GAMAN CONSULTANTS INC.

UDORA ESTATES WATER BALANCE EVALUATION
REVISION 2
PART LOT 35, CON. 6, TWP UXBRIDGE
REGION OF DURHAM

Prepared for:
2695867 Ontario Inc.

December 2025

File 22012.04

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December 22, 2025

2695867 Ontario Inc.
71 Shannon St.
Toronto, On.
M6J 2E6

Attention: Mr. Jeff Risi and John Cooper

Re: Udora Estates Water Balance Evaluation Revision 2
Part Lot 35, Con. 6, TWP Uxbridge, Durham Region
File 22012.04

GAMAN Consultants Inc. is pleased to submit this hydrogeological report documenting the results of a water balance evaluation for the above noted property. The results of the water balance evaluation show a deficit in infiltration after development, and this is common with developments. There is enough recharge available from rooftops to off set the deficit using low impact development measures.

Yours truly,
GAMAN Consultants Inc.

Gary R. Hendy, P.Eng.
Consulting Engineer

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1.0 INTRODUCTION

1.1 BACKGROUND

This report (Revision 2) provides the results of a hydrogeological assessment carried out by GAMAN Consultants Inc. (GAMAN) in support of a plan of subdivision application for the subject lands owned by 2695867 Ontario Inc. The report was initiated to document the effects of creating hard cover surfaces that prevent recharge from infiltrating to the water table.

By way of background, 2695867 Ontario Inc. owns a 1.94-ha parcel of land situated on Part Lots 34 & 35, Concession 6, Township of Uxbridge within the Hamlet of Udora, as shown in Figure 1. Figure 2 illustrates the layout of the 8 proposed lots and stormwater pond based on a Preliminary Site Grading Plan prepared by SCS, dated December 2025. The subject property has an unopened road right-of-way (0.77-ha) connecting Birdie Smith Court to Ontario Street to the west, which is owned by Township of Uxbridge. The subject land, therefore, has a combined area of 2.71-ha.

WSP Canada Inc. and GAMAN Consultants Inc. completed hydrogeological investigations of the Capris Development during 2019 for Capris Developments. The WSP Report was never finalized, and the subdivision was sold to 2695867 Ontario Inc. GAMAN Consultants was retained to re-evaluate the test data from the 2019 investigations and integrate those study results into this hydrogeological report.

This report is the second revision to the Water Balance because of comments received from the LSRCA and changes to the property. The property owners acquired the vacant lot on the north side of the site where it is proposed to construct the stormwater management pond. The former location of the pond was converted to proposed residential lot 8. Some the significant other changes to this report include LSRCA requests to reduce runoff from rooftops to 50% from 90% of the total precipitation for the purpose of mitigating recharge, and the addition of the roadway area to the water balance.

1.2 STUDY OBJECTIVES & SCOPE

The Conservation Authorities Geoscience Group developed guidelines for hydrogeological assessment submissions related to water balances. The document provides information for consultants to consider and address in technical submissions for a development site that are within a Significant Groundwater Recharge Area (SGRA). The purpose of this evaluation was to assess the changes in recharge to the site for input into appropriate mitigation methods to be implemented to maintain groundwater recharge.

The tasks required to complete the work program included:

- Background review of the physical setting of the site including physiography, surficial geology and groundwater.
- A site inspection of the site and surrounding area.
- Review soils and groundwater monitoring data from boreholes installed by other project team members.
- A review of local water well records and existing services around the site.
- Preparation of a hydrogeological report to address the 2013 Conservation Authority Guidelines for a water balance.

This report documents the study findings of these investigations.

2.0 PHYSICAL SETTING

2.1 PHYSIOGRAPHY, SURFICIAL GEOLOGY AND DRAINAGE

The physiography of the Site is illustrated in Figure 3. The study area is situated within the Peterborough Drumlin Field Physiographic Region as described by Chapman and Putnam (1984) as represented in the OGS Earth application accessible through the Ministry of

Northern Development and Mines Web Page. A small portion of the northeast corner of the Site lies within the Simcoe Lowlands Physiographic Region. The Peterborough Drumlin Field is characterized by a rolling till plain that is dotted with oval-shaped hills known as drumlins. Although drumlins flank the site to the east, south and west, there are no drumlins noted within the Site boundary. The till plains and drumlins dominate the landscape at a regional scale. Organic deposits of peat and muck are present in the valleys.

Surficial geology is illustrated in Figure 4. The site is situated on dominantly till-like soils comprised of heterogeneous mixtures of sand and silt with some gravel and clay. The sandy overburden west and north of the site are distinct from the surficial soils east of the site and reflect the two physiographic settings described above.

The bedrock beneath the study area is mapped as limestone/dolostone/shale/arkose/sandstone of the Simcoe Group; Lindsay Formation (Ontario Geological Survey, 2011) as illustrated on Figure 5. The depth to bedrock is estimated to be between 30 to 40 metres below ground surface (m bgs), based on overburden thickness mapping (Gao et al., 2006).

The Site is located within the Lake Simcoe Watershed. The local topography of the Site slopes from the south at an elevation of 250 metres above sea level (masl) to the north, at an elevation of approximately 240 masl. Runoff drains to the north into a drainage ditch along Ravenshoe Road and is inferred to flow into a tributary which connects to the Pefferlaw River, and subsequently Lake Simcoe (Figure 6).

2.2 HYDROGEOLOGY

The hydrogeologic setting was interpreted based on the local water well record database maintained by the MECP and plotted on Figure 7. The Oak Ridges Moraine Groundwater Program was also referenced to support the interpretation.

As noted within the test pit logs, Table E-1, the shallow overburden is comprised mostly of silty-sand to sandy-silt of varying thicknesses and fine sand, typically a minimum of 1.5 metres and up to more than 1.8 metres thick. One test pit documented silt. Particle size distribution analyses from soils from the test pits (Appendix E) are representative of shallow soils and illustrate the gradation of the soils in the uppermost portion of the overburden. The borehole logs for MW17-1, MW17-2 and MW17-3 identify a silty-sand to sandy-silt layer extending to at least 6.7 metres below ground surface (mbgs). The water well record submitted for the on-site well TW1 also noted a sandy composition to a depth of 5.7 mbgs. It is inferred, based on the drilling records, that the soil composition becomes finer grained with depth.

The regional hydrogeologic setting of the area is described below with the visual aid of hydrostratigraphic sections 'A-A' and 'B-B' in Figures 8 and 9 respectively.The hydrostratigraphy consists of the following types of units:

- Upper Unconfined Aquifer
- Upper Aquitard
- Lower Overburden Aquifer
- Bedrock Aquifer

The Upper Unconfined Aquifer is formed within the surficial sand plain. This unit is limited in both vertical and lateral extent, based on the physiographic setting. The unit could be a source of groundwater for shallow dug and bored wells that would extend through this unit and into the underlying till-based aquitard. Domestic wells that might extend through this unit could experience water shortages based on seasonal variations in the water table.

The Upper Aquitard is generally till-like at a depth of below 3 metres, and characteristic of Newmarket Till-aged deposits. This aquitard is comprised of mostly fine-grained sediments that behave as a protective layer above the water-bearing units. Portions of the aquitard

described as clay, or as sand containing a significant component of clay, will have reduced permeability. The aquitard acts as a barrier to retard the vertical movement of groundwater from the ground surface to the underlying aquifers from which water supplies will be obtained by the development. This hydrostratigraphic unit should buffer groundwater quality in the supply aquifer from shallow sources of contaminants discharged near surface. Some portions of the aquitard may contain coarser fractions that allow wells to extract enough groundwater for domestic use.

The Lower Overburden Aquifer is comprised of granular sediments of limited lateral and vertical extent. The aquifer ranges from less than 1 metre to more than 17 metres thick. The aquifer may be non-existent in some of the study area. Many of the wells on-site and off-site terminate within this aquifer. The Lower Overburden Aquifer is confined beneath the overlying Upper Aquitard. Where encountered this aquifer tends to yield sufficient water quantity for domestic use.

The fractured Limestone Bedrock Aquifer is also confined beneath the Upper Aquitard and the Lower Overburden Aquifer, and it extends across the study area. The depth to limestone is generally greater than about 20 metres below grade as observed at the King Coles Ducks Test Well TW09-2 (Figure 8). The physical evidence from previous reporting suggests that the upper portion of the bedrock aquifer and the lower overburden aquifer are hydraulically connected to one another. Either the Lower Overburden Aquifer (where encountered), or the fractured Limestone Bedrock Aquifer, is proposed as the source of groundwater for this development. The water quality in these aquifers is protected from activities at surface by the Upper Aquitard.

2.3 WATER WELL RECONNAISSANCE SURVEY

The Site is surrounded by rural residential properties to the north, east and south and borders a natural heritage system to the west, which currently remains undeveloped. No landfills, salt

domes, or any other land use that would be considered major pollution sources are present within 500 metres of the Site.

Existing agricultural, domestic fertilizers and on-site sewage disposal systems would be sources of nitrogen to the shallow groundwater regime. A survey was conducted on September 25 and 27, 2018 and October 3, 2018, to identify current users of groundwater within 500 metres of the Site. Residents were asked to participate on a voluntary basis and were provided with a letter outlining the purpose of the survey. The survey was administered by a representative from WSP at the time of visitation, or the survey form was left with the resident at their request. Homeowners who were not present were left with the letter outlining the purpose of the survey and the survey form itself. The information gathered from this program was used to supplement information in the (MECP) Water Well Record database. Figure 7 shows the water well locations based on the MECP Water Well Information Service (WWIS). Information contained within the WWIS is summarized in Table A-1, Appendix A.

We understand that WSP staff visited 109 properties in the area surrounding the Site to assess private water supply wells. Thirteen responses to the survey were received. This reflects a response rate of 12%. Some residents were willing to answer a few questions regarding the well but would not allow an inspection. The responses have been summarized in Table A-2 in Appendix A.

The results of the survey indicate that there is a mixture of drilled and dug wells in the surrounding area. The majority of respondents indicated that they had good water pressure with the exception of the properties at 685 Ravenshoe Road, 25 Bagshaw Crescent, 28 Bagshaw Crescent, and 52 Victoria Road. Bagshaw Crescent is located immediately south of the proposed development. Issues related to water pressure can result from the size, age and type of pump to the depth the pump, or pump intake in the well and/or the yield of the well.

Wells that were inspected ranged from 8.2 mbgs to 46 mbgs in depth. One resident noted that their well became contaminated in 2006; however, for privacy issues we have not disclosed the location. No further information on the type of contamination was provided. An ultraviolet treatment system was installed and the resident no longer drinks the water.

The LSRCA requested the water well survey be updated because it is seven years old. In our experience and opinion, the results of the survey remain relevant today and the LSRCA requirement can be relaxed for this aspect of its Guideline for the following reasons:

1. This site is surrounded by a mature hamlet with dwellings that have existed for many decades and little new development around this site.
2. Groundwater monitoring for the Udora Estates Development south of this site for more than a decade showed no detectable changes in groundwater levels for the shallow and deep aquifers. Those reports were reviewed by the Township's Hydrogelogist.
3. The Township of Uxbridge commonly requires a groundwater monitoring and mitigation program to be implemented for developments on private services like these eight proposed lots.

3.0 SITE INVESTIGATIONS

3.1 SHALLOW SUBSURFACE SOILS

WSP excavated ten (10) test pits on-site on May 3, 2019, that are designated as TP19-1 to TP19-10 as shown on Figure 2. The field investigation was carried out under supervision of WSP to assess the subsurface soils and shallow groundwater conditions with respect to the general suitability of the Site to accommodate private sewage disposal systems. Soil samples were obtained from the test pits for visual examination and textural classification. Ten (10) samples were submitted to the WSP soils laboratory for grain size distribution analysis. The test pit logs and particle size analysis reports are presented in Appendix E.

This information was considered in preparation of the water budget evaluation for the site. Envision Consultants also relied on this information for the preparation of the on-site sewage disposal systems because their design team worked on this project as former staff of WSP.

3.2 GROUNDWATER MOVEMENT

GAMAN Consultants completed seasonal groundwater monitoring between December 2022 and November 2024. The results are documented in Table E-2, Appendix E. The interpreted direction of shallow groundwater movement is illustrated in Figure E-1, Appendix E. Shallow groundwater flows in a northwest direction towards a tributary of Pefferlaw River.

Groundwater levels show seasonal variations with spring-time highs and late summer lows. This is typical for shallow groundwater. The monitors on the low-lying north side of the site may have defective grout seals given the age of the monitors and this could be a reason for the spikes in groundwater levels documented in the report.

3.3 GROUNDWATER QUALITY

Groundwater samples were collected from the three shallow monitoring wells at MW17-1, MW17-2 and MW17-3 on February 20, 2019, to assess background water quality parameters within the shallow groundwater regime. The laboratory results of these samples are included in Appendix D. The analytical results indicate dissolved organic carbon (DOC), and hardness concentrations were above Criteria C of the Ontario Drinking Water Quality Standards (ODWQS) for each of MW17-1, MW17-2 and MW17-3. Total alkalinity was also greater than the guidelines for MW17-1 and MW17-3 with values of 510 mg/L and 517 mg/L respectively. These parameters are not a health-related concern in drinking water and can be

effectively managed by point-of-use treatment systems. The groundwater samples were also analyzed for nitrate to determine the existing background nitrate concentration within the shallow groundwater regime. The groundwater had nitrate concentrations of 0.201 mg/L to 2.12 mg/L, with an average concentration of 0.88 mg/L at the time of testing. This is a reasonable estimate as the background nitrate concentration in the proposed adjacent development to the west of the Site (King Cole Ducks development) had nearly non-detectable concentrations of nitrate (0.1 mg/L) at the time of testing.

Table D-2, Appendix D includes additional water quality information from the 2024 nitrate and orthophosphate monitoring program that was implemented to assess the suitability of servicing this site with between 7 and 9 septic systems. The Certificate of Analysis were not available from the WSP report of 2019 and we have added the certificates for the 2024 monitoring program. Groundwater quality remains at background levels in the shallow aquifer on-site.

3.4 SINGLE WELL RESPONSE TESTS

Single well response tests were performed to estimate the hydraulic conductivity of the saturated soils adjacent to the well screens at MW17-1, MW17-2 and MW17-3.

WSP performed rising head tests using a bailer to remove water from the monitor. A data logger and pressure transducer were used to record the responses. The tests were completed on February 20, 2019. The data was evaluated using software and the graphical results are presented in Appendix E. Hydraulic conductivities ranged from $2.6x10^{-7}$ to $1.6x10^{-6}$ m/sec. The range of values is consistent with the observed materials.

4.0 WATER BUDGET

4.1 CLIMATE DATA

As precipitation falls to the ground in the form of rainfall or snow, it is subject to components of the hydrological cycle. Water will generally runoff, infiltrate, evaporate or be subject to transpiration from plant uptake. Evaporation and transpiration are commonly grouped together as evapotranspiration while runoff and infiltration are grouped together as water surplus. The water budget is represented in a simple form as follows:

Water In = water Out

P + EI = ET + IR + RO + EO

Where:

P = Precipitation

EI = External Inputs (Run-on, irrigation and vertical/lateral transfers)

ET = Evapotranspiration from plant uptake and evaporation.

IR = Infiltration Recharge

RO = Run-off

EO = External Outputs (water taking and vertical/lateral transfers)

Lake Simcoe Conservation Authority produced a technical document entitled ***"Lake Simcoe Data: A Reference Document to Support the Completion of Water Balance Assessments.", April 2017, Version 1.*** This document was prepared to standardize climatic data used in water balance evaluations. The data are intended to provide reasonable estimates for these evaluations; however, the qualified professional is expected to use judgement when using these data with site specific data.

The climate data for the Pefferlaw Brook Subwatershed documents the mean precipitation at 897 mm/yr. This average precipitation was used to advance the water balance evaluation for this site.

4.2 GROUNDWATER RECHARGE ESTIMATES

The following sections document estimates of groundwater recharge using LSRCA suggested values and verifying these values against other methods for consistency before selecting a suitable infiltration rate. Methods 1 and 2 are based on MECP Hydrotechnical Guidelines and Method 3 relied on values from the Oak Ridges Moraine Groundwater Program.

4.2.1 MECP Recharge Estimates

Method 1

The MOEE Hydrogeological Technical Information Requirements for Land Development Applications (1995) includes Tables 1 and 2 derived from hydrologic analysis for assessing peak runoff for storm water management.

Table 1 is premised on soil types. The silty sand to sandy silt soils at this site are consistent with recharge rates ranging from 150-200 mm/yr. Three of the test pits showed dominantly sandy soils and one showed silt. The upper range of this infiltration rate of 200 mm/yr is a reasonable average recharge rate using this methodology.

