247					10					8	100	<5/0			
			4.5	246.5										9	100	<5/0			
			5	246					11										
			5.5	245.5															
			6	245															
			6.5	244.5					10										Sand
		END OF BOREHOLE																	



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INPUT BY: SW	MONITORING DATE: 23-NOV-2023
REVIEWED BY:	PAGE 1 OF 1

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: BH404											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912394.853		EASTING (m): 607889.251		ELEV. (m) 251.472											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: -											
SAMPLE TYPE		☒ AUGER		☒ DRIVEN		☒ CORING		☐ DYNAMIC CONE		☐ SHELBY		☐ SPLIT SPOON							
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm)				PL W.C. LL										
					40	80	120	160	20	40	60	80							
		ASPHALT (80mm)	0		5									1	41	<5/0			
		FILL loose, moist, brown sand and gravel	0.5	251										2	67	<5/0	M&I, PAHs		
		FILL firm, moist, brown silty clay trace gravel, oxidation	1	250.5	7									3	100	<5/0	BTEX, PHCs		
		FILL very stiff, wet, brown silty clay trace to some gravel	2	249.5	18									4	93	<5/0			
		moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	2.5	249	28									5	57	<5/0			
		compact dense gravelly sand seam	3.5	248	55									6	100	<5/0			
			4	247.5	20									7	90				
			4.5	247										8	100				
		trace small to medium sized rocks	5	246.5	21														
			5.5	246															
			6	245.5															
			6.5	245	27														
END OF BOREHOLE																			
										LOGGED BY: BW/AC		DRILLING DATE: 8-NOV-23							
										INPUT BY: SW		MONITORING DATE:							
										REVIEWED BY:		PAGE 1 OF 1							

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: BH405											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912398.282		EASTING (m): 607912.001		ELEV. (m) 251.707											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: #2		SEALANT TYPE: BENTONITE											
SAMPLE TYPE		☒ AUGER		☒ DRIVEN		☒ CORING		☐ DYNAMIC CONE		☐ SHELBY		☐ SPLIT SPOON							
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)			SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					N-VALUE (Blows/300mm)				PL W.C. LL										
					40	80	120	160	20	40	60								80
		ASPHALT (120m)	0	251.5	9								1	10	<5				
		FILL loose, moist, brown sand and gravel	0.5	251									2	70	<5				
		FILL firm to stiff, moist, brown silty clay some sand, trace gravel	1	250.5	4								3	100	<5				
			1.5	250	12								4	100	<5				
		moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	2	249.5									5	60	<5				
			2.5	249	46								6	90	<5	BTEX, PHCs			
		dense ----- very dense	3	248.5									7A	<5					
			3.5	248	58								7B	100					
			4	247.5	31								8	10	<5				
			4.5	247	31								9	100	<5				
			5	246.5	45														
			5.5	246	25														
		compact -----	6	245.5															
			6.5	245															
		END OF BOREHOLE																	
										LOGGED BY: SB/AC		DRILLING DATE: 7-NOV-23							
										INPUT BY: SW		MONITORING DATE:							
										REVIEWED BY:		PAGE 1 OF 1							

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: MW406											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912380.044		EASTING (m): 607866.855		ELEV. (m) 251.356											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: #2		SEALANT TYPE: BENTONITE											
SAMPLE TYPE		AUGER		DRIVEN		CORING		DYNAMIC CONE		SHELBY		SPLIT SPOON							
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm)				PL W.C. LL										
					40	80	120	160	20	40	60	80							
					20	40	60	80	20	40	60	80							
		ASPHALT (120mm)	0															Bentonite	
		FILL																	
		compact, moist, brown sand and gravel	0.5	251	15				6				1	40	<5				
		FILL																	
		loose, silty sand trace clay	1	250.5	5				21				2	70	<5				
			1.5	250															
		moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	2	249.5	5				15				3	100	<5			50 mm monitoring well was installed. Waterlevel measured: on Nov 17th, 2023 at 5.11mbgs on Nov 23rd, 2023 at 5.25mbgs	
			2.5	249					8				4	80	<5				
		dense to compact	3	248.5	34				8									Sand	
			3.5	248	17				8				5	100	<5			Screen + Sand	
		loose	4	247.5	9				9				6	20	25				
			4.5	247															
		compact to very dense	5	246.5	22				9				7	100	<5		BTEX, PHCs		
			5.5	246					10				8	5	<5				
		very moist	6	245.5															
			6.5	245	31				9				9	100	<5			Sand	
		END OF BOREHOLE																	
					LOGGED BY: DF/AC				DRILLING DATE: 7-NOV-23										
					INPUT BY: SW				MONITORING DATE: 23-NOV-2023										
					REVIEWED BY:				PAGE 1 OF 1										

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: BH407										
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																		
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912432.271		EASTING (m): 607872.923		ELEV. (m) 251.104										
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER														
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: #2		SEALANT TYPE: HOLE PLUG										
SAMPLE TYPE		☐ AUGER ☒ DRIVEN ☒ CORING ☐ DYNAMIC CONE ☐ SHELBY ☐ SPLIT SPOON																
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)			SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm)				PL	W.C.	LL							
					40	80	120	160										
					20	40	60	80	20	40	60	80						
		TOPSOIL (600mm)	0	251														
		FILL brown, very moist silty sand trace organics	0.5	250.5														
		FILL very moist, brown sand trace silt, trace gravel	1	250														
			1.5	249.5														
			2	249														
			2.5	248.5														
		moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	3	248														
			3.5	247.5														
		compact	4	247														
			4.5	246.5														
			5	246														
		very moist	5.5	245.5														
			6															
		END OF BOREHOLE																
										LOGGED BY: AC/JF		DRILLING DATE: 7-NOV-23						
										INPUT BY: SW		MONITORING DATE: -						
										REVIEWED BY:		PAGE 1 OF 1						

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: MW408												
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																				
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912365.247		EASTING (m): 607893.059		ELEV. (m) 251.903												
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER																
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: #2		SEALANT TYPE: BENTONITE												
SAMPLE TYPE		☒ AUGER		☒ DRIVEN		☒ CORING		☐ DYNAMIC CONE		☐ SHELBY		☐ SPLIT SPOON								
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					N-VALUE (Blows/300mm)				PL W.C. LL											
					40	80	120	160	20	40	60	80								
		TOPSOIL (150mm) FILL loose, moist, brown sandy silt, some clay	0	251.5	18									1	80	<5/0				
			0.5	251	5									2	80	<5/0				
			1	250.5																
			1.5	250	8									3	100	<5/0				
		moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	2	249.5																
			2.5	249	51									4	80	<5/0				
		dense to very dense	3	248.5	23									5	100	<5/0				
			3.5	248																
			4	247.5	36									6	30	<5/0				
		compact to dense	4.5	247	17									7	100	<5/0	BTEX, PHCs			
			5	246.5																
			5.5	246	41									8	100	<5/0				
		very moist	6	245.5	17									9	100	<5/0				
			6.5																	
		END OF BOREHOLE																		
										LOGGED BY: DF/AC		DRILLING DATE: 9-NOV-23								
										INPUT BY: SW		MONITORING DATE: 23-NOV-2023								
										REVIEWED BY:		PAGE 1 OF 1								