Method 2

Recharge rates derived from Table 2 of the MECP Hydrotechnical Guidelines considers infiltration factors related to:

- Topography (range of 0.1 to 0.3)
- Soil type (range of 0.1 to 0.4)
- Vegetation cover. (range of 0.1 to 0.2)

Table C-1, Appendix C documents the infiltration factors for pre-development and post-development scenarios at the site using this method. Topography was evaluated using topographic information from the site with an average slope of about 5% or 50m/km as shown

in Figure C-1, Appendix C. The site reflects steep slopes with a topographic factor of 0.1 for pre-development as shown in Table C-1. Site grading usually makes the slopes gentler than the original topography. The gentler the slope, the higher the infiltration factor and higher the recharge rate post-development. Though grading could enhance recharge compared with pre-development slope factors, we have been conservative and assumed the topographic infiltration factor remains at 0.1 and continues to reflect steep slopes after grading.

Soils at the site are comprised of medium loam to loamy sand as described in Section 3.1 and as shown on Figure 10. The soils reflect an infiltration factor of 0.35 as shown in Table C-2 for pre-development and post-development.

Cover reflects the presence or absence of a canopy that can shade parts of the site and reduce evaporation. The site in its pre-development state is dominantly shrubs with some treed areas consistent with a cover factor of 0.15 and we assumed the same value for post development. The total infiltration factors pre-development and post-development are estimated at 0.60.

The Pefferlaw Brook Subwatershed Table documents precipitation surplus rates for various hydrological soil groups. The grain size analyses from ten test pits were plotted on Figure 10 to provide input to selecting appropriate soils groups for evaluating precipitation surplus at the site. Most of the soils across the site range from medium loam to sandy loam with one test result showing silt loam. The soils groups in the LSRCA Pefferlaw Brook Subwatershed Table identify Silt loam and Sandy Loam as two groups to assess water surplus for range of soils at the site. This is a small site at 2.71 ha. and it was deemed appropriate to simplify the selection of a soils group based on the average precipitation surplus values for Sandy Loam and Silt Loam from the table. The average precipitation surplus value for pasture and shrubs within the Sandy Loam to Silt Loam is 314 mm/yr. for pre-development. The average precipitation surplus value for urban lawns in post-development within the Sandy Loam to Silt Loam is 321 mm/yr.

Recharge is calculated as the product of water surplus (precipitation surplus) x Total Infiltration Factor (0.60). The predevelopment recharge rate for the site is 188 mm/year and the post-development recharge rate for urban lawns is 193 mm/year.

4.2.2 ORMPG Recharge Estimates

Method 3

The Oak Ridges Moraine Groundwater Program on-line data visualization tool was used as a guide for evaluating recharge rates. We reviewed the recharge model for the area and presented the information in Figure 11. The recharge rates within various blocks (or cells), at or adjacent to the site, show recharge rates ranging from about 121 to 562 mm/yr. The lower recharge rates appear to be influenced by urban development with larger impervious areas. The subject property is located mostly within recharge rate cells of 192 mm/year, and this is consistent with recharge rates calculated for this site in Section 4.2.1.

4.3 PRE-DEVELOPMENT & POST-DEVELOPMENT WATER BUDGETS

The existing lands are undeveloped. There are no impermeable surfaces at the site and the soils have been shown to be comprised of heterogeneous mixtures of silty-sand to sandy-silt associated with loamy sand to medium loam. Runoff and infiltration for the pre-development conditions of the site were based on water budget information presented in previous sections. Table C-2 documents the runoff and recharge rates for the pre-development and post-development scenarios.

The pre-development recharge rate for the undeveloped lands was calculated at 5,106 m^3/year based on a recharge rate of 188.4 mm/year. Runoff was calculated at 3,404 m^3/year and is expected to be conveyed off-site.

Sources of recharge for post-development include natural infiltration on urban lawns. The impermeable areas of the site include the lined stormwater pond, roads, dwellings and driveways. The total infiltration post-development on urban lawns is estimated at 4,031 m^3/year. Table C-2 documents a recharge deficit of 1,074 m^3/year for the site, equivalent to a reduction of recharge calculated at 21%.

4.4 MITIGATION

Mitigation is recommended to maintain pre-development groundwater recharge rates and to minimize or eliminate compensation fees to LSRCA. Roof top runoff is a source of clean water to off set the recharge deficit. Table C-3 documents the rooftop area at 297 m^2 for each dwelling. We understand SCS used this area to calculate impervious surfaces in the preparation of the SCS Drainage Area Figure W.1, dated December 2025 as shown on Figure 12.

In previous submissions to LSRCA for other developments, up to 90% of the total precipitation was used and permitted from rooftops. In the most recent LSRCA comment, 50% was recommended as the allowable percentage of rooftop area. This evaluation has applied this 50% value; however, higher values may be considered in future submissions if necessary. Rooftop runoff could provide 1,066 m^3/year of water to offset essentially all of the recharge deficit calculated at 1,074 m^3/yr.

In summary, it is possible to mitigate the recharge deficit at this site using clean runoff from rooftops.

5.0 CONCLUSIONS AND RECOMMENDATIONS

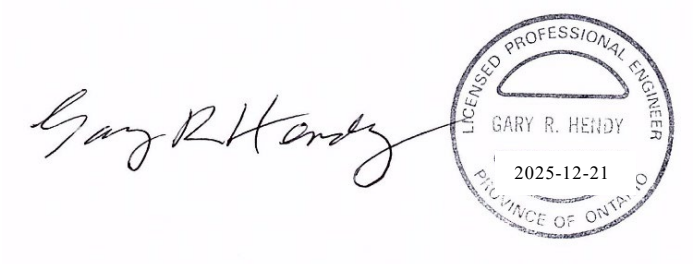
The conclusions and recommendations presented below are premised on the data collected and reviewed as part of these investigations:

- The site is predominantly located within the Peterborough Drumlin Field Physiographic Region while a small portion lies within the Simcoe Lowlands Physiographic Region.
- Local topography at the site slopes from the south to the north. Drainage is to the north towards a drainage ditch along Ravenshoe Road that discharges into a tributary of Pefferlaw River.
- The surficial soils at the site are comprised mostly of sandy silt-silty sand, and sandy soils. One test pit location showed silt.
- Shallow groundwater movement is from south to north through the site.
- A water well reconnaissance survey was conducted at 109 properties surrounding the Site. The results of the survey indicated that the majority of respondents have adequate water quantity.
- Groundwater monitoring data for more than a decade at the Udora Estates development on the south side of the site showed essentially no detectable changes in shallow or deep groundwater levels to warrant updating the results of the water well survey as suggested by LSRCA.
- Groundwater quality at the on-site shallow groundwater monitors showed the presence of dissolved organic carbon (DOC), alkalinity, and hardness at concentrations above the aesthetic or operational guidelines of the Ontario Drinking Water Quality Standards (ODWQS). The measured parameter values do not restrict the ability to use this water for drinking water purposes. All other parameters tested were less than or within ranges prescribed by the ODWQS.
- The average background nitrate concentration in shallow groundwater in 2019 was 0.86 mg/L and is below the ODWQS of 10 mg/L. Groundwater quality from nitrate and

orthophosphate monitoring during 2024 continues to show groundwater quality remains at background concentrations in the shallow aquifer.

- Hydraulic conductivity tests performed at the three shallow monitors provides estimates of hydraulic conductivity ranging from $2.6x10^{-7}$ and $1.6x10^{-6}$ m/sec. The range of values is consistent with the observed materials.
- The site is located outside of any defined Wellhead Protection Areas.
- The recharge rates for the shallow soils observed at this site were estimated at 189 mm/year for pre-development and 193 mm/year for post-development areas. These values are consistent with the recharge rates documented in the Oak Ridges Moraine Groundwater Program.
- The pre-development recharge was calculated at 5,106 m^3/year and the post-development recharge rate was calculated at 4,031 m^3/year. The recharge deficit caused by construction of hard covered surfaces in the post-development scenario for this site is calculated at 1,071 m^3/year and represents about a 21% reduction in recharge.
- Sources of clean runoff to off set the deficit in recharge are available from roof runoff. The volume of runoff available from these sources effectively mitigate the estimated recharge deficit for the site. LID measures to promote infiltration include advanced swale infiltration measures proposed by SCS.

Respectfully Submitted,
GAMAN CONSULTANTS INC.



Gary R. Hendy, P.Eng.
Consulting Engineer

6.0 LIMITATIONS AND USE

This report has been prepared for the exclusive use of 2695867 Ontario Inc. for their exclusive use in the evaluation of the area for the proposed development. GAMAN Consultants Inc. accepts no responsibility for any damages incurred by any third party as a result of decisions made, or actions taken based upon the information contained within this report.

All background information used in the preparation of this report has been relied upon in good faith, and GAMAN does not accept any responsibility for any misstatements, inaccuracies, or deficiencies contained in those documents or records. The information contained in this report should be evaluated, interpreted and implemented only in the context of the assignment.

The findings and conclusions included in this report reflect our best judgement in light of the information available at the time of report preparation and site inspection and are valid only at the date of issuance. If additional information is provided in the future, such as the results of additional site-specific assessments or monitoring, GAMAN will be pleased to re-evaluate our conclusions contained within this report, and issue amendments, as required.

7.0 REFERENCES

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Ministry of Environment Conservation & Parks

Water Well Records

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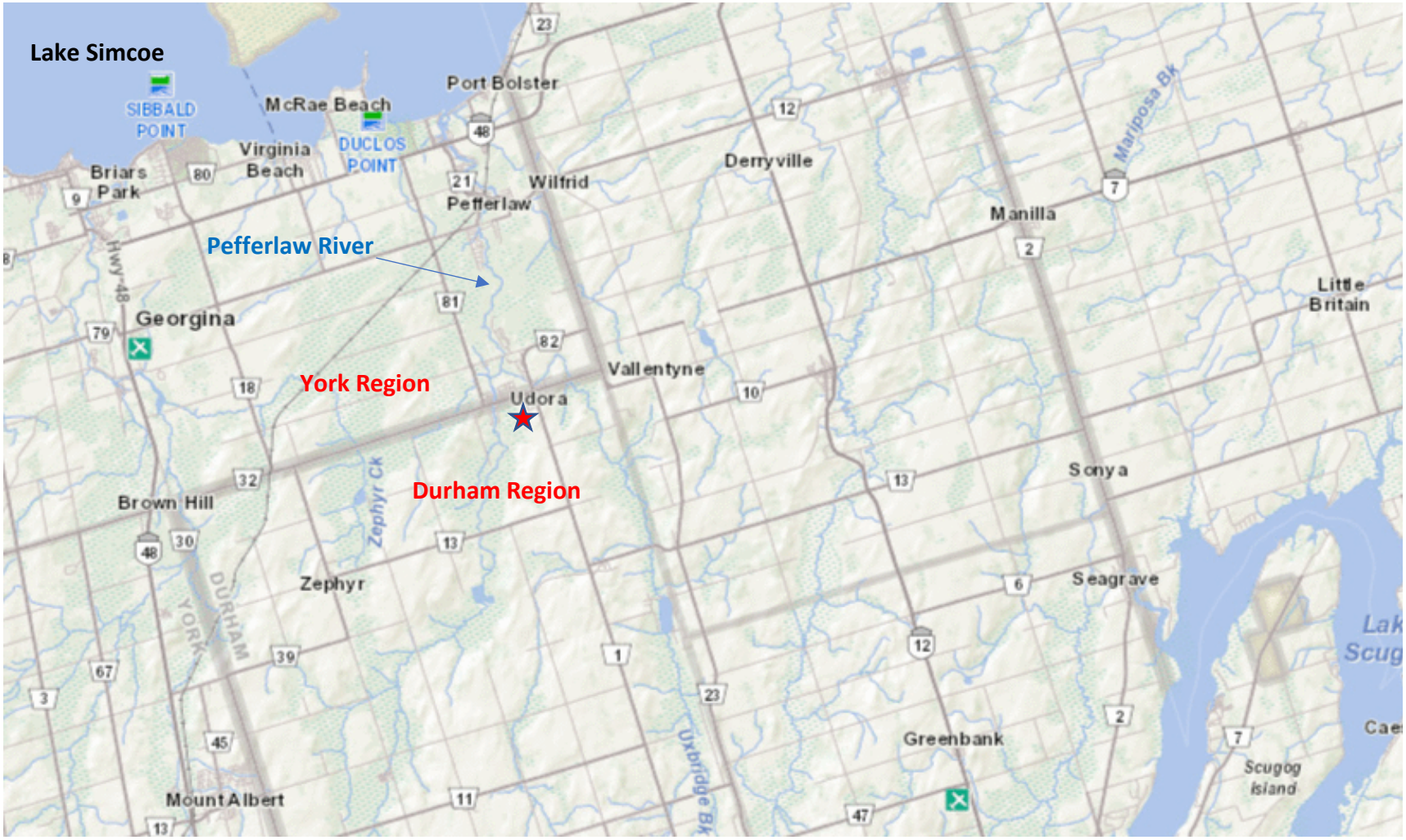
FIGURES



NOTES

★ Site Location

Site Location

Udora Estates Water Balance Evaluation, Revision 2

Part Lot 35, Con. 6, TWP Uxbridge

For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

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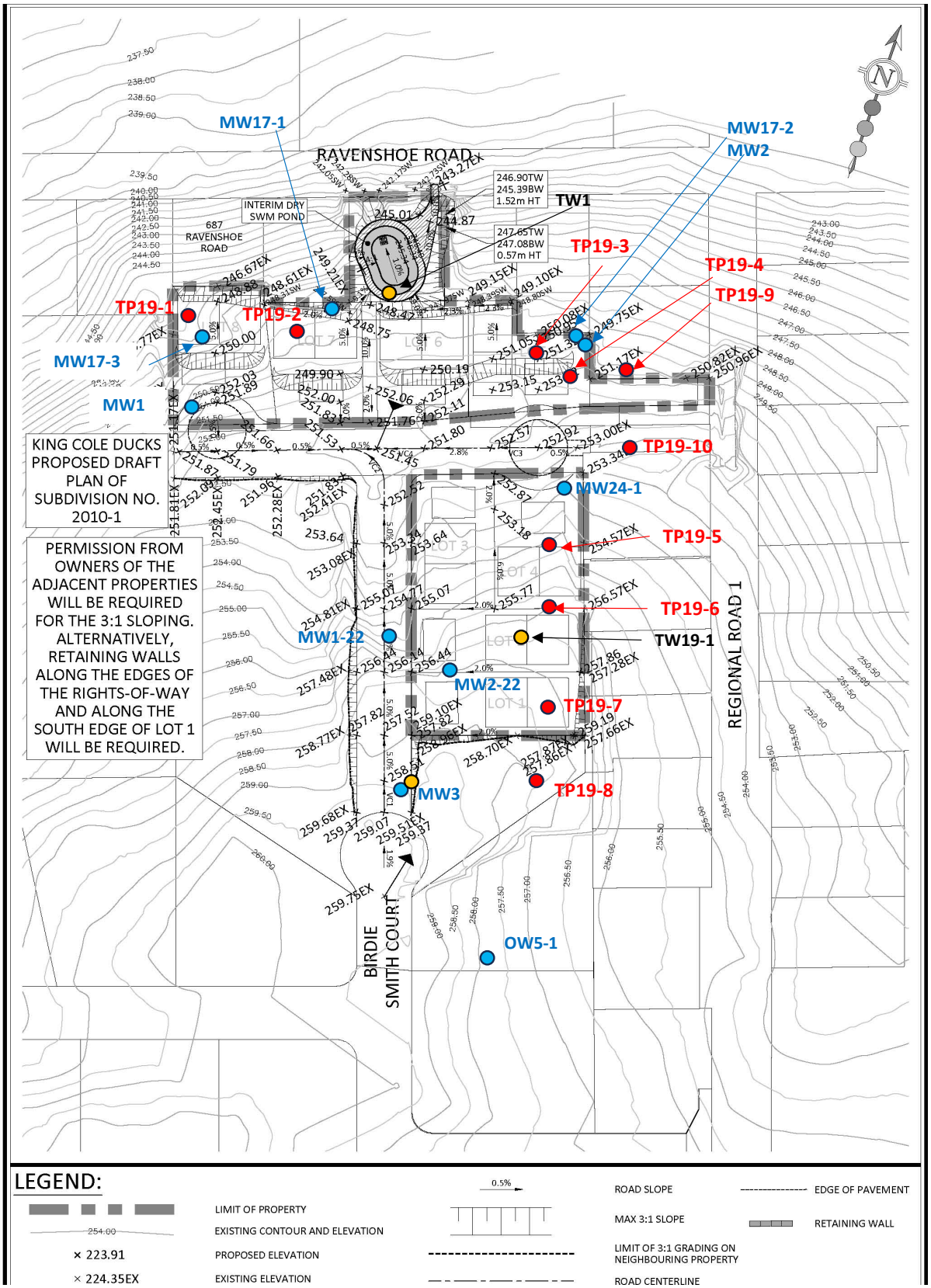
Figure 1



NOTES:

Test pit and monitor locations estimated from other maps

Map Source :SCS FSSR Preliminary Grading Plan Fig. 5.1, Dated Dec. 2025

TP19-1 Test pits location (see Envision Sept 2022 Fig. 2 Plan)

MW17-1 Groundwater Monitor Location

TW1 Water Supply Test Well Location

Site Plan

Udora Estates Water Balance Evaluation, Revision 2

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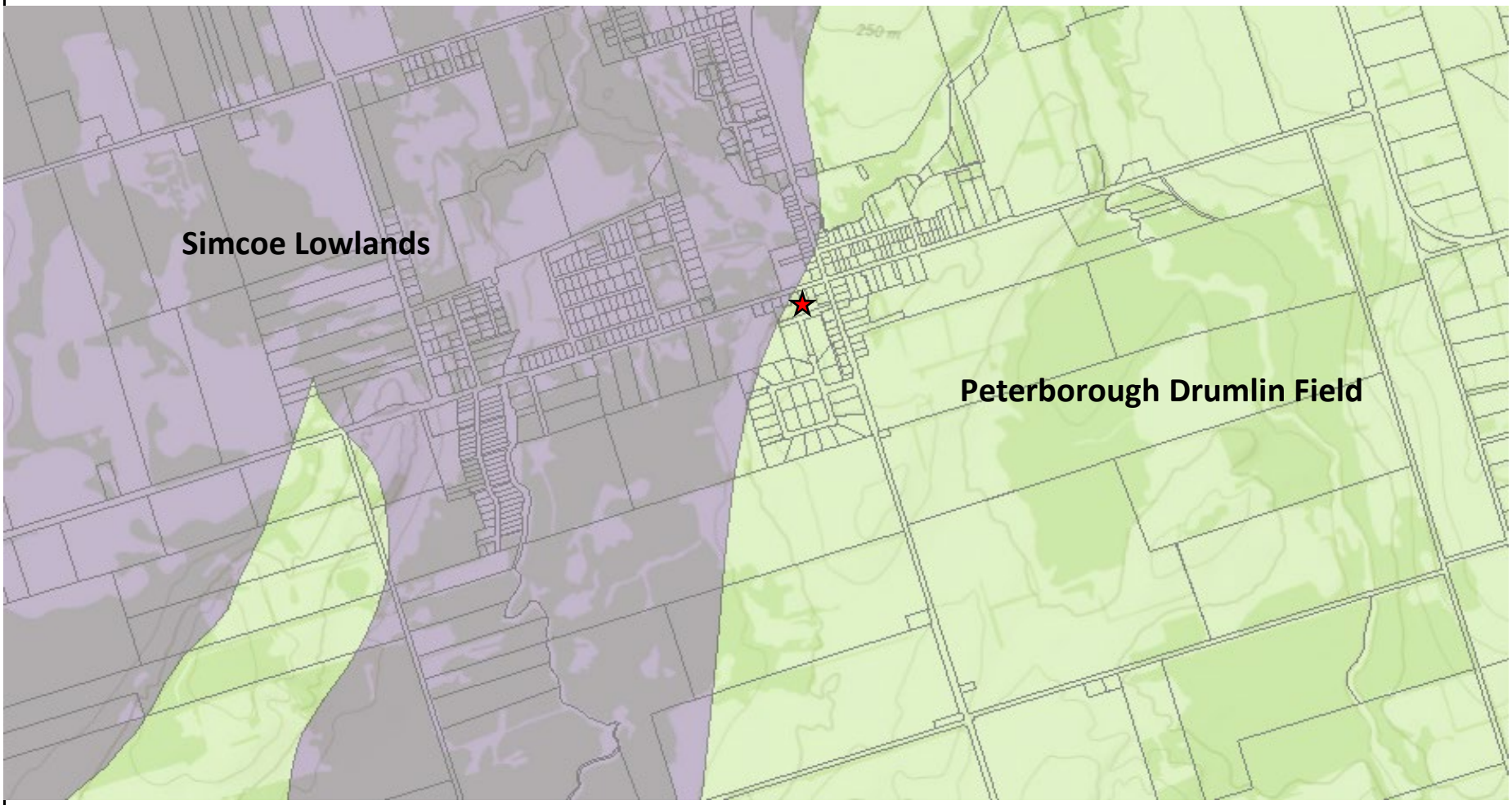
Figure 2



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Physiography

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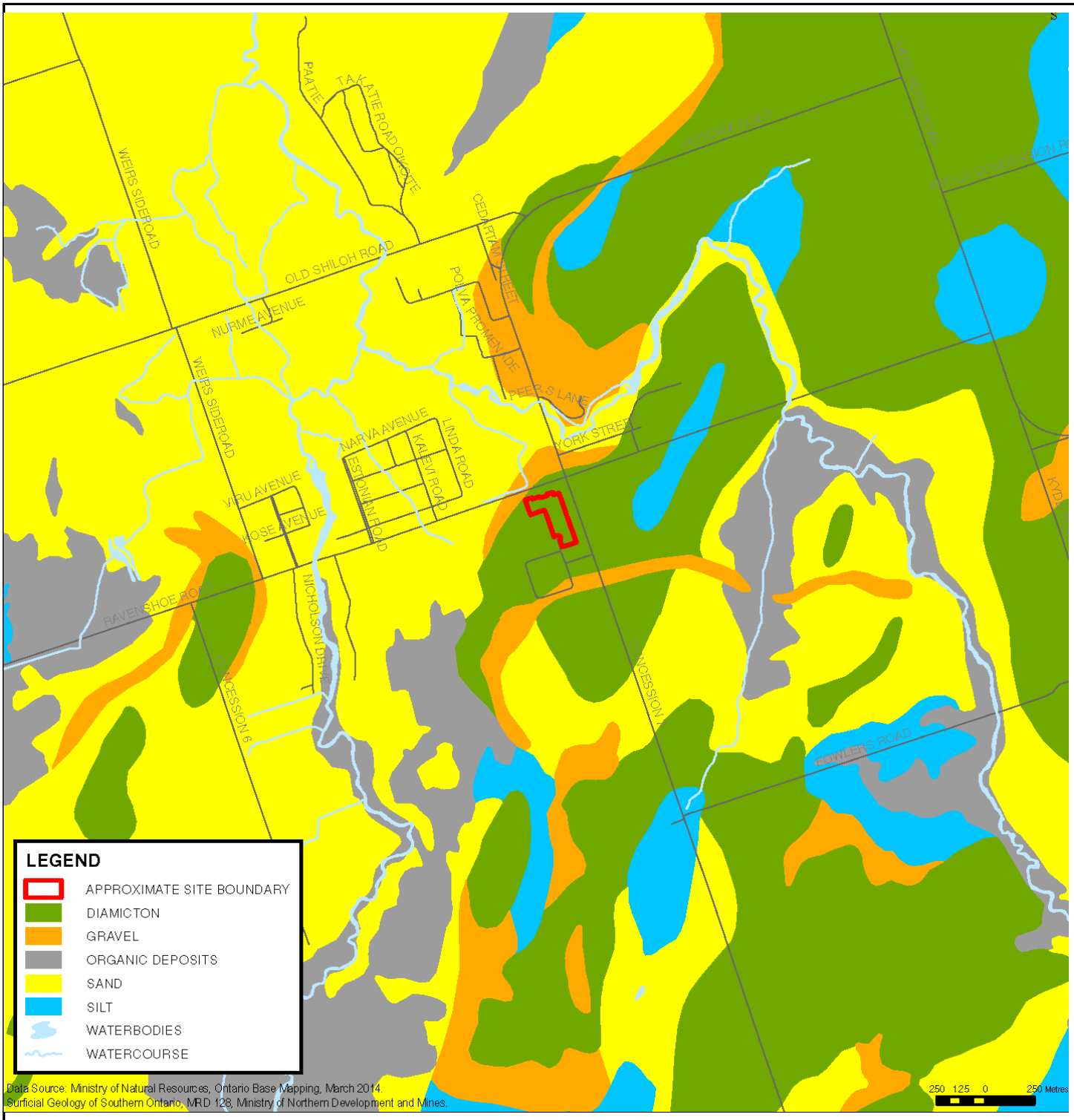
Figure 3



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SURFICIAL GEOLOGY

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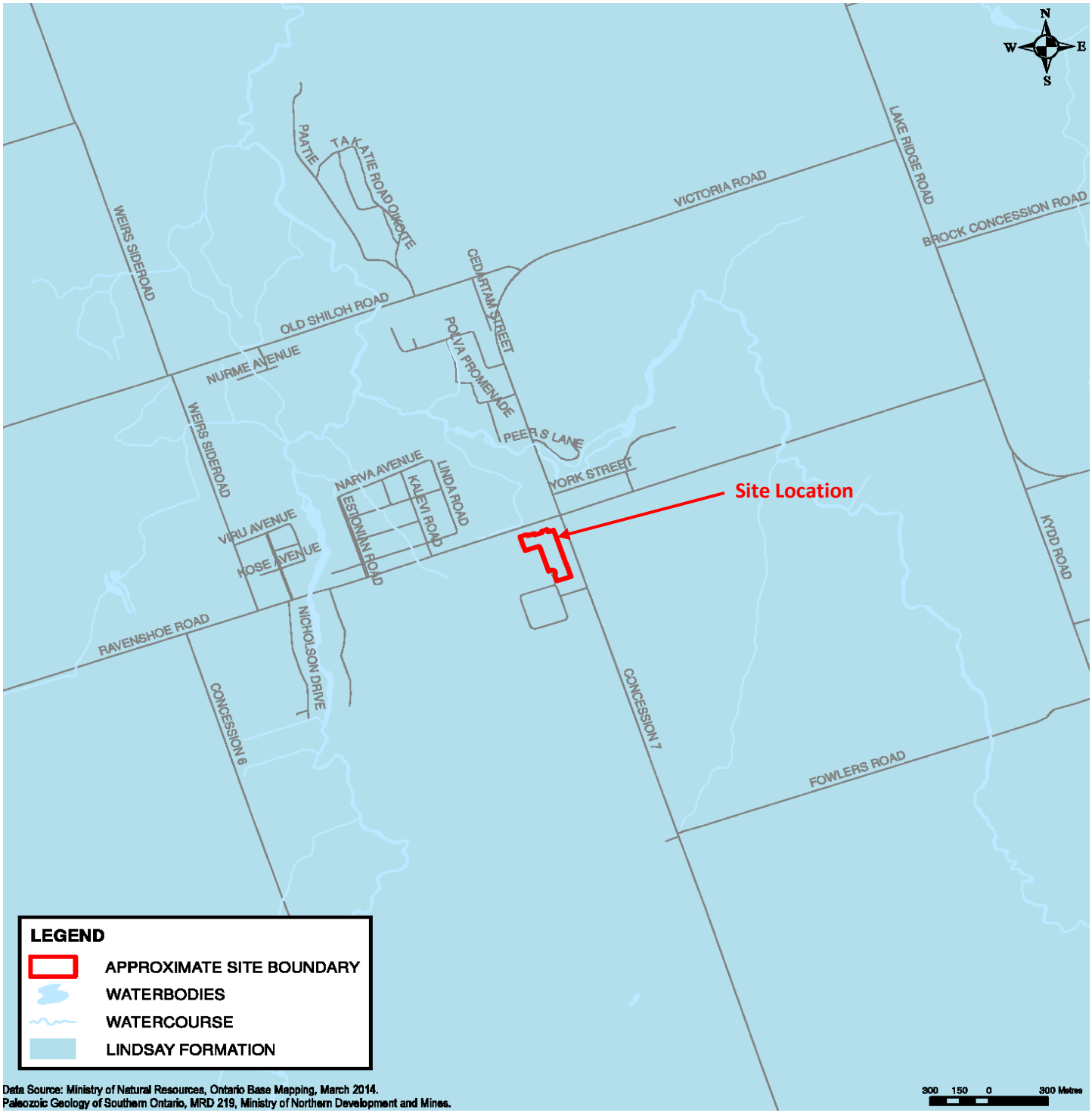
Figure 4



NOTES

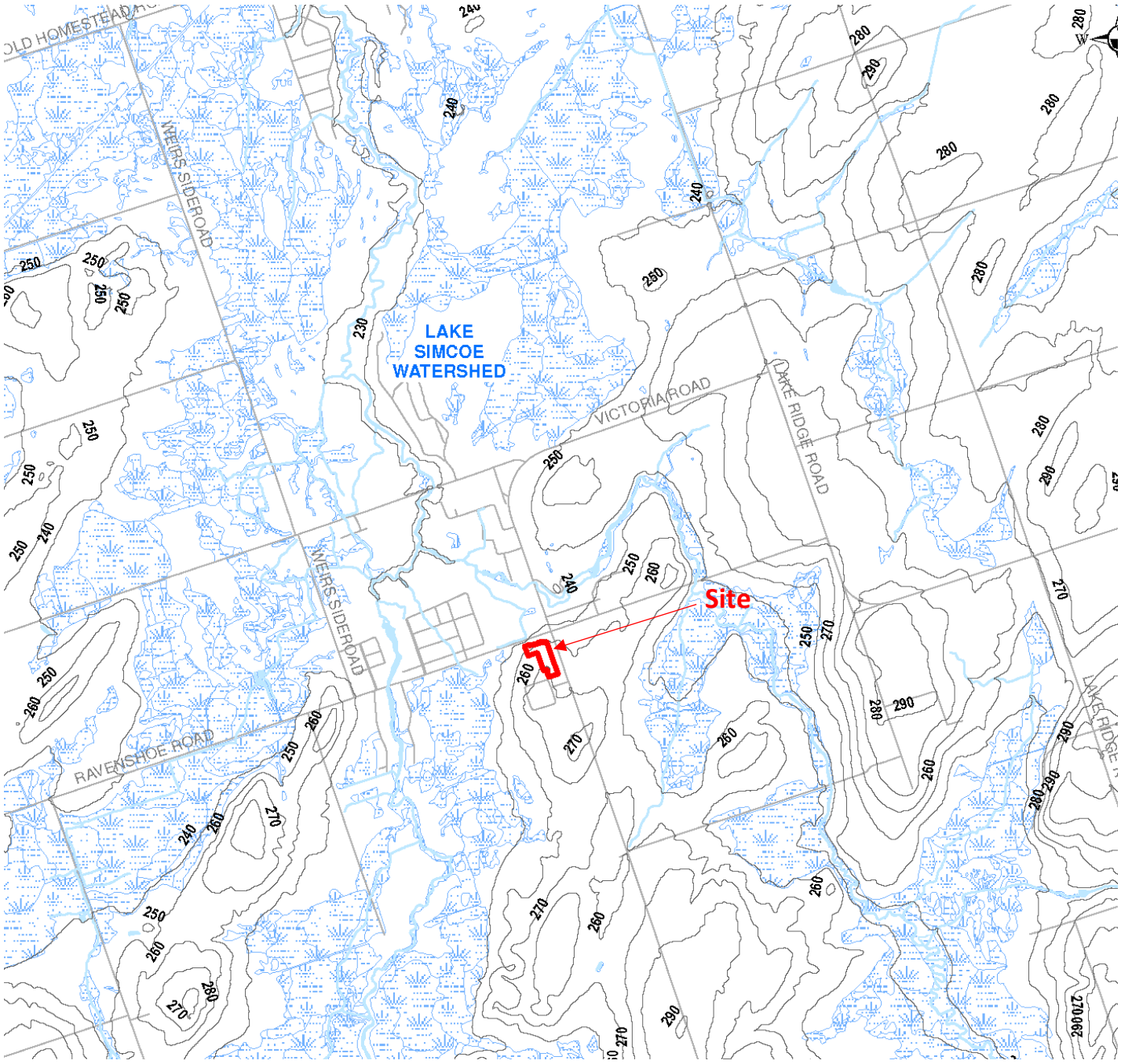
Bedrock Geology

Udora Estates Water Balance Evaluation, Revision 2
Part Lot 35, Con. 6, TWP Uxbridge
For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

GAMAN Consultants Inc.