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: MW409											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912418.044		EASTING (m): 607829.459		ELEV. (m) 250.444											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: #2		SEALANT TYPE: BENTONITE											
SAMPLE TYPE		☒ AUGER		☒ DRIVEN		☒ CORING		☐ DYNAMIC CONE		☐ SHELBY		☐ SPLIT SPOON							
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm)				PL W.C. LL										
					40	80	120	160	20	40	60	80							
		ASPHALT (90mm)	0																Bentonite
		FILL compact, wet, brown sand and gravel	0.5	250	16								1		50	<5/0			
		FILL loose to compact, moist, brown sandy silt some clay, trace organics	1	249.5	5								2		60	<5/0			
			1.5	249															
			2	248.5	11								3		50	5/0			
		compact, moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	2.5	248	19								4		80	<5/0			
			3	247.5															
			3.5	247	21								5		90	35/0	BTEX, PHCs		
		very moist	4	246.5	14								6		60	<5/0			
			4.5	246															
			5	245.5	20								7		20	5/0			
			5.5	245															
			6	244.5	22								8		80	10/0	BTEX, PHCs		
			6.5	244	24								9		100	5/0			
		END OF BOREHOLE																	
										LOGGED BY: JF/AC		DRILLING DATE: 9-NOV-23							
										INPUT BY: SW		MONITORING DATE: 23-NOV-2023							
										REVIEWED BY:		PAGE 1 OF 1							

50 mm monitoring well was installed.
Waterlevel measured:
on Nov 17th, 2023 at 4.33mbgs
on Nov 23rd, 2023 at 4.41mbgs

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: MW410												
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																				
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912434.383		EASTING (m): 607884.469		ELEV. (m) 251.21												
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER																
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: WELL GRAVEL		SEALANT TYPE: BENTONITE												
SAMPLE TYPE		AUGER		DRIVEN		CORING		DYNAMIC CONE		SHELBY		SPLIT SPOON								
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					N-VALUE (Blows/300mm)				PL W.C. LL											
					40 80 120 160															
		TOPSOIL (350mm)	0	251	4									1		70	<5/0			Bentonite
		FILL very loose, moist, brown sand	0.5	250.5	2									2		50	<5/0	M&I, PAHs, BTEX, PHCs		
		FILL compact, wet, brown sandy silt trace clay	1.5	250	16									3		60	<5/0			
		moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	2	249.5	21									4		70	10/0			50 mm monitoring well was installed. Waterlevel measured: on Nov 17th, 2023 at 4.89mbgs on Nov 23rd, 2023 at 4.90mbgs
			2.5	249	21									5		80	35/0	BTEX, PHCs		Sand
			3	248.5	21									6		100	10/0			Screen + Sand
			3.5	248	66									7		40	<5/0			
			4	247.5	33									8		40	10/0			
			4.5	247	64/280									9		100	<5/0			Sand
			5	246.5																
			5.5	246																
			6	245.5																
			6.5	245																
		END OF BOREHOLE																		



LOGGED BY: DF/AC

INPUT BY: SW

REVIEWED BY:

DRILLING DATE: 10-NOV-23

MONITORING DATE: 23-NOV-2023

PAGE 1 OF 1

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: MW411											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912417.208		EASTING (m): 607889.523		ELEV. (m) 251.252											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: WELL GRAVEL		SEALANT TYPE: BENTONITE											
SAMPLE TYPE		AUGER		DRIVEN		CORING		DYNAMIC CONE		SHELBY		SPLIT SPOON							
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)			SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					N-VALUE (Blows/300mm)				PL W.C. LL										
					40	80	120	160	20	40	60	80							
		TOPSOIL (250mm)	0	251	5				24				1		40	<5/0			Bentonite
		FILL loose, moist, brown silty sand	0.5	250.5					10				2		100	<5/0			
		compact, moist, brownish grey SANDY SILT to SILTY SAND trace clay, trace gravel (TILL)	1	250	12				8				3		80	25/0			
		----	1.5	249.5	21				8				4		100	5/0			
		----	2	249					8				5		100	35/0			
		----- sand seam (some gravel) -----	2.5	248.5	29				9				6		80	5/0			
			3	248	30				7				7		90	25/0			
			3.5	247.5					10				8		100	10/0			
			4	247	26				10				9		80	35/0			
			4.5	246.5					10				10		100	10/0			
			5	246	20				10				11		100	10/0			
			5.5	245.5					10				12		100	10/0			
		----- very moist -----	6	245	12				10				13		100	10/0			
			6.5	244.5					10				14		100	10/0			
			7	244					10				15		100	10/0			
			7.5	243.5					10				16		100	10/0			
		----- dense to very dense -----	8	243	35				10				17		100	10/0			
			8.5	242.5					10				18		100	10/0			
			9	242					10				19		100	10/0			



LOGGED BY: DF/AC

INPUT BY: SW

REVIEWED BY:

DRILLING DATE: 14-NOV-23

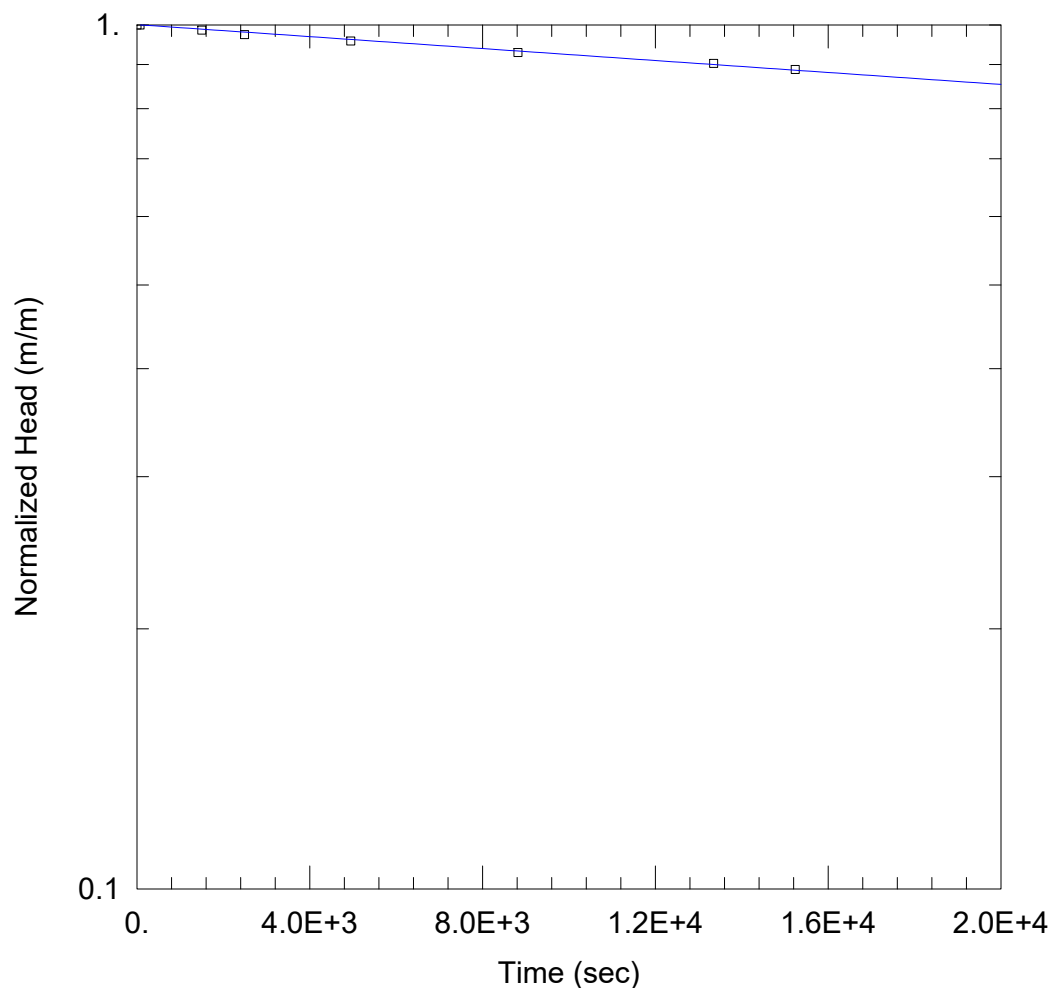
MONITORING DATE: 23-NOV-2023

PAGE 1 OF 2

CLIENT: SUNCOR ENERGY PARTNERSHIPS				PROJECT NO.: CH321.00				RECORD OF: MW411											
ADDRESS: 623 YONGE STREET AND 515 BIG BAY ROAD																			
CITY/PROVINCE: BARRIE, ONTARIO				NORTHING (m): 4912417.208		EASTING (m): 607889.523		ELEV. (m) 251.252											
CONTRACTOR: PONTIL DRILLING				METHOD: HOLLOW STEM AUGER															
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: WELL GRAVEL		SEALANT TYPE: BENTONITE											
SAMPLE TYPE		☐ AUGER ☒ DRIVEN		☒ CORING		☐ DYNAMIC CONE		☐ SHELBY		☐ SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	CV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					40	80	120	160	N-VALUE (Blows/300mm)										
					20	40	60	80	20	40	60	80							
		END OF BOREHOLE	9.5					94/250	7					10		100	5/0		

	LOGGED BY: DF/AC	DRILLING DATE: 14-NOV-23
	INPUT BY: SW	MONITORING DATE: 23-NOV-2023
	REVIEWED BY:	PAGE 2 OF 2

APPENDIX III
HYDRAULIC ANALYSES



HYDROGEOLOGICAL ASSESSMENT

Data Set: C:\...\ktest_MW408.aqt

Date: 02/05/24

Time: 15:22:47

PROJECT INFORMATION

Company: Terrapex

Client: Suncor

Project: CH321.00

Location: 623 Yonge Street, Barrie, ON

Test Well: MW408

Test Date: December 1, 2023

AQUIFER DATA

Saturated Thickness: 9.215 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (MW408)

Initial Displacement: 1.385 m

Static Water Column Height: 0.172 m

Total Well Penetration Depth: 6.342 m

Screen Length: 3.257 m

Casing Radius: 0.026 m

Well Radius: 0.031 m

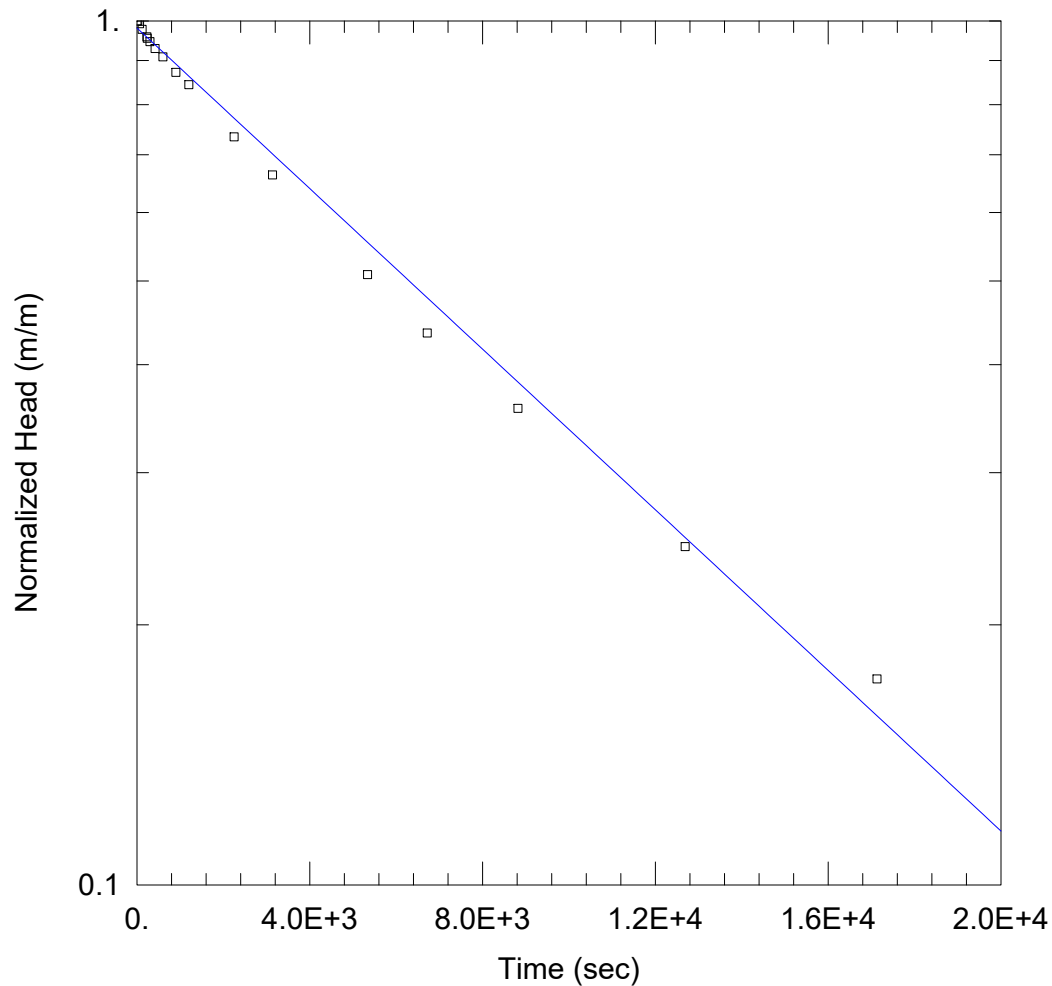
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 2.932E-9$ m/sec

$y_0 = 1.386$ m



HYDROGEOLOGICAL ASSESSMENT

Data Set: C:\...\ktest_MW409.aqt

Date: 02/05/24

Time: 15:23:09

PROJECT INFORMATION

Company: Terrapex

Client: Suncor

Project: CH321.00

Location: 623 Yonge Street, Barrie, ON

Test Well: MW409

Test Date: December 1, 2023

AQUIFER DATA

Saturated Thickness: 10.58 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (MW409)

Initial Displacement: 0.82 m

Static Water Column Height: 1.635 m

Total Well Penetration Depth: 5.075 m

Screen Length: 3.355 m

Casing Radius: 0.026 m

Well Radius: 0.031 m

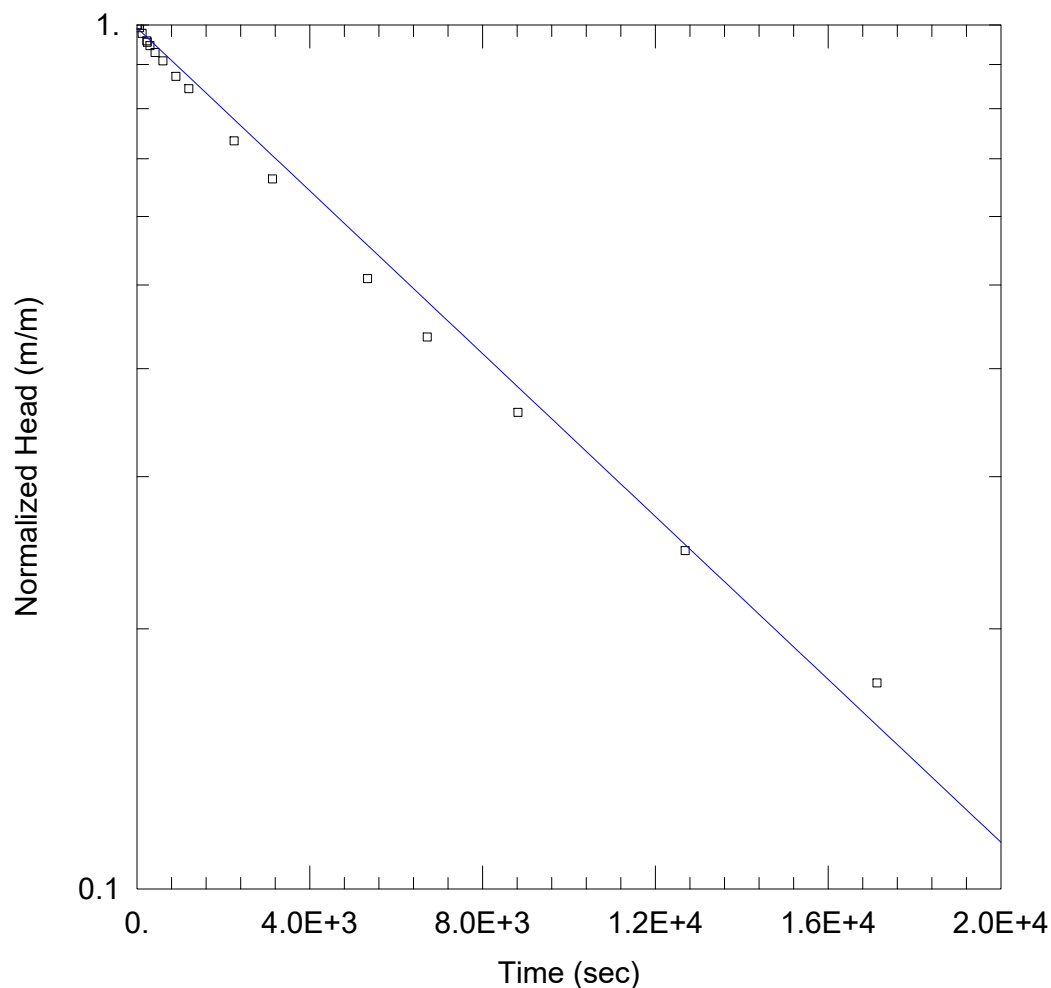
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 3.661E-8$ m/sec