Figure 5



NOTES

Drainage

Udora Estates Water Balance Evaluation, Revision 2

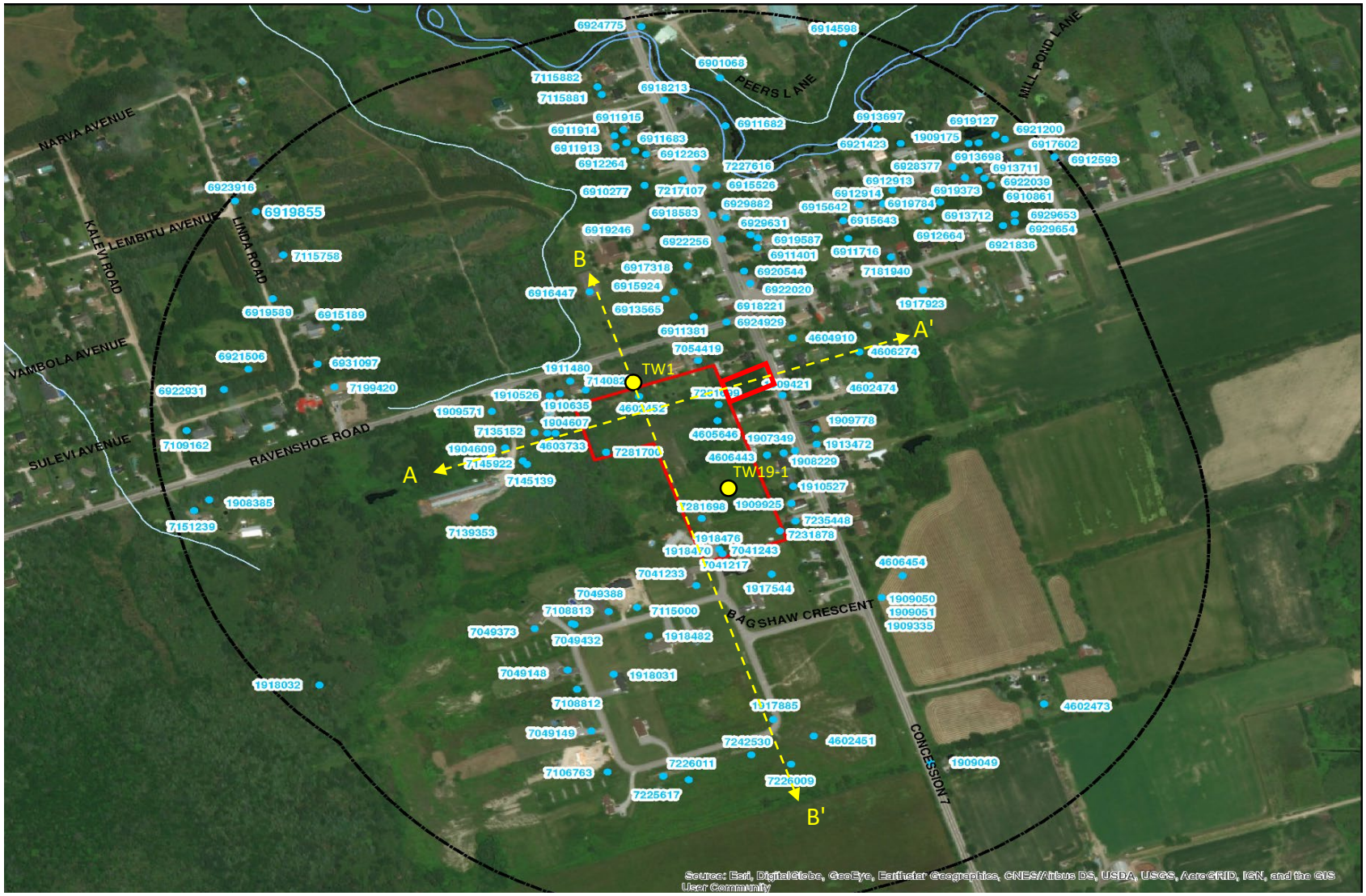
Part Lot 35, Con. 6, TWP Uxbridge

For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

GAMAN Consultants Inc.

Figure 6



NOTES

Site Location

B ◄- - - - - - - ► B' Line of Cross Section

Water Well Location Map

Udora Estates Water Balance Evaluation, Revision 2

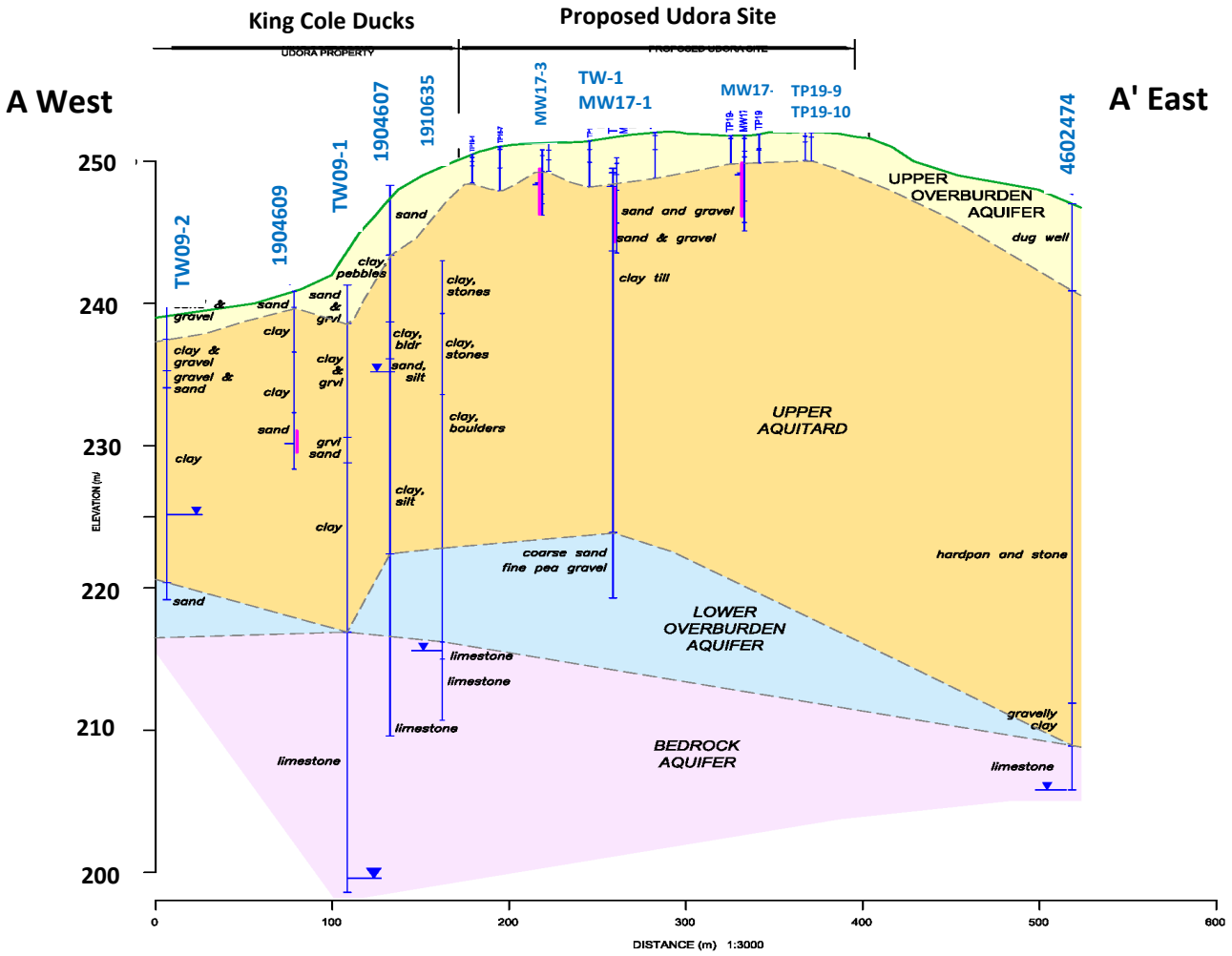
Part Lot 35, Con. 6, TWP Uxbridge

For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

GAMAN Consultants Inc.

Figure 7



NOTE:
THE ACTUAL SOIL STRATIFICATION HAS BEEN VERIFIED FROM DATA OBTAINED AT THE BOREHOLE AND TEST PIT LOCATIONS ONLY. THE INFERRED CONTACTS SHOWN ARE BASED ON GEOLOGICAL EVIDENCE AND THESE MAY VARY FROM THOSE SHOWN BETWEEN BORINGS

NOTES

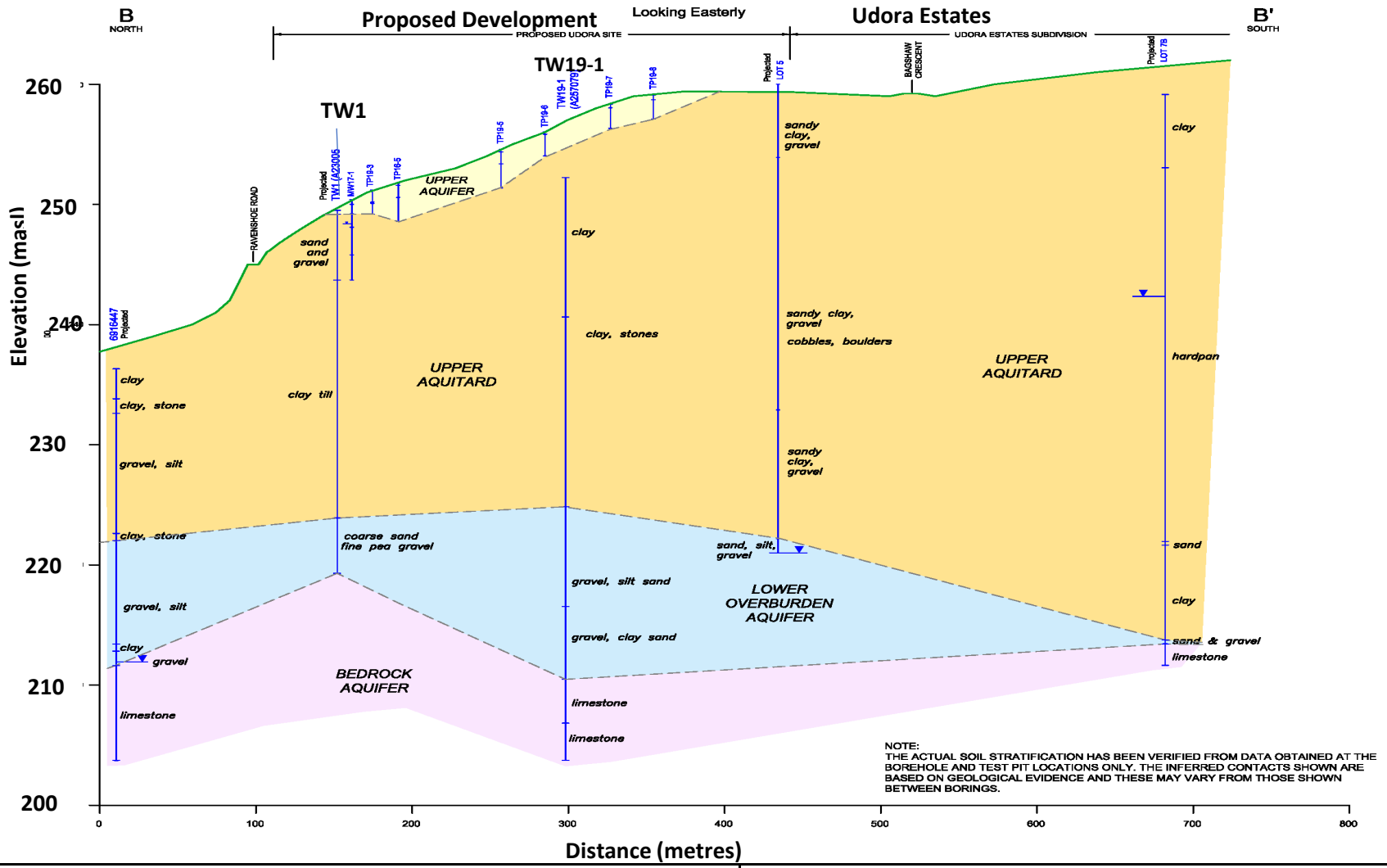
Cross Section A-A'

Udora Estates Water Balance Evaluation, Revision 2
Part Lot 35, Con. 6, TWP Uxbridge
For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

GAMAN Consultants Inc.

Figure 8



NOTES

Reference Figure (WSP 2019 Draft Report)

Cross-Section B-B'

Udora Estates Water Balance Evaluation, Revision 2

Part Lot 35, Con. 6, TWP Uxbridge

For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

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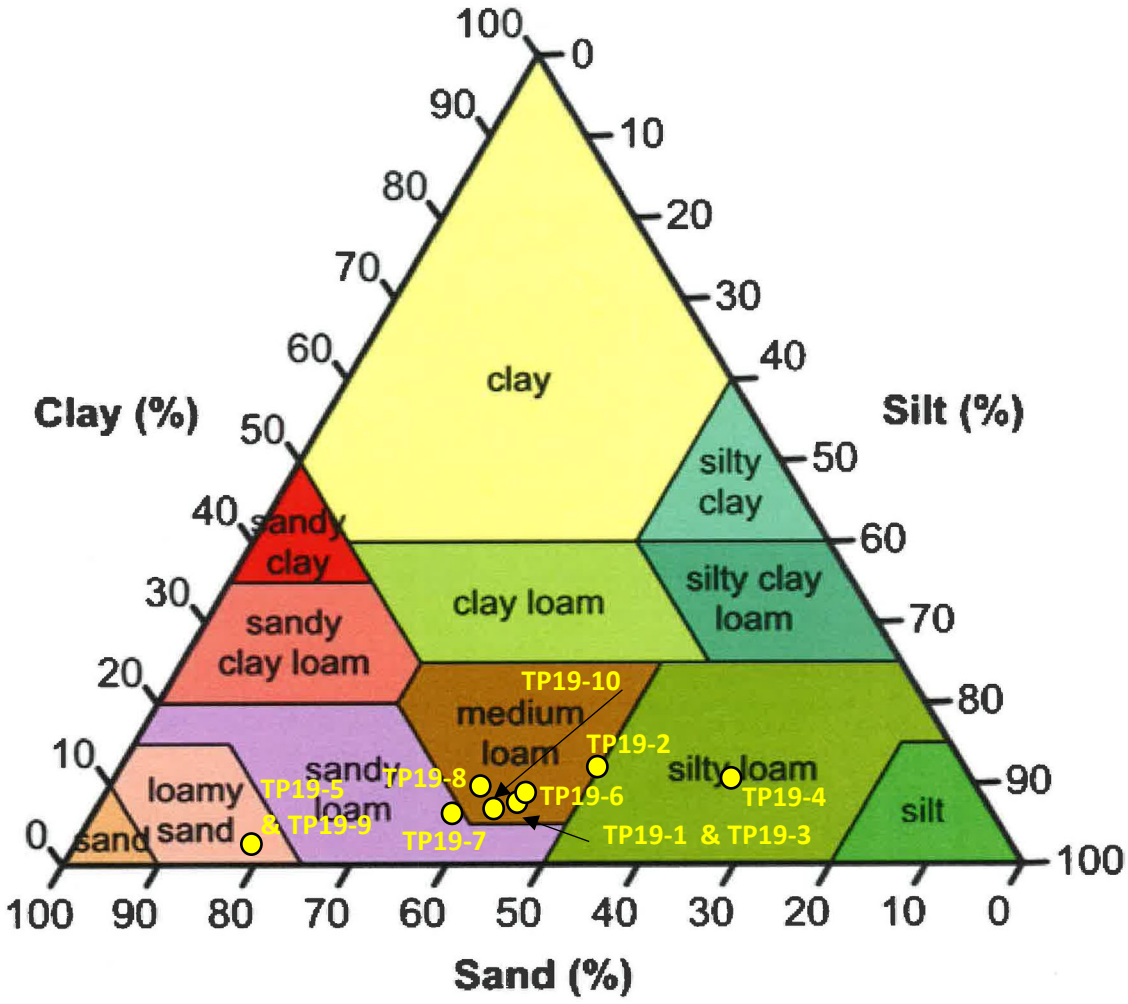
Figure 9