$y_0 = 0.8048$ m



HYDROGEOLOGICAL ASSESSMENT

Data Set: C:\...\ktest_MW410.aqt

Date: 02/05/24

Time: 15:23:29

PROJECT INFORMATION

Company: Terrapex

Client: Suncor

Project: CH321.00

Location: 623 Yonge Street, Barrie, ON

Test Well: MW409

Test Date: December 1, 2023

AQUIFER DATA

Saturated Thickness: 10.58 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (MW409)

Initial Displacement: 0.82 m

Static Water Column Height: 1.635 m

Total Well Penetration Depth: 5.075 m

Screen Length: 3.355 m

Casing Radius: 0.026 m

Well Radius: 0.031 m

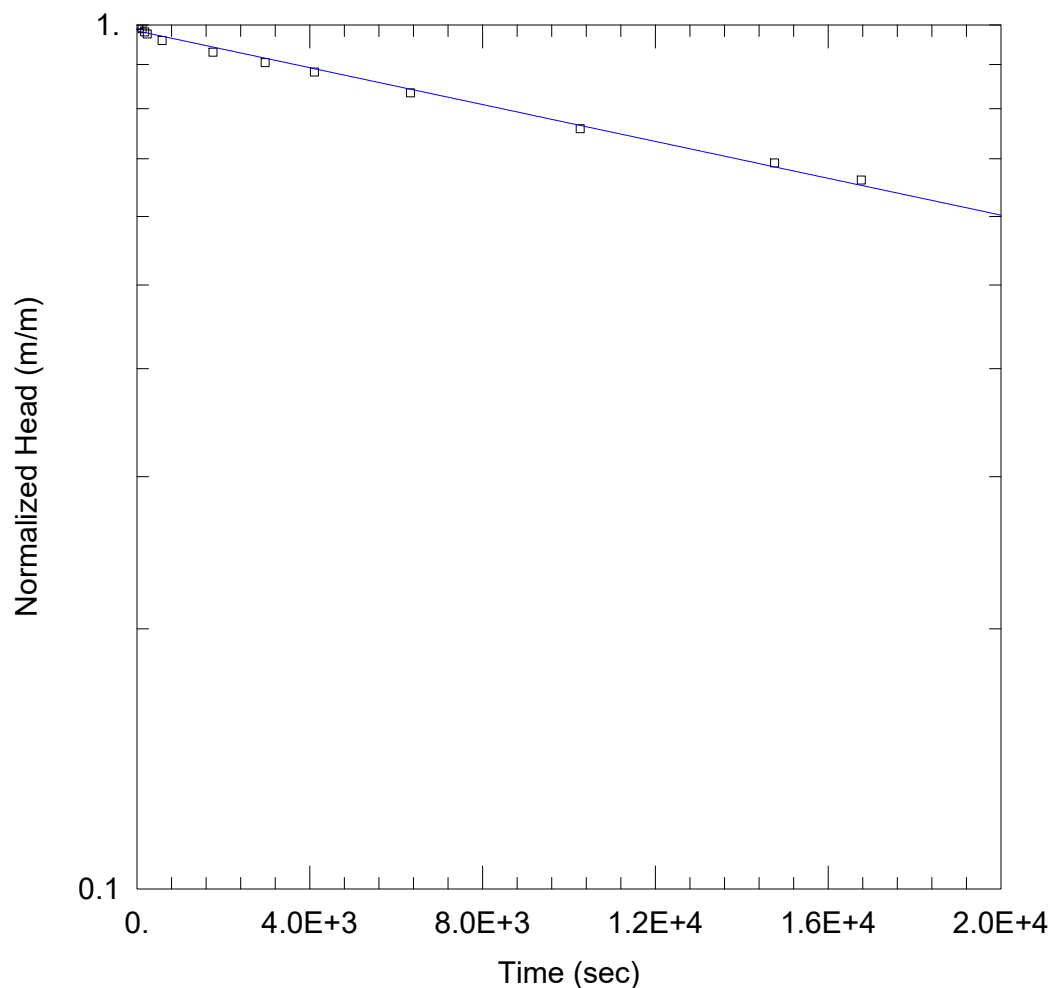
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 3.713E-8$ m/sec

$y_0 = 0.8135$ m



HYDROGEOLOGICAL ASSESSMENT

Data Set: C:\...\ktest_MW411.aqt

Date: 02/05/24

Time: 15:23:56

PROJECT INFORMATION

Company: Terrapex

Client: Suncor

Project: CH321.00

Location: 623 Yonge Street, Barrie, ON

Test Well: MW411

Test Date: December 1, 2023

AQUIFER DATA

Saturated Thickness: 8.562 m

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW411)

Initial Displacement: 0.712 m

Static Water Column Height: 0.777 m

Total Well Penetration Depth: 8.253 m

Screen Length: 3.7 m

Casing Radius: 0.026 m

Well Radius: 0.031 m

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 8.867E-9 m/sec

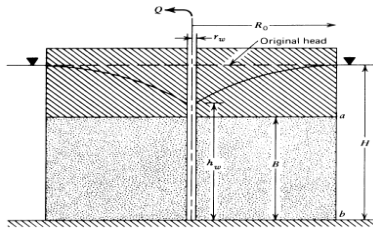
y0 = 0.7008 m

Construction Dewatering Worksheet



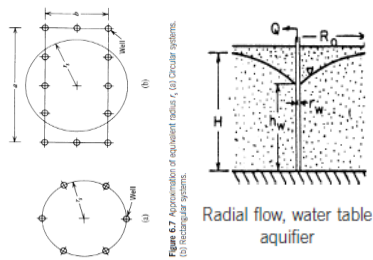
Project: 623 Yonge Street and 515 Big Bay Point Road
Barrie, Ontario
Project Number: CH321.00
Location: Building Footprint
Date: May 7, 2024

Input Parameters



(1)	Aquifer Thickness	(H)	15 m
(2)	Target Aquifer Thickness	(h)	14.28 m
(3)	Effective Drawdown	(Δh)	0.72 m
(4)	Hydraulic Conductivity	(K)	3.7E-08 m/s
(5)	Hydraulic Conductivity	(K)	3.2E-03 m/d
(6)	Excavation length	(a)	17.66 m
(7)	Excavation width	(b)	16.47 m
(8)	Excavation Length/Width Ratio	(a/b)	1.1

Distance Calculations



(9)	Width of Dewatering	(L)	0 m
(10)	Radius/Zone of Influence (ZOI)	(R _o)	0.4 m
(11)	Equivalent Radius of Well (where a/b ≤ 1.5)	(R _s)	10 m
(12)	Equivalent Radius of Well (where a/b > 1.5)	(R _s)	m

Volume Calculations

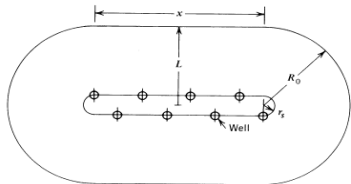


Figure 6.8 Approximate analysis of long, narrow systems.