NOTES

TP19-1 ○ Test Pit Designation with Particle Sizes

Agricultural Soils Chart

Udora Estates Water Balance Evaluation, Revision 2

Part Lot 35, Con. 6, TWP Uxbridge

For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

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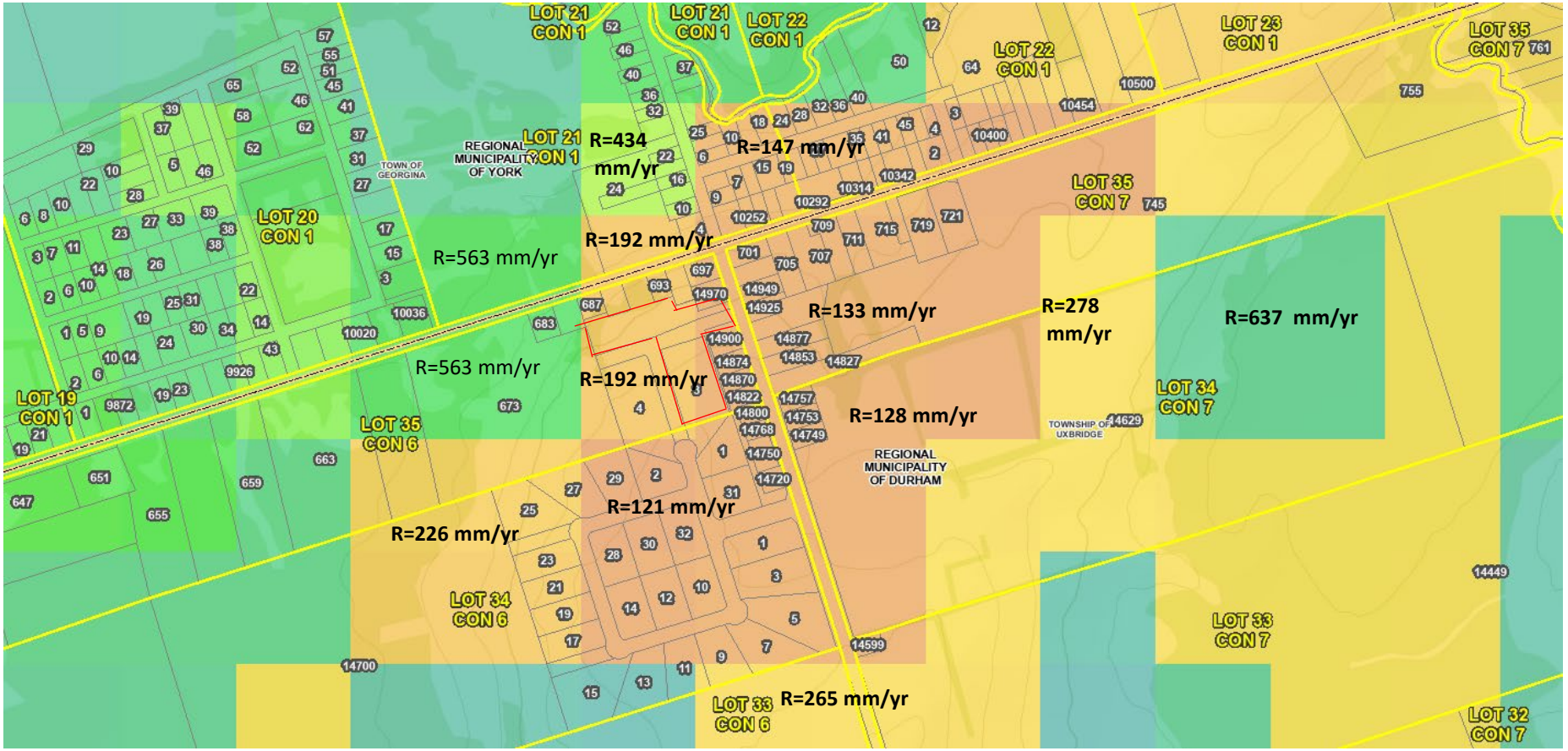
Figure 10



NOTES

Site Location

ORMGP Recharge Rates

Udora Estates Water Balance Evaluation, Revision 2

Part Lot 35, Con. 6, TWP Uxbridge

For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

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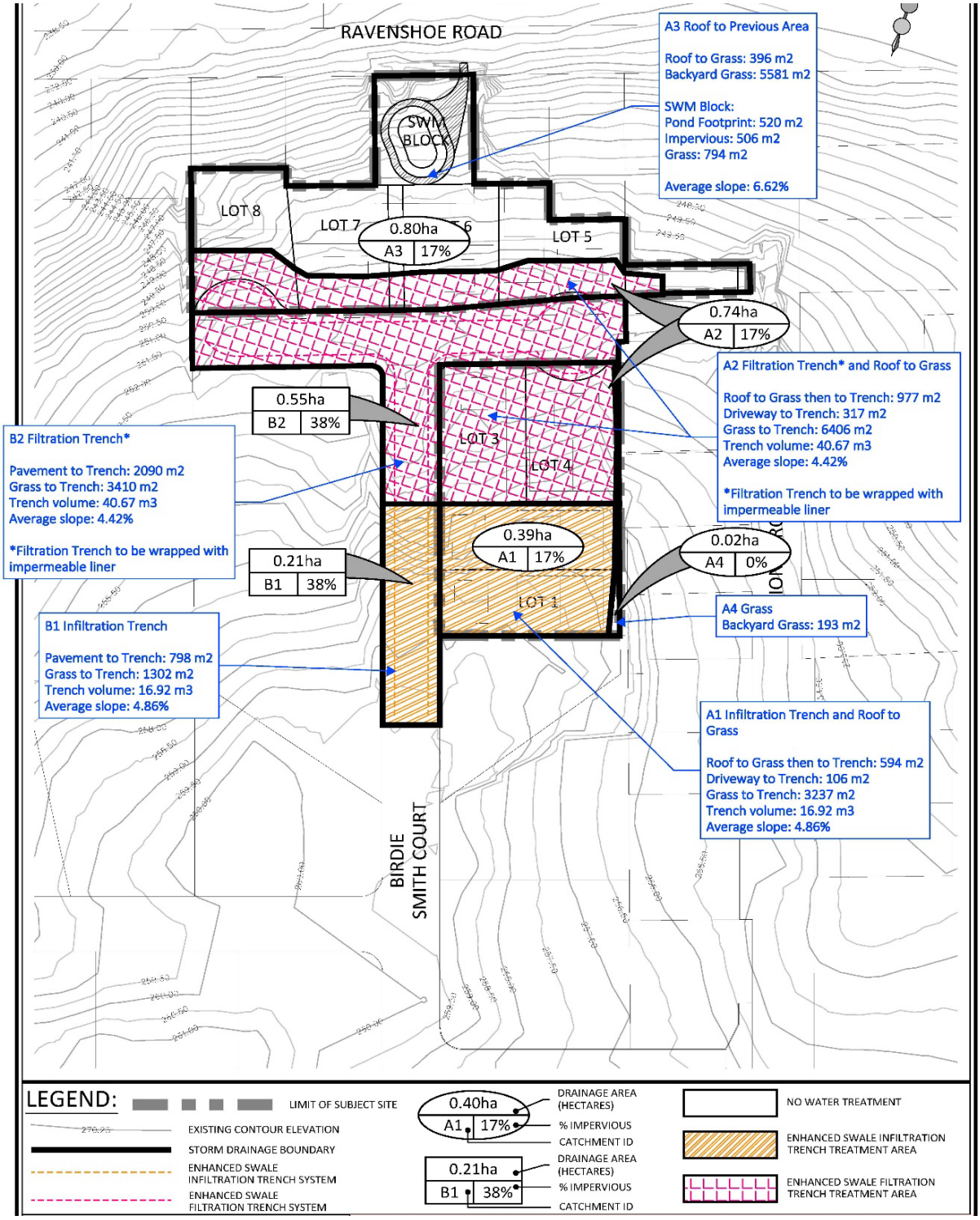
Figure 11



NOTES

Map Source :SCS FSSR Water Balance Drainage Area Fig. W.1, version 2328-P-LId-Prop-2.4-2.4 Dated Dec. 2025

SCS Proposed LID Plan

Udora Estates Water Balance Evaluation, Revision 2

Part Lot 35, Con. 6, TWP Uxbridge

For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

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Figure 12

APPENDICES

APPENDIX A

WELL RECORDS
WELL RECONNAISSANCE SURVEY

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
1917885	645032	4901420	260.56	24.99							Abandoned-Other		1917885				
1918470	644968	4901660	260.36		Other Method						Abandoned-Supply		1918470				
	644885		260.77	176.00	Rotary (Air)						Abandoned-Supply	23.00		BROWN	SAND	SILTY	GRAVEL
	644885		260.77	176.00	Rotary (Air)						Abandoned-Supply	60.00		GREY	SAND	SILTY	GRAVEL
	644885		260.77	176.00	Rotary (Air)						Abandoned-Supply	141 .50		GREY	CLAY	SANDY	GRAVEL
1918482	644885	4901538	260.77	176.00	Rotary (Air)						Abandoned-Supply	176 .00	1918482	GREY	LIMESTONE		
6911913	644845.7	4902228	234.75	2.13	Cable Tool						Abandoned-Supply	2.13	6911913	BROWN	CLAY	SAND	BOULDERS
6911914	644843.7	4902243	234.59	4.88	Cable Tool						Abandoned-Supply	4.88	6911914	BROWN	CLAY	SAND	BOULDERS
	644854.7		234.74	21.03	Cable Tool						Abandoned-Supply	4.27		BROWN	CLAY	SAND	BOULDERS
	644854.7		234.74	21.03	Cable Tool						Abandoned-Supply	10.67		GREY	CLAY	BOULDERS	
	644854.7		234.74	21.03	Cable Tool						Abandoned-Supply	15.24		GREY	CLAY		
6911915	644854.7	4902251	234.74	21.03	Cable Tool						Abandoned-Supply	21.03	6911915	GREY	CLAY	GRAVEL	BOULDERS
6929654	645317.8	4902121	244.21			9					Abandoned-Other		6929654				
7108813	644797	4901554	256.73								Abandoned-Supply		7108813				
7115758	644452	4902075	233.79								Unknown		7115758				
7140825	644810	4901884	243.57								Abandoned-Other		7140825				
	644741	4901780	245.50								Unknown						
7145139	644347	4901715	233.61								Unknown		7145139				
	645053		261.54	48.70		48.00	28		LPM		Unknown	5.10		BROWN	CLAY	SAND	
	645053		261.54	48.70		48.00	28		LPM		Unknown	31.00		GREY	CLAY	BOULDERS	
	645053		261.54	48.70		48.00	28		LPM		Unknown	44.00		GREY	CLAY	STONES	LAYERED
	645053		261.54	48.70		48.00	28		LPM		Unknown	45.10		GREY	CLAY		SOFT
7226009	645053	4901357	261.54	48.70		48.00	28		LPM		Unknown	48.70	7226009	GREY	LIMESTONE	CLAY	HARD
7235448	645058	4901700	257.42								Abandoned-Quality		7235448				
	644764.7	4901823	245.72	38.71	Rotary (Convent.)	13.11	6	27.276	GPM	Domestic	Water Supply	4.88		BROWN	SAND	PACKED	
	644764.7	4901823	245.72	38.71	Rotary (Convent.)	13.11	6	27.276	GPM	Domestic	Water Supply	9.75		BLUE	CLAY	STONES	DENSE

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644764.7	4901823	245.72	38.71	Rotary (Convent.)	13.11	6	27.276	GPM	Domestic	Water Supply	12.19		GREY	CLAY	BOULDERS	LOOSE
	644764.7	4901823	245.72	38.71	Rotary (Convent.)	13.11	6	27.276	GPM	Domestic	Water Supply	13.11		BLACK	SAND	SILT	LOOSE
	644764.7	4901823	245.72	38.71	Rotary (Convent.)	13.11	6	27.276	GPM	Domestic	Water Supply	25.91		GREY	CLAY	SILT	HARD
1904607	644764.7	4901823	245.72	38.71	Rotary (Convent.)	13.11	6	27.276	GPM	Domestic	Water Supply	38.71	B	BROWN	SHALE	HARD	
	644714.7	4901803	242.09	12.50	Rotary (Convent.)	12.50	3	13.638	GPM	Domestic	Water Supply	4.27		BROWN	SAND	PACKED	
	644714.7	4901803	242.09	12.50	Rotary (Convent.)	12.50	3	13.638	GPM	Domestic	Water Supply	8.53		BLUE	CLAY	STONES	DENSE
	644714.7	4901803	242.09	12.50	Rotary (Convent.)	12.50	3	13.638	GPM	Domestic	Water Supply	11.28		GREY	CLAY	STONES	LOOSE
1904609	644714.7	4901803	242.09	12.50	Rotary (Convent.)	12.50	3	13.638	GPM	Domestic	Water Supply	12.50	0	BLACK	SAND	SILT	LOOSE
	645044	4901796	254.86	25.91	Rotary (Convent.)	24.38	3	13.638	GPM	Domestic	Water Supply	4.27		BROWN	CLAY		
	645044	4901796	254.86	25.91	Rotary (Convent.)	24.38	3	13.638	GPM	Domestic	Water Supply	23.77		GREY	CLAY	STONES	HARD
1907349	645044	4901796	254.86	25.91	Rotary (Convent.)	24.38	3	13.638	GPM	Domestic	Water Supply	25.91	0	BROWN	GRAVEL	SAND	
	645057.7	4901799	255.03	24.99	Cable Tool	24.99	7	31.822	GPM	Domestic	Water Supply	0.61			TOPSOIL		
	645057.7	4901799	255.03	24.99	Cable Tool	24.99	7	31.822	GPM	Domestic	Water Supply	3.66			SAND	CLAY	
	645057.7	4901799	255.03	24.99	Cable Tool	24.99	7	31.822	GPM	Domestic	Water Supply	23.16			HARDPAN		
1908229	645057.7	4901799	255.03	24.99	Cable Tool	24.99	7	31.822	GPM	Domestic	Water Supply	24.99	0		SAND	GRAVEL	
	644364.7	4901730	234.05	6.40	Boring	1.52	6	27.276	GPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		
	644364.7	4901730	234.05	6.40	Boring	1.52	6	27.276	GPM	Domestic	Water Supply	1.52		BROWN	CLAY	STONES	PACKED
	644364.7	4901730	234.05	6.40	Boring	1.52	6	27.276	GPM	Domestic	Water Supply	3.05		BROWN	SAND	WATER-BEARING	PACKED
1908385	644364.7	4901730	234.05	6.40	Boring	1.52	6	27.276	GPM	Domestic	Water Supply	6.40	1908385	GREY	CLAY	PACKED	
	645160		256.34	70.10	Rotary (Convent.)					Domestic	Abandoned-Supply	0.30			TOPSOIL		
	645160		256.34	70.10	Rotary (Convent.)					Domestic	Abandoned-Supply	2.74		BROWN	FINE SAND		
	645160		256.34	70.10	Rotary (Convent.)					Domestic	Abandoned-Supply	3.05			STONES		
	645160		256.34	70.10	Rotary (Convent.)					Domestic	Abandoned-Supply	19.81		GREY	CLAY	GRAVEL	
	645160		256.34	70.10	Rotary (Convent.)					Domestic	Abandoned-Supply	24.38			LIMESTONE	ROCK	
1909050	645160	4901592	256.34	70.10	Rotary (Convent.)					Domestic	Abandoned-Supply	70.10	1909050		LIMESTONE	ROCK	
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	0.30			TOPSOIL		

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	0.91			SAND		
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	4.88		BROWN	CLAY	GRAVEL	SANDSTONE
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	6.71		GREY	CLAY	GRAVEL	STONES
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	18 .59		GREY	CLAY	GRAVEL	
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	24.69			FINE GRAVEL	LAYERED	CLAY
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	26.52			LIMESTONE	ROCK	
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	28.35		GREY	CLAY	GRAVEL	
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	29.26		GREY	MEDIUM SAND		
	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	37.49		GREY	CLAY	GRAVEL	
1909051	645160	4901592	256.34	39.01	Diamond	28.35	5	22.73	GPM	Domestic	Water Supply	39.01	B	GREY	LIMESTONE	ROCK	
	645263	4902232	235.26	22.86	Cable Tool	21.34	15	68.19	GPM	Domestic	Water Supply	3.05		BROWN	SAND		
	645263	4902232	235.26	22.86	Cable Tool	21.34	15	68.19	GPM	Domestic	Water Supply	3.96			GRAVEL		
	645263	4902232	235.26	22.86	Cable Tool	21.34	15	68.19	GPM	Domestic	Water Supply	17.37		GREY	CLAY	SAND	
	645263	4902232	235.26	22.86	Cable Tool	21.34	15	68.19	GPM	Domestic	Water Supply	19.20			GRAVEL		
	645263	4902232	235.26	22.86	Cable Tool	21.34	15	68.19	GPM	Domestic	Water Supply	21.34		GREY	CLAY	STONES	
1909175	645263	4902232	235.26	22.86	Cable Tool	21.34	15	68.19	GPM	Domestic	Water Supply	22.86	0		COARSE SAND		
	645160	4901592	256.34	21.34	Cable Tool	17.98	4	18.184	GPM	Domestic	Water Supply	3.05		GREY	CLAY	SANDY	
	645160	4901592	256.34	21.34	Cable Tool	17.98	4	18.184	GPM	Domestic	Water Supply	12.19		GREY	SANDSTONE		
	645160	4901592	256.34	21.34	Cable Tool	17.98	4	18.184	GPM	Domestic	Water Supply	17.98		GREY	CLAY	GRAVELLY	
1909335	645160	4901592	256.34	21.34	Cable Tool	17.98	4	18.184	GPM	Domestic	Water Supply	21.34	B	GREY	LIMESTONE		
	645043	4901877	251.47	13.41	Rotary (Convent.)	12.19	6	27.276	GPM	Domestic	Water Supply	1.52		BLUE	CLAY		
	645043	4901877	251.47	13.41	Rotary (Convent.)	12.19	6	27.276	GPM	Domestic	Water Supply	11.89		BROWN	CLAY	STONES	
1909421	645043	4901877	251.47	13.41	Rotary (Convent.)	12.19	6	27.276	GPM	Domestic	Water Supply	13.41	0	BROWN	SAND	STONES	
	644699	4901854	239.78	7.32	Boring	3.66	6	27.276	GPM	Domestic	Water Supply	0.61		BLACK	TOPSOIL		
	644699	4901854	239.78	7.32	Boring	3.66	6	27.276	GPM	Domestic	Water Supply	3.66		BROWN	CLAY	STONES	PACKED
	644699	4901854	239.78	7.32	Boring	3.66	6	27.276	GPM	Domestic	Water Supply	6.10		GREY	CLAY	LAYERED	WATER-BEARING

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
1909571	644699	4901854	239.78	7.32	Boring	3.66	6	27.276	GPM	Domestic	Water Supply	7.32	1909571	GREY	CLAY	STONES	CEMENTED
	645082	4901829	253.55	40.54	Cable Tool	39.62	80	363.68	GPM	Domestic	Water Supply	21.34		BROWN	CLAY	STONEY	
	645082	4901829	253.55	40.54	Cable Tool	39.62	80	363.68	GPM	Domestic	Water Supply	25.91		GREY	CLAY	STONEY	
	645082	4901829	253.55	40.54	Cable Tool	39.62	80	363.68	GPM	Domestic	Water Supply	28.96		WHITE	CLAY	STONEY	
	645082	4901829	253.55	40.54	Cable Tool	39.62	80	363.68	GPM	Domestic	Water Supply	39.62		GREY	CLAY	SANDY	
	645082	4901829	253.55	40.54	Cable Tool	39.62	80	363.68	GPM	Domestic	Water Supply	40.54		GREY	SAND	GRAVEL	
1909778	645082	4901829	253.55	40.54	Cable Tool	39.62	80	363.68	GPM	Domestic	Water Supply	40.54	B	WHITE	LIMESTONE		
	645053.7	4901725	256.87	18.29	Cable Tool	18.29	20	90.92	GPM	Domestic	Water Supply	2.44		BROWN	SAND	GRAVEL	
	645053.7	4901725	256.87	18.29	Cable Tool	18.29	20	90.92	GPM	Domestic	Water Supply	15 .24		GREY	SAND	GRAVEL	BOULDERS
	645053.7	4901725	256.87	18.29	Cable Tool	18.29	20	90.92	GPM	Domestic	Water Supply	17.07		BLUE	SAND	CLAY	
1909925	645053.7	4901725	256.87	18.29	Cable Tool	18.29	20	90.92	GPM	Domestic	Water Supply	18 .29	0	BROWN	SAND	GRAVEL	
	644767.7	4901876	241.68	27.13	Rotary (Convent.)	22.25	10	45.46	GPM	Domestic	Water Supply	0.61		BROWN	CLAY	TOPSOIL	SOFT
	644767.7	4901876	241.68	27.13	Rotary (Convent.)	22.25	10	45.46	GPM	Domestic	Water Supply	2.44		BROWN	GRAVEL	CLAY	LOOSE
	644767.7	4901876	241.68	27.13	Rotary (Convent.)	22.25	10	45.46	GPM	Domestic	Water Supply	5.49		GREY	CLAY	SOFT	
	644767.7	4901876	241.68	27.13	Rotary (Convent.)	22.25	10	45.46	GPM	Domestic	Water Supply	22.25		BLUE	CLAY	SANDY	HARD
1910526	644767.7	4901876	241.68	27.13	Rotary (Convent.)	22.25	10	45.46	GPM	Domestic	Water Supply	27.13	B	GREY	LIMESTONE	HARD	
	645055.7	4901749	256.00	44.20	Rotary (Convent.)	43.28	12	54.552	GPM	Domestic	Water Supply	0.61		BROWN	SAND	FILL	LOOSE
	645055.7	4901749	256.00	44.20	Rotary (Convent.)	43.28	12	54.552	GPM	Domestic	Water Supply	8.23		BROWN	CLAY	STONES	HARD
	645055.7	4901749	256.00	44.20	Rotary (Convent.)	43.28	12	54.552	GPM	Domestic	Water Supply	39.93		GREY	CLAY	BOULDERS	SILT
1910527	645055.7	4901749	256.00	44.20	Rotary (Convent.)	43.28	12	54.552	GPM	Domestic	Water Supply	44.20	B	GREY	LIMESTONE	HARD	
	644779.7	4901879	241.82	32.31	Rotary (Convent.)	26.82	8	36.368	GPM	Domestic	Water Supply	3.66		BROWN	CLAY	STONES	HARD
	644779.7	4901879	241.82	32.31	Rotary (Convent.)	26.82	8	36.368	GPM	Domestic	Water Supply	9.45		BLUE	CLAY	STONES	SOFT
	644779.7	4901879	241.82	32.31	Rotary (Convent.)	26.82	8	36.368	GPM	Domestic	Water Supply	26.82		BLUE	CLAY	BOULDERS	HARD
	644779.7	4901879	241.82	32.31	Rotary (Convent.)	26.82	8	36.368	GPM	Domestic	Water Supply	28.04		GREY	LIMESTONE	SHALE	
1910635	644779.7	4901879	241.82	32.31	Rotary (Convent.)	26.82	8	36.368	GPM	Domestic	Water Supply	32.31	B	GREY	LIMESTONE	HARD	
	644791.7	4901897	240.00	35.05	Cable Tool	32.92	5	22.73	GPM	Domestic	Water Supply	6.10		BROWN	CLAY	SOFT	

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644791.7	4901897	240.00	35.05	Cable Tool	32.92	5	22.73	GPM	Domestic	Water Supply	8.53		GREY	CLAY		
	644791.7	4901897	240.00	35.05	Cable Tool	32.92	5	22.73	GPM	Domestic	Water Supply	26.52		GREY	CLAY	STONES	
	644791.7	4901897	240.00	35.05	Cable Tool	32.92	5	22.73	GPM	Domestic	Water Supply	30.48		GREY	CLAY		
	644791.7	4901897	240.00	35.05	Cable Tool	32.92	5	22.73	GPM	Domestic	Water Supply	32.00		GREY	CLAY	GRAVEL	
	644791.7	4901897	240.00	35.05	Cable Tool	32.92	5	22.73	GPM	Domestic	Water Supply	32.92		GREY	SAND	CLAY	SILT
1911480	644791.7	4901897	240.00	35.05	Cable Tool	32.92	5	22.73	GPM	Domestic	Water Supply	35.05	0	GREY	SHALE		
	645083	4901808	254.39	23.77	Rotary (Convent.)	23.77	8	36.368	GPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL	PACKED	
	645083	4901808	254.39	23.77	Rotary (Convent.)	23.77	8	36.368	GPM	Domestic	Water Supply	8.53		BROWN	CLAY	STONES	HARD
	645083	4901808	254.39	23.77	Rotary (Convent.)	23.77	8	36.368	GPM	Domestic	Water Supply	19.20		GREY	CLAY	STONES	HARD
	645083	4901808	254.39	23.77	Rotary (Convent.)	23.77	8	36.368	GPM	Domestic	Water Supply	22.86		GREY	SAND	STONES	LOOSE
1913472	645083	4901808	254.39	23.77	Rotary (Convent.)	23.77	8	36.368	GPM	Domestic	Water Supply	23.77	0	GREY	STONES	CLAY	HARD
	645209	4902025	242.26	33.53	Rotary (Air)	33.00	75	75	LPM	Domestic	Water Supply	6.71		BROWN	SAND		
	645209	4902025	242.26	33.53	Rotary (Air)	33.00	75	75	LPM	Domestic	Water Supply	28.66		GREY	CLAY	STONES	
1917923	645209	4902025	242.26	33.53	Rotary (Air)	33.00	75	75	LPM	Domestic	Water Supply	33.53	B	GREY	LIMESTONE		
	644843		260.78	37.80	Rotary (Air)	36.88	4		LPM	Domestic	Test Hole	4.57		BROWN	SAND	CLAY	STONES
	644843		260.78	37.80	Rotary (Air)	36.88	4		LPM	Domestic	Test Hole	6.10		BROWN	SAND	GRAVEL	
	644843		260.78	37.80	Rotary (Air)	36.88	4		LPM	Domestic	Test Hole	9.75		GREY	CLAY	SILT	SOFT
	644843		260.78	37.80	Rotary (Air)	36.88	4		LPM	Domestic	Test Hole	12.19		BROWN	CLAY	SILT	SOFT
	644843		260.78	37.80	Rotary (Air)	36.88	4		LPM	Domestic	Test Hole	28.96		GREY	CLAY		
	644843		260.78	37.80	Rotary (Air)	36.88	4		LPM	Domestic	Test Hole	29.87		GREY	GRAVEL	SILT	
	644843		260.78	37.80	Rotary (Air)	36.88	4		LPM	Domestic	Test Hole	36.88		GREY	SILT	SAND	
1918031	644843	4901484	260.78	37.80	Rotary (Air)	36.88	4		LPM	Domestic	Test Hole	37.80	1918031	BROWN	SAND		
	644495		237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	0.61		BROWN	TOPSOIL		
	644495		237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	8.84		BROWN	SAND	CLAY	
	644495		237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	9.14		BROWN	GRAVEL		
	644495		237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	27.74		GREY	CLAY		

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644495		237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	29.57		BROWN	CLAY		
	644495		237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	38.10		GREY	CLAY		
	644495		237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	38.71		GREY	SAND		
	644495		237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	43.89		GREY	CLAY		
1918032	644495	4901469	237.22	48.16	Rotary (Air)	47.85	5		LPM	Domestic	Test Hole	48.16	1918032	BROWN	ROCK		
	644968	4901660	260.36	77.94	Rotary (Air)	43.13	3	13.638	GPM	Domestic	Water Supply	4.88		BROWN	CLAY	SILTY	GRAVEL
	644968	4901660	260.36	77.94	Rotary (Air)	43.13	3	13.638	GPM	Domestic	Water Supply	31.39		GREY	CLAY	SANDY	GRAVEL
	644968	4901660	260.36	77.94	Rotary (Air)	43.13	3	13.638	GPM	Domestic	Water Supply	39.32		GREY	CLAY	SANDY	SILT
	644968	4901660	260.36	77.94	Rotary (Air)	43.13	3	13.638	GPM	Domestic	Water Supply	43.13		GREY	CLAY	SANDY	GRAVEL
1918476	644968	4901660	260.36	77.94	Rotary (Air)	43.13	3	13.638	GPM	Domestic	Water Supply	77.94	B	GREY	LIMESTONE		
	644873.7	4901875	249.89	36.58	Cable Tool	35.05	2	9.092	GPM	Domestic	Water Supply	7.62			PREVIOUSLY DUG		
	644873.7	4901875	249.89	36.58	Cable Tool	35.05	2	9.092	GPM	Domestic	Water Supply	14.63		GREY	MEDIUM		
	644873.7	4901875	249.89	36.58	Cable Tool	35.05	2	9.092	GPM	Domestic	Water Supply	27.74		GREY	CLAY	GRAVEL	
4602452	644873.7	4901875	249.89	36.58	Cable Tool	35.05	2	9.092	GPM	Domestic	Water Supply	36.58	B		LIMESTONE		
	645145.7	4901905	245.99	41.15	Cable Tool	38.10	7	31.822	GPM	Domestic	Water Supply	6.10			PREVIOUSLY DUG		
	645145.7	4901905	245.99	41.15	Cable Tool	38.10	7	31.822	GPM	Domestic	Water Supply	35.05			HARDPAN	STONES	
	645145.7	4901905	245.99	41.15	Cable Tool	38.10	7	31.822	GPM	Domestic	Water Supply	38.10			CLAY	GRAVEL	
4602474	645145.7	4901905	245.99	41.15	Cable Tool	38.10	7	31.822	GPM	Domestic	Water Supply	41.15	B		LIMESTONE		
	645054.7	4901958	246.44	8.53	Boring	3.05	10	45.46	GPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		
	645054.7	4901958	246.44	8.53	Boring	3.05	10	45.46	GPM	Domestic	Water Supply	3.05		BROWN	CLAY		
	645054.7	4901958	246.44	8.53	Boring	3.05	10	45.46	GPM	Domestic	Water Supply	3.35		BROWN	CLAY	SILT	
	645054.7	4901958	246.44	8.53	Boring	3.05	10	45.46	GPM	Domestic	Water Supply	6.40		BLUE	CLAY	STONES	
	645054.7	4901958	246.44	8.53	Boring	3.05	10	45.46	GPM	Domestic	Water Supply	7.01		BLUE	CLAY	SILT	
4604910	645054.7	4901958	246.44	8.53	Boring	3.05	10	45.46	GPM	Domestic	Water Supply	8.53	4604910	BLUE	CLAY	STONES	
	644965.7	4901841	253.97	43.28	Rotary (Convent.)	43.28	6	27.276	GPM	Domestic	Water Supply	6.10		BROWN	CLAY	STONES	
	644965.7	4901841	253.97	43.28	Rotary (Convent.)	43.28	6	27.276	GPM	Domestic	Water Supply	40.54		BLUE	CLAY	STONES	