(13)	Trench Calculation (where a/b ≤ 1.5)	(Q)	6 m3/day
		(Q)	5,725 L/day
(14)	Trench Calculation (where a/b > 1.5)	(Q)	m3/day
		(Q)	L/day
(15)	Anticipated Incident Precipitation		7,272 L/day @ 25mm storm

SUMMARY OF VOLUMES

Estimated Dewatering Volume	(A)	5,725 L/day
Incident Precipitation (25mm storm)	(B)	7,272 L/day
Total Dewatering Volume (A+B)	(C)	12,997 L/day
Design Dewatering Volume (Ax2+B)	(D)	18,722 L/day
Permitting Calculation (Ax2)		11,451 L/day
Permanent Dewatering (Ax2)		11,451 L/day

Relevant Formulae (Powers, 2007)

(9) $R_o / 2$	(eq. 6.15, p. 105)
(10) $3000 (H - h) \times \text{sqft} (K)$	(eq. 6.12, p. 71)
(11) $\text{sqft} ((a \times b) / \pi)$	(eq. 6.9, p. 70)
(12) $(a+b)/\pi$	(eq. 6.10, p.102)
(13) $(\pi \times K \times (H^2 - h^2)) / \ln ((R_o + R_s) / R_s) + 2 \times (K \times K \times (H^2 - h^2)) / (2 \times L)$	(pg. 66,67,68; eq. 6.1 and 6.2)
(14) $(\pi \times K \times (H^2 - h^2)) / \ln ((R_o + R_s) / R_s) + 2 \times (K \times K \times (H^2 - h^2)) / (2 \times L)$	(pg. 66,67,68; eq. 6.1 and 6.2)
(15) $a \times b \times 25$	(pk 15Sept2022)

APPENDIX IV
LABORATORY RECORD OF GROUNDWATER QUALITY

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
90 SCARSDALE RD
TORONTO, ON M3B2R7
(905) 474-5265

ATTENTION TO: Sara Sutherland

PROJECT: CH321.00

AGAT WORK ORDER: 23T105375

TRACE ORGANICS REVIEWED BY: Radhika Chakraborty, Trace Organics Lab Manager

WATER ANALYSIS REVIEWED BY: Nivine Basily, Inorganic Team Lead

DATE REPORTED: Dec 27, 2023

PAGES (INCLUDING COVER): 14

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.
- For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.



Certificate of Analysis

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

SAMPLING SITE: 623 Yonge Street, Barrie, ON

ATTENTION TO: Sara Sutherland

SAMPLED BY:

Barrie Sanitary Sewer Use By-law - Organics

DATE RECEIVED: 2023-12-18

DATE REPORTED: 2023-12-27

SAMPLE DESCRIPTION: MW409				
SAMPLE TYPE: Water				
DATE SAMPLED: 2023-12-15 10:30				
Parameter	Unit	G / S	RDL	55522224
Oil and Grease (animal/vegetable) in water	mg/L	150	0.5	1.67
Oil and Grease (mineral) in water	mg/L	15	0.5	<0.5
Dichloromethane	mg/L	0.09	0.0003	<0.0003
Benzene	mg/L	0.01	0.0002	<0.0002
Trichloroethylene	mg/L	0.05	0.0002	<0.0002
Toluene	mg/L	0.02	0.0002	<0.0002
Tetrachloroethene	mg/L	0.06	0.0002	<0.0002
Ethylbenzene	mg/L	0.06	0.0001	<0.0001
1,1,2,2-Tetrachloroethane	mg/L	0.06	0.0001	<0.0001
1,4-Dichlorobenzene	mg/L	0.08	0.0001	<0.0001
1,2-Dichlorobenzene	mg/L	0.05	0.0001	<0.0001
Xylenes (Total)	mg/L	0.3	0.0002	<0.0002
Hexachlorobenzene	mg/L	0.0001	0.00001	<0.00001
Naphthalene	mg/L		0.0003	<0.0003
Acenaphthylene	mg/L		0.00011	<0.00011
Acenaphthene	mg/L		0.00010	<0.00010
Fluorene	mg/L		0.0002	<0.0002
Phenanthrene	mg/L		0.00011	<0.00011
Anthracene	mg/L		0.00007	<0.00007
Fluoranthene	mg/L		0.00012	<0.00012
Pyrene	mg/L		0.00012	<0.00012
Benzo(a)anthracene	mg/L		0.00008	<0.00008
Chrysene	mg/L		0.00005	<0.00005
Benzo(b)fluoranthene	mg/L		0.00003	<0.00003
Benzo(k)fluoranthene	mg/L		0.00006	<0.00006
Benzo(a)pyrene	mg/L		0.001	<0.001
Indeno(1,2,3-cd)pyrene	mg/L		0.00003	<0.00003
Dibenzo(a,h)anthracene	mg/L		0.00009	<0.00009
Benzo(ghi)perylene	mg/L		0.00006	<0.00006

Certified By:

R. Chakraborty



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
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TEL (905)712-5100
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<http://www.agatlabs.com>

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLING SITE: 623 Yonge Street, Barrie, ON

SAMPLED BY:

Barrie Sanitary Sewer Use By-law - Organics

DATE RECEIVED: 2023-12-18

DATE REPORTED: 2023-12-27

SAMPLE DESCRIPTION: MW409
SAMPLE TYPE: Water
DATE SAMPLED: 2023-12-15
10:30
5552224

Parameter	Unit	G / S	RDL	
Total PAHs	mg/L	0.005	0.0003	<0.0003
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	50-140	100	
4-Bromofluorobenzene	% Recovery	50-140	68	
TCMX	%	50-140	83	
Acridine-d9	%	50-140	83	
Naphthalene-d8	%	50-140	63	
Terphenyl-d14	%	50-140	81	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Limits for Sanitary Sewer Discharge - The City of Barrie - By-Law No. 2012-172
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.
5552224 Oil and Grease animal/vegetable is a calculated parameter. The calculated value is the difference between Total O&G and Mineral O&G.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

R. Chakraborty



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

5835 COOPERS AVENUE
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FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

SAMPLING SITE: 623 Yonge Street, Barrie, ON

ATTENTION TO: Sara Sutherland

SAMPLED BY:

Barrie Sanitary/Storm Sewer Use By-law - Inorganics

DATE RECEIVED: 2023-12-18

DATE REPORTED: 2023-12-23

SAMPLE DESCRIPTION: MW409
SAMPLE TYPE: Water
DATE SAMPLED: 2023-12-15
10:30
5552224

Parameter	Unit	G / S: A	G / S: B	RDL	
BOD (5)	mg/L	300	15	2	<2[<B]
pH	pH Units	6.0-9.5	6.0-9.5	NA	7.30
Chemical Oxygen Demand	mg/L	600		5	40[<A]
Total Suspended Solids	mg/L	350	15	10	<10[<B]
Total Phosphorus	mg/L	10		0.02	<0.02[<A]
Total Kjeldahl Nitrogen	mg/L	100		0.10	<0.10[<A]
Fluoride	mg/L	10		0.26	<0.26[<A]
Chloride	mg/L	1500		2.4	5270[>A]
Sulphate	mg/L	1500		1.9	255[<A]
Sulphide	mg/L	1.0		0.01	<0.01[<A]
Phenols	mg/L	0.1		0.002	0.003[<A]
Cyanide, SAD	mg/L	1.2		0.002	0.007[<A]
Total Aluminum	mg/L	50		0.010	0.017[<A]
Total Antimony	mg/L	5.0		0.003	<0.003[<A]
Total Arsenic	mg/L	1.0		0.003	<0.003[<A]
Total Barium	mg/L	5.0		0.002	0.398[<A]
Total Bismuth	mg/L	5.0		0.002	<0.002[<A]
Total Cadmium	mg/L	0.7	0.001	0.0001	<0.0001[<B]
Total Chromium	mg/L	2.0	0.08	0.003	<0.003[<B]
Total Cobalt	mg/L	5.0		0.0005	0.0039[<A]
Total Copper	mg/L	2.0	0.01	0.002	0.005[<B]
Total Iron	mg/L	50		0.050	<0.050[<A]
Total Lead	mg/L	0.7	0.05	0.0005	0.0008[<B]
Total Manganese	mg/L	5.0		0.002	0.138[<A]
Total Mercury	mg/L	0.01		0.0002	<0.0002[<A]
Total Molybdenum	mg/L	5.0		0.002	0.005[<A]
Total Nickel	mg/L	2.0	0.05	0.003	0.003[<B]
Total Selenium	mg/L	1.0		0.002	<0.002[<A]
Total Silver	mg/L	0.4		0.0001	<0.0001[<A]

Certified By:



Nine Basily



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

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<http://www.agatlabs.com>

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

SAMPLING SITE: 623 Yonge Street, Barrie, ON

ATTENTION TO: Sara Sutherland

SAMPLED BY:

Barrie Sanitary/Storm Sewer Use By-law - Inorganics

DATE RECEIVED: 2023-12-18

DATE REPORTED: 2023-12-23

SAMPLE DESCRIPTION: MW409
SAMPLE TYPE: Water
DATE SAMPLED: 2023-12-15
10:30
5552224

Parameter	Unit	G / S: A	G / S: B	RDL	
Total Tin	mg/L	5.0		0.002	<0.002[<A]
Total Vanadium	mg/L	5.0		0.002	<0.002[<A]
Total Zinc	mg/L	2.0	0.04	0.020	<0.020[<B]

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: A Refers to Limits for Sanitary Sewer Discharge - The City of Barrie - By-Law No. 2012-172, B Refers to Limits for Storm Sewer Discharge - The City of Barrie - By-Law No. 2012-172
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5552224 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Nivine Basly



AGAT Laboratories

Exceedance Summary

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

5835 COOPERS AVENUE
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<http://www.agatlabs.com>

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Sara Sutherland

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
5552224	MW409	ON Barrie SN	Barrie Sanitary/Storm Sewer Use By-law - Inorganics	Chloride	mg/L	1500	5270

Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE: 623 Yonge Street, Barrie, ON

SAMPLED BY:

Trace Organics Analysis

RPT Date:			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Barrie Sanitary Sewer Use By-law - Organics															
Oil and Grease (animal/vegetable) in water	5522846		< 0.5	< 0.5	NA	< 0.5	100%	70%	130%	118%	70%	130%	111%	70%	130%
Oil and Grease (mineral) in water	5522846		< 0.5	< 0.5	NA	< 0.5	90%	70%	130%	74%	70%	130%	83%	70%	130%
Dichloromethane	5559587		<0.0003	<0.0003	NA	< 0.0003	119%	50%	140%	98%	60%	130%	89%	50%	140%
Benzene	5559587		<0.0002	<0.0002	NA	< 0.0002	91%	50%	140%	93%	60%	130%	80%	50%	140%
Trichloroethylene	5559587		<0.0002	<0.0002	NA	< 0.0002	95%	50%	140%	115%	60%	130%	103%	50%	140%
Toluene	5559587		<0.0002	<0.0002	NA	< 0.0002	96%	50%	140%	115%	60%	130%	89%	50%	140%
Tetrachloroethene	5559587		<0.0002	<0.0002	NA	< 0.0002	109%	50%	140%	101%	60%	130%	97%	50%	140%
Ethylbenzene	5559587		<0.0001	<0.0001	NA	< 0.0001	101%	50%	140%	95%	60%	130%	83%	50%	140%
1,1,2,2-Tetrachloroethane	5559587		<0.0001	<0.0001	NA	< 0.0001	111%	50%	140%	109%	60%	130%	98%	50%	140%
1,4-Dichlorobenzene	5559587		<0.0001	<0.0001	NA	< 0.0001	96%	50%	140%	103%	60%	130%	81%	50%	140%
1,2-Dichlorobenzene	5559587		<0.0001	<0.0001	NA	< 0.0001	112%	50%	140%	106%	60%	130%	89%	50%	140%
Hexachlorobenzene	5530370		< 0.00001	< 0.00001	NA	< 0.00001	105%	50%	140%	92%	50%	140%	104%	50%	140%
Naphthalene	5542797		< 0.0003	< 0.0003	NA	< 0.0003	101%	50%	140%	78%	50%	140%	100%	50%	140%
Acenaphthylene	5542797		< 0.00011	< 0.00011	NA	< 0.00011	118%	50%	140%	75%	50%	140%	86%	50%	140%
Acenaphthene	5542797		< 0.00010	< 0.00010	NA	< 0.00010	117%	50%	140%	88%	50%	140%	99%	50%	140%
Fluorene	5542797		< 0.0002	< 0.0002	NA	< 0.0002	114%	50%	140%	92%	50%	140%	82%	50%	140%
Phenanthrene	5542797		< 0.00011	< 0.00011	NA	< 0.00011	114%	50%	140%	82%	50%	140%	90%	50%	140%
Anthracene	5542797		< 0.00007	< 0.00007	NA	< 0.00007	103%	50%	140%	71%	50%	140%	90%	50%	140%
Fluoranthene	5542797		< 0.00012	< 0.00012	NA	< 0.00012	113%	50%	140%	74%	50%	140%	89%	50%	140%
Pyrene	5542797		< 0.00012	< 0.00012	NA	< 0.00012	109%	50%	140%	73%	50%	140%	90%	50%	140%
Benzo(a)anthracene	5542797		< 0.00008	< 0.00008	NA	< 0.00008	76%	50%	140%	76%	50%	140%	84%	50%	140%
Chrysene	5542797		< 0.00005	< 0.00005	NA	< 0.00005	92%	50%	140%	72%	50%	140%	107%	50%	140%
Benzo(b)fluoranthene	5542797		< 0.00003	< 0.00003	NA	< 0.00003	87%	50%	140%	91%	50%	140%	91%	50%	140%
Benzo(k)fluoranthene	5542797		< 0.00006	< 0.00006	NA	< 0.00006	119%	50%	140%	76%	50%	140%	104%	50%	140%
Benzo(a)pyrene	5542797		< 0.001	< 0.001	NA	< 0.001	86%	50%	140%	111%	50%	140%	68%	50%	140%
Indeno(1,2,3-cd)pyrene	5542797		< 0.00003	< 0.00003	NA	< 0.00003	80%	50%	140%	90%	50%	140%	72%	50%	140%
Dibenzo(a,h)anthracene	5542797		< 0.00009	< 0.00009	NA	< 0.00009	76%	50%	140%	89%	50%	140%	89%	50%	140%
Benzo(ghi)perylene	5542797		< 0.00006	< 0.00006	NA	< 0.00006	112%	50%	140%	94%	50%	140%	105%	50%	140%

Comments: When the average of the sample and duplicate results is less than 5x the RDL, the Relative Percent Difference (RPD) will be indicated as Not Applicable (NA).