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
4605646	644965.7	4901841	253.97	43.28	Rotary (Convent.)	43.28	6	27.276	GPM	Domestic	Water Supply	43.28	B	GREY	LIMESTONE		
SAND																	
	645133.7	4901938	245.45	15.24	Cable Tool	14.02	6	27.276	GPM	Domestic	Water Supply	0.61		BLACK	TOPSOIL		
	645133.7	4901938	245.45	15.24	Cable Tool	14.02	6	27.276	GPM	Domestic	Water Supply	3.05		BROWN	CLAY	BOULDERS	
	645133.7	4901938	245.45	15.24	Cable Tool	14.02	6	27.276	GPM	Domestic	Water Supply	12.19		GREY	CLAY	GRAVEL	
4606274	645133.7	4901938	245.45	15.24	Cable Tool	14.02	6	27.276	GPM	Domestic	Water Supply	15 .24	0	GREY	CLAY	GRAVEL	
	645024.7	4901793	255.09	45.72	Cable Tool	41.76	15	68.19	GPM	Domestic	Water Supply	0.61		BLACK	TOPSOIL		
	645024.7	4901793	255.09	45.72	Cable Tool	41.76	15	68.19	GPM	Domestic	Water Supply	6.10		BROWN	CLAY	STONES	HARD
	645024.7	4901793	255.09	45.72	Cable Tool	41.76	15	68.19	GPM	Domestic	Water Supply	22.86		BLUE	CLAY	STONES	HARDPAN
	645024.7	4901793	255.09	45.72	Cable Tool	41.76	15	68.19	GPM	Domestic	Water Supply	23.77		GREY	GRAVEL	CLAY	
	645024.7	4901793	255.09	45.72	Cable Tool	41.76	15	68.19	GPM	Domestic	Water Supply	40.54		GREY	CLAY	STONES	HARDPAN
4606443	645024.7	4901793	255.09	45.72	Cable Tool	41.76	15	68.19	GPM	Domestic	Water Supply	45.72	B	WHITE	LIMESTONE	HARD	
	645184.7	4901623	255.56	43.89	Cable Tool	41.15	15	68.19	GPM	Domestic	Water Supply	6.10		BROWN	CLAY	SAND	
	645184.7	4901623	255.56	43.89	Cable Tool	41.15	15	68.19	GPM	Domestic	Water Supply	9.14		BROWN	CLAY	STONES	
	645184.7	4901623	255.56	43.89	Cable Tool	41.15	15	68.19	GPM	Domestic	Water Supply	18 .29		BLUE	CLAY	STONES	HARDPAN
	645184.7	4901623	255.56	43.89	Cable Tool	41.15	15	68.19	GPM	Domestic	Water Supply	27.43		BLUE	CLAY	GRAVEL	LAYERED
	645184.7	4901623	255.56	43.89	Cable Tool	41.15	15	68.19	GPM	Domestic	Water Supply	39.32		BLUE	CLAY	BOULDERS	HARDPAN
4606454	645184.7	4901623	255.56	43.89	Cable Tool	41.15	15	68.19	GPM	Domestic	Water Supply	43.89	B	WHITE	LIMESTONE	FRACTURED	
	644879.7	4902173	234.64	12.50	Cable Tool	12.50	10	45.46	GPM	Domestic	Water Supply	3.66		BROWN	CLAY	MEDIUM SAND	
	644879.7	4902173	234.64	12.50	Cable Tool	12.50	10	45.46	GPM	Domestic	Water Supply	12.19		BLUE	CLAY	STONES	
6910277	644879.7	4902173	234.64	12.50	Cable Tool	12.50	10	45.46	GPM	Domestic	Water Supply	12.50	0	GREY	GRAVEL	MEDIUM SAND	
	645289.7	4902173	240.83	18.90	Rotary (Convent.)	18.90	20	90.92	GPM	Domestic	Water Supply	6.10		BROWN	SAND		
	645289.7	4902173	240.83	18.90	Rotary (Convent.)	18.90	20	90.92	GPM	Domestic	Water Supply	12.50		BLUE	CLAY		
	645289.7	4902173	240.83	18.90	Rotary (Convent.)	18.90	20	90.92	GPM	Domestic	Water Supply	15.24		GREY	CLAY	SILT	STONES
6910861	645289.7	4902173	240.83	18.90	Rotary (Convent.)	18.90	20	90.92	GPM	Domestic	Water Supply	18.90	0	GREY	SAND	GRAVEL	STONES
	644937.7	4901988	242.15	14.63	Rotary (Convent.)	14.63	6	27.276	GPM	Domestic	Water Supply	5.49		BROWN	CLAY	STONES	

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644937.7	4901988	242.15	14.63	Rotary (Convent.)	14.63	6	27.276	GPM	Domestic	Water Supply	10.97		GREY	CLAY	STONES	BOULDERS
6911381	644937.7	4901988	242.15	14.63	Rotary (Convent.)	14.63	6	27.276	GPM	Domestic	Water Supply	14.63	0	GREY	SAND	GRAVEL	
	645012.7	4902085	237.54	24.99	Rotary (Convent.)	24.99	10	45.46	GPM	Domestic	Water Supply	0.91		BROWN	CLAY		
	645012.7	4902085	237.54	24.99	Rotary (Convent.)	24.99	10	45.46	GPM	Domestic	Water Supply	3.66		BROWN	GRAVEL		
	645012.7	4902085	237.54	24.99	Rotary (Convent.)	24.99	10	45.46	GPM	Domestic	Water Supply	24.69		BLUE	CLAY	SILT	STONES
6911401	645012.7	4902085	237.54	24.99	Rotary (Convent.)	24.99	10	45.46	GPM	Domestic	Water Supply	24.99	0	GREY	GRAVEL		
	644975.7	4902257	230.66	18.90	Rotary (Convent.)	13.72	5	22.73	GPM	Domestic	Water Supply	1.83		BROWN	SAND	GRAVEL	
	644975.7	4902257	230.66	18.90	Rotary (Convent.)	13.72	5	22.73	GPM	Domestic	Water Supply	4.27		BROWN	GRAVEL		
	644975.7	4902257	230.66	18.90	Rotary (Convent.)	13.72	5	22.73	GPM	Domestic	Water Supply	13 .72		BLUE	CLAY	STONES	
	644975.7	4902257	230.66	18.90	Rotary (Convent.)	13.72	5	22.73	GPM	Domestic	Water Supply	14.02		GREY	SAND		
	644975.7	4902257	230.66	18.90	Rotary (Convent.)	13.72	5	22.73	GPM	Domestic	Water Supply	18 .59		BLUE	CLAY	STONES	
6911682	644975.7	4902257	230.66	18.90	Rotary (Convent.)	13.72	5	22.73	GPM	Domestic	Water Supply	18 .90	B	GREY	LIMESTONE		
	644858.7	4902233	235.02	28.04	Rotary (Convent.)	10.67	8	36.368	GPM	Domestic	Water Supply	2.44		BROWN	CLAY	STONES	
	644858.7	4902233	235.02	28.04	Rotary (Convent.)	10.67	8	36.368	GPM	Domestic	Water Supply	10.67		GREY	CLAY	STONES	
	644858.7	4902233	235.02	28.04	Rotary (Convent.)	10.67	8	36.368	GPM	Domestic	Water Supply	10.97		GREY	GRAVEL		
	644858.7	4902233	235.02	28.04	Rotary (Convent.)	10.67	8	36.368	GPM	Domestic	Water Supply	19.51		GREY	CLAY	BOULDERS	STONES
6911683	644858.7	4902233	235.02	28.04	Rotary (Convent.)	10.67	8	36.368	GPM	Domestic	Water Supply	28.04	B	GREY	LIMESTONE		
	645120.7	4902098	238.91	34.75	Rotary (Convent.)	29.26	4	18.184	GPM	Domestic	Water Supply	0.61		BROWN	SAND	FILL	
	645120.7	4902098	238.91	34.75	Rotary (Convent.)	29.26	4	18.184	GPM	Domestic	Water Supply	0.91		BLACK	TOPSOIL		
	645120.7	4902098	238.91	34.75	Rotary (Convent.)	29.26	4	18.184	GPM	Domestic	Water Supply	6.10		BROWN	CLAY	STONES	BOULDERS
	645120.7	4902098	238.91	34.75	Rotary (Convent.)	29.26	4	18.184	GPM	Domestic	Water Supply	28.65		GREY	CLAY	STONES	BOULDERS
	645120.7	4902098	238.91	34.75	Rotary (Convent.)	29.26	4	18.184	GPM	Domestic	Water Supply	29.26		GREY	GRAVEL		
6911716	645120.7	4902098	238.91	34.75	Rotary (Convent.)	29.26	4	18.184	GPM	Domestic	Water Supply	34.75	B	GREY	LIMESTONE		
	644881.7	4902217	235.12	19.81	Cable Tool	19.51	13	59.098	GPM	Domestic	Water Supply	3.66		BLUE	CLAY		
	644881.7	4902217	235.12	19.81	Cable Tool	19.51	13	59.098	GPM	Domestic	Water Supply	7.32		GREY	GRAVEL		
	644881.7	4902217	235.12	19.81	Cable Tool	19.51	13	59.098	GPM	Domestic	Water Supply	18.59		BLUE	CLAY	STONES	

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Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
6912263	644881.7	4902217	235.12	19.81	Cable Tool	19.51	13	59.098	GPM	Domestic	Water Supply	19.81	B	GREY	LIMESTONE		
	644868.7	4902222	235.01	18.59	Cable Tool	17.37	20	90.92	GPM	Domestic	Water Supply	5.49		YELLOW	SAND	CLAY	
	644868.7	4902222	235.01	18.59	Cable Tool	17.37	20	90.92	GPM	Domestic	Water Supply	7.32		GREY	BOULDERS		
	644868.7	4902222	235.01	18.59	Cable Tool	17.37	20	90.92	GPM	Domestic	Water Supply	13 .72		BLUE	CLAY	SAND	
	644868.7	4902222	235.01	18.59	Cable Tool	17.37	20	90.92	GPM	Domestic	Water Supply	17.37		BROWN	CLAY	SAND	
6912264	644868.7	4902222	235.01	18.59	Cable Tool	17.37	20	90.92	GPM	Domestic	Water Supply	18 .59	0	BROWN	SAND	GRAVEL	
	645364.7	4902213	242.82	25.91	Cable Tool	24.99	10	45.46	GPM	Domestic	Water Supply	3.66			SAND	STONES	
	645364.7	4902213	242.82	25.91	Cable Tool	24.99	10	45.46	GPM	Domestic	Water Supply	9.75			GRAVEL	STONES	
	645364.7	4902213	242.82	25.91	Cable Tool	24.99	10	45.46	GPM	Domestic	Water Supply	24.99			STONES		
6912593	645364.7	4902213	242.82	25.91	Cable Tool	24.99	10	45.46	GPM	Domestic	Water Supply	25.91	0	BROWN	GRAVEL		
	645214.7	4902123	239.40	16.15	Rotary (Convent.)	16.15	6	27.276	GPM	Domestic	Water Supply	3.35		BROWN	SAND		
	645214.7	4902123	239.40	16.15	Rotary (Convent.)	16.15	6	27.276	GPM	Domestic	Water Supply	9.14		BLUE	CLAY		
	645214.7	4902123	239.40	16.15	Rotary (Convent.)	16.15	6	27.276	GPM	Domestic	Water Supply	10.06		GREY	CLAY	STONES	
	645214.7	4902123	239.40	16.15	Rotary (Convent.)	16.15	6	27.276	GPM	Domestic	Water Supply	15.24		GREY	CLAY	STONES	
6912664	645214.7	4902123	239.40	16.15	Rotary (Convent.)	16.15	6	27.276	GPM	Domestic	Water Supply	16.15	0	GREY	SAND	GRAVEL	
	645172.7	4902166	236.84	14.63	Rotary (Convent.)	14.63	12	54.552	GPM	Domestic	Water Supply	2.44		BROWN	SAND	GRAVEL	
	645172.7	4902166	236.84	14.63	Rotary (Convent.)	14.63	12	54.552	GPM	Domestic	Water Supply	10.67		BLUE	CLAY		
	645172.7	4902166	236.84	14.63	Rotary (Convent.)	14.63	12	54.552	GPM	Domestic	Water Supply	13.41		GREY	CLAY	STONES	
6912913	645172.7	4902166	236.84	14.63	Rotary (Convent.)	14.63	12	54.552	GPM	Domestic	Water Supply	14.63	0	GREY	SAND	GRAVEL	
	645161.7	4902147	237.48	14.63	Rotary (Convent.)	14.63	10	45.46	GPM	Domestic	Water Supply	2.13		BROWN	GRAVEL	SAND	
	645161.7	4902147	237.48	14.63	Rotary (Convent.)	14.63	10	45.46	GPM	Domestic	Water Supply	13 .72		GREY	CLAY	STONES	
6912914	645161.7	4902147	237.48	14.63	Rotary (Convent.)	14.63	10	45.46	GPM	Domestic	Water Supply	14.63	0	GREY	SAND	GRAVEL	
	644904.7	4902013	239.32	13.11	Cable Tool	11.89	20	90.92	GPM	Domestic	Water Supply	2.13		BROWN	CLAY	SAND	
	644904.7	4902013	239.32	13.11	Cable Tool	11.89	20	90.92	GPM	Domestic	Water Supply	9.75		BROWN	SAND	CLAY	STONES
	644904.7	4902013	239.32	13.11	Cable Tool	11.89	20	90.92	GPM	Domestic	Water Supply	11.89		BROWN	FINE SAND		
	644904.7	4902013	239.32	13.11	Cable Tool	11.89	20	90.92	GPM	Domestic	Water Supply	12.50		BROWN	COARSE SAND		

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
6913565	644904.7	4902013	239.32	13.11	Cable Tool	11.89	20	90.92	GPM	Domestic	Water Supply	13 .11	0	BLACK	GRAVEL		
	645154.7	4902253	231.04	10.97	Cable Tool	5.49	20	90.92	GPM	Domestic	Water Supply	5.49		BROWN	CLAY	SANDY	
	645154.7	4902253	231.04	10.97	Cable Tool	5.49	20	90.92	GPM	Domestic	Water Supply	9.75		GREY	GRAVEL	CLAY	
6913697	645154.7	4902253	231.04	10.97	Cable Tool	5.49	20	90.92	GPM	Domestic	Water Supply	10.97	0	GREY	GRAVEL	CLEAN	
	645274.7	4902233	236.15	10.67	Cable Tool	5.79	12	54.552	GPM	Domestic	Water Supply	5.79		BROWN	CLAY	SANDY	
	645274.7	4902233	236.15	10.67	Cable Tool	5.79	12	54.552	GPM	Domestic	Water Supply	9.14		GREY	GRAVEL		
6913698	645274.7	4902233	236.15	10.67	Cable Tool	5.79	12	54.552	GPM	Domestic	Water Supply	10.67	0	GREY	GRAVEL	CLEAN	
	645274.7	4902194	238.72	17.68	Rotary (Convent.)	17.68	25	113.65	GPM	Domestic	Water Supply	2.74		BROWN	SAND		
	645274.7	4902194	238.72	17.68	Rotary (Convent.)	17.68	25	113.65	GPM	Domestic	Water Supply	9.75		BLUE	CLAY		
	645274.7	4902194	238.72	17.68	Rotary (Convent.)	17.68	25	113.65	GPM	Domestic	Water Supply	15.24		GREY	CLAY	STONES	
6913711	645274.7	4902194	238.72	17.68	Rotary (Convent.)	17.68	25	113.65	GPM	Domestic	Water Supply	17.68	0	GREY	SAND	GRAVEL	
	645229.7	4902149	238.76	16.76	Rotary (Convent.)	16.76	7	31.822	GPM	Domestic	Water Supply	2.74		BROWN	SAND		
	645229.7	4902149	238.76	16.76	Rotary (Convent.)	16.76	7	31.822	GPM	Domestic	Water Supply	8.23		BLUE	CLAY		
	645229.7	4902149	238.76	16.76	Rotary (Convent.)	16.76	7	31.822	GPM	Domestic	Water Supply	9.14		RED	GRANITE	BOULDERS	
	645229.7	4902149	238.76	16.76	Rotary (Convent.)	16.76	7	31.822	GPM	Domestic	Water Supply	14.63		GREY	CLAY	STONES	
6913712	645229.7	4902149	238.76	16.76	Rotary (Convent.)	16.76	7	31.822	GPM	Domestic	Water Supply	16.76	0	GREY	SAND	GRAVEL	
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	0.91		BROWN	SAND	DRY	
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	3.35		BROWN	GRAVEL	DRY	
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	6.10		BROWN	GRAVEL	SAND	
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	9.14		BROWN	SAND	CLAY	PACKED
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	16.46		GREY	CLAY	BOULDERS	HARD
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	18 .29		GREY	GRAVEL	SILT	CEMENTED
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	21.95		GREY	CLAY	STONES	HARD
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	22.86		GREY	SAND	SILT	POROUS
	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	24.69		GREY	CLAY	STONES	HARD
6914598	645114.7	4902373	234.85	25.30	Rotary (Convent.)	22.25	6	27.276	GPM	Domestic	Water Supply	25.30	B	GREY	LIMESTONE	HARD	