Certified By:

R. Chakraborty

Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE: 623 Yonge Street, Barrie, ON

SAMPLED BY:

Water Analysis															
RPT Date:			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Barrie Sanitary/Storm Sewer Use By-law - Inorganics															
BOD (5)	5552251		7	7	NA	< 2	102%	75%	125%						
pH	5549361		10.1	10.3	2.0%	NA	102%	90%	110%						
Chemical Oxygen Demand	5542874		8	<5	NA	< 5	90%	90%	110%	98%	90%	110%	119%	70%	130%
Total Suspended Solids	5555069		<10	<10	NA	< 10	96%	80%	120%						
Total Phosphorus	5555084		0.05	0.05	NA	< 0.02	101%	70%	130%	113%	80%	120%	120%	70%	130%
Total Kjeldahl Nitrogen	5553407		0.14	0.12	NA	< 0.10	101%	70%	130%	100%	80%	120%	93%	70%	130%
Fluoride	5554367		<0.05	<0.05	NA	< 0.05	101%	70%	130%	103%	80%	120%	105%	70%	130%
Chloride	5554367		252	254	0.8%	< 0.10	91%	70%	130%	96%	80%	120%	NA	70%	130%
Sulphate	5554367		126	126	0.0%	< 0.10	97%	70%	130%	95%	80%	120%	96%	70%	130%
Sulphide	5548068		<0.01	<0.01	NA	< 0.01	100%	90%	110%	99%	90%	110%	100%	80%	120%
Phenols	5555637		<0.002	<0.002	NA	< 0.002	93%	90%	110%	93%	90%	110%	96%	80%	120%
Cyanide, SAD	5546390		<0.002	<0.002	NA	< 0.002	96%	70%	130%	107%	80%	120%	107%	70%	130%
Total Aluminum	5557119		0.579	0.567	2.1%	< 0.010	94%	70%	130%	101%	80%	120%	83%	70%	130%
Total Antimony	5557119		<0.003	<0.003	NA	< 0.003	102%	70%	130%	100%	80%	120%	106%	70%	130%
Total Arsenic	5557119		<0.003	0.003	NA	< 0.003	102%	70%	130%	97%	80%	120%	101%	70%	130%
Total Barium	5557119		0.033	0.034	3.0%	< 0.002	98%	70%	130%	100%	80%	120%	108%	70%	130%
Total Bismuth	5557119		<0.002	<0.002	NA	< 0.002	101%	70%	130%	101%	80%	120%	107%	70%	130%
Total Cadmium	5557119		<0.0001	<0.0001	NA	< 0.0001	99%	70%	130%	100%	80%	120%	103%	70%	130%
Total Chromium	5557119		0.097	0.099	2.0%	< 0.003	101%	70%	130%	99%	80%	120%	103%	70%	130%
Total Cobalt	5557119		<0.0005	0.0014	NA	< 0.0005	104%	70%	130%	100%	80%	120%	103%	70%	130%
Total Copper	5557119		0.004	0.004	NA	< 0.002	101%	70%	130%	101%	80%	120%	101%	70%	130%
Total Iron	5557119		0.419	0.448	6.7%	< 0.050	100%	70%	130%	97%	80%	120%	101%	70%	130%
Total Lead	5557119		0.0013	0.0013	NA	< 0.0005	102%	70%	130%	97%	80%	120%	103%	70%	130%
Total Manganese	5557119		0.038	0.040	5.1%	< 0.002	103%	70%	130%	104%	80%	120%	104%	70%	130%
Total Mercury	5552224	5552224	<0.0002	<0.0002	NA	< 0.0002	98%	70%	130%	97%	80%	120%	91%	70%	130%
Total Molybdenum	5557119		0.019	0.019	0.0%	< 0.002	103%	70%	130%	105%	80%	120%	109%	70%	130%
Total Nickel	5557119		<0.003	<0.003	NA	< 0.003	103%	70%	130%	100%	80%	120%	103%	70%	130%
Total Selenium	5557119		<0.002	<0.002	NA	< 0.002	104%	70%	130%	103%	80%	120%	107%	70%	130%
Total Silver	5557119		<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	99%	80%	120%	103%	70%	130%
Total Tin	5557119		<0.002	<0.002	NA	< 0.002	98%	70%	130%	99%	80%	120%	105%	70%	130%
Total Vanadium	5557119		0.004	0.003	NA	< 0.002	103%	70%	130%	104%	80%	120%	105%	70%	130%
Total Zinc	5557119		0.021	0.025	NA	< 0.020	104%	70%	130%	110%	80%	120%	106%	70%	130%

Comments: NA signifies Not Applicable.

Duplicate NA: results are under 5X the RDL and will not be calculated.

Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.



Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

PROJECT: CH321.00

SAMPLING SITE: 623 Yonge Street, Barrie, ON

AGAT WORK ORDER: 23T105375

ATTENTION TO: Sara Sutherland

SAMPLED BY:

Water Analysis (Continued)

RPT Date:			DUPLICATE			Method Blank	REFERENCE MATERIAL		METHOD BLANK SPIKE			MATRIX SPIKE			
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Certified By: _____



Nivine Basily

Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE: 623 Yonge Street, Barrie, ON

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Oil and Grease (animal/vegetable) in water	VOL-91-5011	EPA SW-846 3510C & SM 5520	BALANCE
Oil and Grease (mineral) in water	VOL-91-5011	EPA SW-846 3510C & SM 5520	BALANCE
Dichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Tetrachloroethene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	CALCULATION
Hexachlorobenzene	ORG-91-5112	EPA SW846 3510C & 8081B	GC/ECD
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
TCMX	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Naphthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluorene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Chrysene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS



Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE: 623 Yonge Street, Barrie, ON

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Indeno(1,2,3-cd)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Dibenzo(a,h)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(ghi)perylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Total PAHs	ORG-91-5105	modified from EPA 3510C and EPA 8270E	CALCULATION
Acridine-d9	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS

Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

PROJECT: CH321.00

SAMPLING SITE: 623 Yonge Street, Barrie, ON

AGAT WORK ORDER: 23T105375

ATTENTION TO: Sara Sutherland

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
BOD (5)	INOR-93-6006	Modified from SM 5210 B	DO METER
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE
Chemical Oxygen Demand	INOR-93-6042	modified from SM 5220 A and SM 5220 D	SPECTROPHOTOMETER
Total Suspended Solids	INOR-93-6028	modified from EPA 1684, ON MOECC E3139, SM 2540C,D	BALANCE
Total Phosphorus	INOR-93-6022	modified from SM 4500-P B and SM 4500-P E	SPECTROPHOTOMETER
Total Kjeldahl Nitrogen	INOR-93-6048	modified from EPA 351.2 and SM 4500-NORG D	LACHAT FIA
Fluoride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Sulphate	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Sulphide	INOR-93-6054	modified from SM 4500 S2- D	SPECTROPHOTOMETER
Phenols	INOR-93-6072	modified from SM 5530 D	LACHAT FIA
Cyanide, SAD	INOR-93-6051	modified from MOECC E3015; SM 4500-CN- A, B, & C	SEGMENTED FLOW ANALYSIS
Total Aluminum	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Antimony	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Arsenic	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Barium	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Bismuth	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Cadmium	MET -93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Chromium	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Cobalt	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Copper	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Iron	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Lead	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Manganese	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Total Molybdenum	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Nickel	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Selenium	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Silver	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Tin	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS

Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 23T105375

PROJECT: CH321.00

ATTENTION TO: Sara Sutherland

SAMPLING SITE: 623 Yonge Street, Barrie, ON

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Total Vanadium	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS
Total Zinc	MET-93-6103	modified from EPA 200.8, 3005A, 3010A & 6020B	ICP-MS

APPENDIX V
WATER BALANCE ANALYSES REPORTS
AND PHOSPHORUS BALANCE
ANALYSIS REPORT



Project: Water Balance
623 Yonge Street, Barrie, Ontario

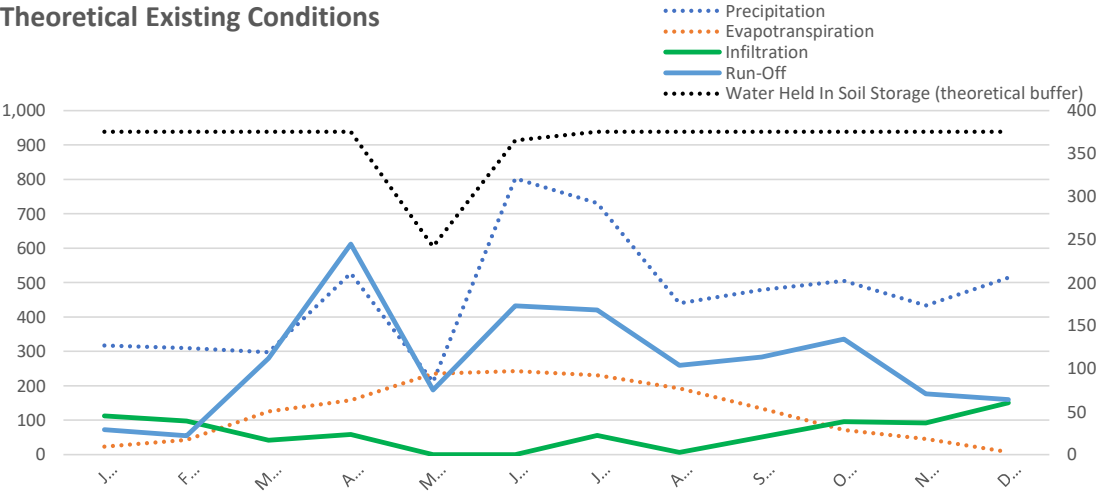
THEORETICAL WATER BALANCE ASSESSMENT - DRAFT

Date: Jan 30,2024
Reviewed By: ZK

Theoretical Existing Conditions

	Precipitation (m3/month)	Evapotranspiration (m3/month)	Water Held In Soil Storage (theoretical buffer) (m3/month)	Infiltration (m3/month)	Run-Off (m3/month)
January	317	24	376	113	73
February	310	42	376	98	55
March	298	126	376	42	280
April	527	158	376	59	613
May	211	235	242	0	188
June	803	243	365	0	432
July	731	230	376	56	420
August	440	192	376	6	260
September	479	134	376	51	284
October	505	72	376	96	336
November	434	45	376	92	177
December	514	8	376	151	160
Minimum (Monthly)	211	8	242	0	55
Maximum (Monthly)	803	243	376	151	613
Average Monthly	464	126	364	64	273
Per Annum	5,569	1,510	-	763	3,278

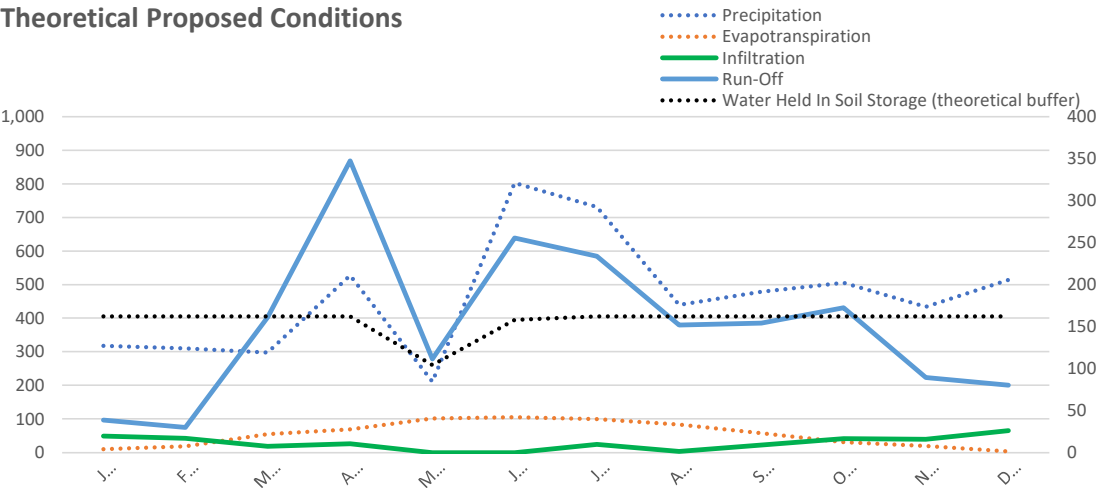
Theoretical Existing Conditions



Theoretical Proposed Conditions

	Precipitation (m³/month)	Evapotranspiration (m³/month)	Water Held In Soil Storage (theoretical buffer) (m³/month)	Infiltration (m³/month)	Run-Off (m³/month)
January	317	10	162	49	96
February	310	18	162	42	75
March	298	54	162	18	402
April	527	68	162	25	869
May	211	102	104	0	278
June	803	105	158	0	639
July	731	99	162	24	584
August	440	83	162	3	379
September	479	58	162	22	385
October	505	31	162	41	431
November	434	20	162	40	223
December	514	3	162	65	200
Minimum (Monthly)	211	3	104	0	75
Maximum (Monthly)	803	105	162	65	869
Average Monthly	464	54	157	27	380
Per Annum	5,569	652	-	329	4,563

Theoretical Proposed Conditions



Project DEVELOPMENT Summary

DEVELOPMENT: 623 Yonge Street, Barrie, Ontario

Subwatershed: Lovers Creek

Total Pre-Development Area (ha):	0.6000	Total Pre-Development Phosphorus Load (kg/yr):	1.09
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Pre-Development Land Use	Area (ha)	P coeff. (kg/ha)	P Load (kg/yr)
High Intensity - Comm/Industrial	0.6	1.82	1.09

POST-DEVELOPMENT LOAD

Post-Development Land Use	Area (ha)	P coeff. (kg/ha)	Best Management Practice applied with P Removal Efficiency	P Load (kg/yr)
High Intensity - Comm/Industrial	0.6	1.82	Other	0.87

Oil/Grit Separator

Post-Development Area Altered:	0.60	P Load (kg/yr)
Total Pre-Development Area:	0.60	

Unaffected Area: **0**

Pre-Development: **1.09**
Post-Development: **1.09**
Change (Pre - Post): **0.00**

0% Net Increase in Load

Post-Development (with BMPs): **0.87**
Change (Pre - Post): **0.22**

20% Net Reduction in Load

DEVELOPMENT: 623 Yonge Street, Barrie, Ontario

Subwatershed: Lovers Creek

CONSTRUCTION PHASE LOAD

Site-Specific Input:

Constant / Lookup:

Calculation:

Sub Area: Entire Site

Duration of Construction (months):	4	R (rainfall / runoff for Lake Simcoe)	90
Duration of Exposed Soil (months):	1	K (soil erodability factor):	0.3
Surface Slope Gradient (%):	0	NN (determined by slope):	0.2
Length of Slope (m):	30	BMP prevention Efficiency:	0%
Slope Area (ha):	0.6	BMP capture Efficiency:	70%
% slope erosion prevention applied to:	1	LS (slope length gradient factor):	0.65
% slope runoff capture applied to:	1	C (portion of year of exposed soil):	0.25
Subwatershed Soil [P] (kg/kg):	0.0004	P (prevention + capture):	0.30
		Soil Loss (kg/year):	1770.383
		Phosphorus Load (kg):	0.24

Developed AREA (ha): 0.60000002384

Total

Construction Phase Phosphorus Load with BMPs (kg):	0.24
Construction Phase Phosphorus Load no BMPs (kg):	0.79

SUMMARY WITH IMPLEMENTATION OF BMPs

**P Load
(kg/yr)**

Pre-Development:	1.09
Construction Phase Amortized Over 8 Years :	0.03
Post-Development:	0.87
Post-Development + Amortized Construction:	0.90

Pre-Development Load - Post-Development Load:	0.22
Conclusion:	20% Reduction in Load

Pre-Development Load - (Post-Development + Amortized Construction Load):	0.19
Conclusion:	17% Reduction in Load

Based on a comparison of Pre-Development and Post-Development loads, and in consideration of Construction Phase loads, the Ministry would encourage the Municipality to:

Approve development as site specific appropriate.