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644514.7	4901973	234.91	17.98	Rotary (Convent.)	17.98	9	40.914	GPM	Domestic	Water Supply	3.05		BROWN	GRAVEL	LOOSE	
	644514.7	4901973	234.91	17.98	Rotary (Convent.)	17.98	9	40.914	GPM	Domestic	Water Supply	9.14		GREY	CLAY	STONES	HARD
	644514.7	4901973	234.91	17.98	Rotary (Convent.)	17.98	9	40.914	GPM	Domestic	Water Supply	17.07		GREY	SILT	CLAY	HARD
6915189	644514.7	4901973	234.91	17.98	Rotary (Convent.)	17.98	9	40.914	GPM	Domestic	Water Supply	17.98	B	GREY	LIMESTONE	SHALY	
	644964.7	4902173	234.00	13.72	Cable Tool	10.67	10	45.46	GPM	Domestic	Water Supply	0.61		BLACK	TOPSOIL		
	644964.7	4902173	234.00	13.72	Cable Tool	10.67	10	45.46	GPM	Domestic	Water Supply	2.74		BROWN	CLAY		
	644964.7	4902173	234.00	13.72	Cable Tool	10.67	10	45.46	GPM	Domestic	Water Supply	10.67		GREY	CLAY	STONES	PACKED
6915526	644964.7	4902173	234.00	13.72	Cable Tool	10.67	10	45.46	GPM	Domestic	Water Supply	13 .72	0	GREY	GRAVEL	SAND	
	645114.7	4902123	237.81	13.11	Cable Tool	11.58	6	27.276	GPM	Domestic	Water Supply	7.01		BROWN	CLAY		
	645114.7	4902123	237.81	13.11	Cable Tool	11.58	6	27.276	GPM	Domestic	Water Supply	11.58		YELLOW	SAND	GRAVEL	LAYERED
6915642	645114.7	4902123	237.81	13.11	Cable Tool	11.58	6	27.276	GPM	Domestic	Water Supply	13 .11	0	BROWN	SAND	GRAVEL	LAYERED
	645114.7	4902123	237.81	13.41	Cable Tool	11.28	8	36.368	GPM	Domestic	Water Supply	4.88		BROWN	CLAY	STONES	
	645114.7	4902123	237.81	13.41	Cable Tool	11.28	8	36.368	GPM	Domestic	Water Supply	11.28		YELLOW	CLAY	SAND	
6915643	645114.7	4902123	237.81	13.41	Cable Tool	11.28	8	36.368	GPM	Domestic	Water Supply	13 .41	0	BROWN	SAND	GRAVEL	LAYERED
	644914.7	4902023	239.39	7.01	Boring	3.66	2	9.092	GPM	Domestic	Water Supply	0.30			TOPSOIL		
	644914.7	4902023	239.39	7.01	Boring	3.66	2	9.092	GPM	Domestic	Water Supply	3.66			CLAY		
6915924	644914.7	4902023	239.39	7.01	Boring	3.66	2	9.092	GPM	Domestic	Water Supply	7.01	6915924		HARDPAN	STONES	
	644814.7	4902023	234.73	32.61	Rotary (Convent.)	27.43	3	13.638	GPM	Domestic	Water Supply	3.66		BROWN	CLAY	DENSE	
	644814.7	4902023	234.73	32.61	Rotary (Convent.)	27.43	3	13.638	GPM	Domestic	Water Supply	13.72		GREY	CLAY	STONES	HARD
	644814.7	4902023	234.73	32.61	Rotary (Convent.)	27.43	3	13.638	GPM	Domestic	Water Supply	14.33		GREY	GRAVEL	SILT	CEMENTED
	644814.7	4902023	234.73	32.61	Rotary (Convent.)	27.43	3	13.638	GPM	Domestic	Water Supply	22.86		GREY	CLAY	STONES	HARD
	644814.7	4902023	234.73	32.61	Rotary (Convent.)	27.43	3	13.638	GPM	Domestic	Water Supply	23.47		GREY	GRAVEL	SILT	CEMENTED
	644814.7	4902023	234.73	32.61	Rotary (Convent.)	27.43	3	13.638	GPM	Domestic	Water Supply	24.69		GREY	CLAY	HARD	
	644814.7	4902023	234.73	32.61	Rotary (Convent.)	27.43	3	13.638	GPM	Domestic	Water Supply	24.99		GREY	GRAVEL	CEMENTED	
6916447	644814.7	4902023	234.73	32.61	Rotary (Convent.)	27.43	3	13.638	GPM	Domestic	Water Supply	32.61	B	GREY	LIMESTONE	HARD	
	644930.7	4902060	238.48	13.72	Cable Tool	12.80	15	68.19	GPM	Domestic	Water Supply	7.62			PREVIOUSLY DUG		

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644930.7	4902060	238.48	13.72	Cable Tool	12.80	15	68.19	GPM	Domestic	Water Supply	12.80		BROWN	CLAY	STONES	HARD
6917318	644930.7	4902060	238.48	13.72	Cable Tool	12.80	15	68.19	GPM	Domestic	Water Supply	13.72	0	GREY	COARSE SAND	GRAVEL	
	645322	4902220	240.47	10.06	Rotary (Convent.)	9.14	12	54.552	GPM	Domestic	Water Supply	0.30		BROWN	TOPSOIL		
	645322	4902220	240.47	10.06	Rotary (Convent.)	9.14	12	54.552	GPM	Domestic	Water Supply	2.44		BROWN	CLAY		
	645322	4902220	240.47	10.06	Rotary (Convent.)	9.14	12	54.552	GPM	Domestic	Water Supply	4.57		BROWN	GRAVEL	HARD	
	645322	4902220	240.47	10.06	Rotary (Convent.)	9.14	12	54.552	GPM	Domestic	Water Supply	5.49		BROWN	SAND	HARD	
	645322	4902220	240.47	10.06	Rotary (Convent.)	9.14	12	54.552	GPM	Domestic	Water Supply	8.53		BROWN	GRAVEL	HARD	
6917602	645322	4902220	240.47	10.06	Rotary (Convent.)	9.14	12	54.552	GPM	Domestic	Water Supply	10.06	0	BROWN	SAND	HARD	
	644903	4902293	234.36	31.70	Rotary (Convent.)	31.70	20	90.92	GPM	Domestic	Water Supply	3.66		BROWN	SAND	DRY	
	644903	4902293	234.36	31.70	Rotary (Convent.)	31.70	20	90.92	GPM	Domestic	Water Supply	8.53		BROWN	COARSE GRAVEL	SAND	
	644903	4902293	234.36	31.70	Rotary (Convent.)	31.70	20	90.92	GPM	Domestic	Water Supply	28.65		YELLOW	CLAY	STONES	HARD
6918213	644903	4902293	234.36	31.70	Rotary (Convent.)	31.70	20	90.92	GPM	Domestic	Water Supply	31.70	B	GREY	LIMESTONE		
	645004.7	4902035	240.74	12.19	Cable Tool	10.97	8	36.368	GPM	Domestic	Water Supply	0.61		BROWN	FILL	STONES	
	645004.7	4902035	240.74	12.19	Cable Tool	10.97	8	36.368	GPM	Domestic	Water Supply	5.79		BROWN	SAND	CLAY	LOOSE
	645004.7	4902035	240.74	12.19	Cable Tool	10.97	8	36.368	GPM	Domestic	Water Supply	10.97		BLUE	CLAY	STONES	
6918221	645004.7	4902035	240.74	12.19	Cable Tool	10.97	8	36.368	GPM	Domestic	Water Supply	12.19	0	BROWN	SAND	CLAY	LAYERED
	644960	4902131	234.99	26.52	Cable Tool	24.38	7	31.822	GPM	Domestic	Water Supply	7.62		BROWN	CLAY	SAND	STONES
	644960	4902131	234.99	26.52	Cable Tool	24.38	7	31.822	GPM	Domestic	Water Supply	24.38		GREY	CLAY	STONEY	
6918583	644960	4902131	234.99	26.52	Cable Tool	24.38	7	31.822	GPM	Domestic	Water Supply	26.52	B		LIMESTONE		
	645294.7	4902244	237.51	22.86	Cable Tool	21.95	30	136.38	GPM	Domestic	Water Supply	0.61			TOPSOIL		
	645294.7	4902244	237.51	22.86	Cable Tool	21.95	30	136.38	GPM	Domestic	Water Supply	3.66			SAND	GRAVEL	
	645294.7	4902244	237.51	22.86	Cable Tool	21.95	30	136.38	GPM	Domestic	Water Supply	10.06		BROWN	CLAY	STONEY	SANDY
	645294.7	4902244	237.51	22.86	Cable Tool	21.95	30	136.38	GPM	Domestic	Water Supply	21.95		GREY	CLAY	SANDY	
6919127	645294.7	4902244	237.51	22.86	Cable Tool	21.95	30	136.38	GPM	Domestic	Water Supply	22.86	0	GREY	COARSE SAND		
	645258.7	4902184	238.05	10.97	Rotary (Convent.)	8.53	15	68.19	GPM	Domestic	Water Supply	0.61		BROWN	SAND	FILL	LOOSE
	645258.7	4902184	238.05	10.97	Rotary (Convent.)	8.53	15	68.19	GPM	Domestic	Water Supply	2.74		BLACK	TOPSOIL	LOOSE	

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	645258.7	4902184	238.05	10.97	Rotary (Convent.)	8.53	15	68.19	GPM	Domestic	Water Supply	4.88		RED	SAND	CLAY	SOFT
	645258.7	4902184	238.05	10.97	Rotary (Convent.)	8.53	15	68.19	GPM	Domestic	Water Supply	8.53		GREY	CLAY	SILT	HARD
6919373	645258.7	4902184	238.05	10.97	Rotary (Convent.)	8.53	15	68.19	GPM	Domestic	Water Supply	10.97	0	RED	SAND	GRAVEL	LOOSE
	645014	4902099	236.84	32.00	Rotary (Convent.)	31.39	10	45.46	GPM	Domestic	Water Supply	0.30		BROWN	TOPSOIL		
	645014	4902099	236.84	32.00	Rotary (Convent.)	31.39	10	45.46	GPM	Domestic	Water Supply	3.66		BROWN	SAND		
	645014	4902099	236.84	32.00	Rotary (Convent.)	31.39	10	45.46	GPM	Domestic	Water Supply	23.47		GREY	CLAY	STONES	HARDPAN
6919587	645014	4902099	236.84	32.00	Rotary (Convent.)	31.39	10	45.46	GPM	Domestic	Water Supply	32.00	B	GREY	LIMESTONE	CLAY	
	644439.7	4902013	233.94	18.90	Rotary (Convent.)	14.02	20	90.92	GPM	Domestic	Water Supply	0.91		BROWN	SAND		
	644439.7	4902013	233.94	18.90	Rotary (Convent.)	14.02	20	90.92	GPM	Domestic	Water Supply	3.66		BROWN	SAND	STONES	HARD
	644439.7	4902013	233.94	18.90	Rotary (Convent.)	14.02	20	90.92	GPM	Domestic	Water Supply	14.02		GREY	CLAY	STONES	HARD
6919589	644439.7	4902013	233.94	18.90	Rotary (Convent.)	14.02	20	90.92	GPM	Domestic	Water Supply	18.90	B	GREY	LIMESTONE		
	645133.7	4902146	237.22	13.72	Cable Tool	13.41	15	68.19	GPM	Domestic	Water Supply	2.13		BROWN	CLAY	TOPSOIL	
	645133.7	4902146	237.22	13.72	Cable Tool	13.41	15	68.19	GPM	Domestic	Water Supply	8.84		BROWN	CLAY	SAND	
	645133.7	4902146	237.22	13.72	Cable Tool	13.41	15	68.19	GPM	Domestic	Water Supply	13 .41		GREY	CLAY	STONES	
6919784	645133.7	4902146	237.22	13.72	Cable Tool	13.41	15	68.19	GPM	Domestic	Water Supply	13 .72	0	GREY	SAND	GRAVEL	CLEAN
6919855	644419.7	4902136	233.41	10.97	Rotary (Convent.)	7.62	20	90.92	GPM	Domestic	Water Supply	0.30	0	BROWN	TOPSOIL	SAND	
	644419.7	4902136	233.41	10.97	Rotary (Convent.)	7.62	20	90.92	GPM	Domestic	Water Supply	10.97		BROWN	SAND	STONES	SANDY
	644997.7	4902052	239.54	13.72	Cable Tool	12.80	6	27.276	GPM	Domestic	Water Supply	0.30		BROWN	TOPSOIL	SOFT	
	644997.7	4902052	239.54	13.72	Cable Tool	12.80	6	27.276	GPM	Domestic	Water Supply	2.74		BROWN	SAND	STONES	
	644997.7	4902052	239.54	13.72	Cable Tool	12.80	6	27.276	GPM	Domestic	Water Supply	10.06		GREY	CLAY	GRAVEL	
	644997.7	4902052	239.54	13.72	Cable Tool	12.80	6	27.276	GPM	Domestic	Water Supply	12.50		GREY	GRAVEL	STONES	BOULDERS
6920544	644997.7	4902052	239.54	13.72	Cable Tool	12.80	6	27.276	GPM	Domestic	Water Supply	13 .72	0	BLACK	COARSE SAND		
	645305.7	4902238	238.54	22.56	Rotary (Air)	22.56	60	272.76	GPM	Domestic	Water Supply	11 .28		BROWN	CLAY	SOFT	
	645305.7	4902238	238.54	22.56	Rotary (Air)	22.56	60	272.76	GPM	Domestic	Water Supply	17.37		GREY	CLAY	STONES	HARD
6921200	645305.7	4902238	238.54	22.56	Rotary (Air)	22.56	60	272.76	GPM	Domestic	Water Supply	22.56	0	GREY	COARSE GRAVEL	CLEAN	
	645182.7	4902232	233.23	10.97	Rotary (Convent.)	6.10	25	113.65	GPM	Domestic	Water Supply	1.22		BLACK	PEAT	TOPSOIL	LOOSE

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	645182.7	4902232	233.23	10.97	Rotary (Convent.)	6.10	25	113.65	GPM	Domestic	Water Supply	2.13		BROWN	GRAVEL	SAND	LOOSE
	645182.7	4902232	233.23	10.97	Rotary (Convent.)	6.10	25	113.65	GPM	Domestic	Water Supply	6.10		BLUE	CLAY	DENSE	
	645182.7	4902232	233.23	10.97	Rotary (Convent.)	6.10	25	113.65	GPM	Domestic	Water Supply	8.53		GREY	SAND	LAYERED	
6921423	645182.7	4902232	233.23	10.97	Rotary (Convent.)	6.10	25	113.65	GPM	Domestic	Water Supply	10.97	0	GREY	GRAVEL	LOOSE	
	644410.7	4901914	234.01	17.37	Cable Tool	17.37	6	27.276	GPM	Domestic	Water Supply	0.30		BROWN	TOPSOIL		
	644410.7	4901914	234.01	17.37	Cable Tool	17.37	6	27.276	GPM	Domestic	Water Supply	5.49		BROWN	SAND		
	644410.7	4901914	234.01	17.37	Cable Tool	17.37	6	27.276	GPM	Domestic	Water Supply	12.19		GREY	CLAY		
6921506	644410.7	4901914	234.01	17.37	Cable Tool	17.37	6	27.276	GPM	Domestic	Water Supply	17.37	B	BROWN	SHALE	ROCK	SAND
	645303.7	4902116	243.40	25.91	Cable Tool	24.99	20	90.92	GPM	Domestic	Water Supply	0.30		BROWN	TOPSOIL		
	645303.7	4902116	243.40	25.91	Cable Tool	24.99	20	90.92	GPM	Domestic	Water Supply	7.01		BROWN	SAND	LOOSE	
	645303.7	4902116	243.40	25.91	Cable Tool	24.99	20	90.92	GPM	Domestic	Water Supply	16.15		BLUE	CLAY	STONES	STICKY
	645303.7	4902116	243.40	25.91	Cable Tool	24.99	20	90.92	GPM	Domestic	Water Supply	18 .29		BROWN	CLAY	SAND	LAYERED
	645303.7	4902116	243.40	25.91	Cable Tool	24.99	20	90.92	GPM	Domestic	Water Supply	19.81		GREY	CLAY		
	645303.7	4902116	243.40	25.91	Cable Tool	24.99	20	90.92	GPM	Domestic	Water Supply	24.69		GREY	GRAVEL	LOOSE	
	645303.7	4902116	243.40	25.91	Cable Tool	24.99	20	90.92	GPM	Domestic	Water Supply	24.99		GREY	CLAY		
6921836	645303.7	4902116	243.40	25.91	Cable Tool	24.99	20	90.92	GPM	Domestic	Water Supply	25.91	0	BLACK	COARSE SAND		
	645004.7	4902035	240.74	30.18	Cable Tool	28.04	10	45.46	GPM	Domestic	Water Supply	12.19			PREV. DRILLED		
	645004.7	4902035	240.74	30.18	Cable Tool	28.04	10	45.46	GPM	Domestic	Water Supply	13 .41		BROWN	CLAY	SAND	LAYERED
	645004.7	4902035	240.74	30.18	Cable Tool	28.04	10	45.46	GPM	Domestic	Water Supply	25.91		GREY	CLAY	STONES	HARD
	645004.7	4902035	240.74	30.18	Cable Tool	28.04	10	45.46	GPM	Domestic	Water Supply	26.21		GREY	CLAY	SOFT	
	645004.7	4902035	240.74	30.18	Cable Tool	28.04	10	45.46	GPM	Domestic	Water Supply	28.04		GREY	LIMESTONE	HARD	
6922020	645004.7	4902035	240.74	30.18	Cable Tool	28.04	10	45.46	GPM	Domestic	Water Supply	30.18	B	WHITE	LIMESTONE		
	645281.7	4902183	239.79	13.72	Cable Tool	12.19	7	31.822	GPM	Domestic	Water Supply	1.22		BLACK	MUCK	SOFT	
	645281.7	4902183	239.79	13.72	Cable Tool	12.19	7	31.822	GPM	Domestic	Water Supply	2.44		BROWN	SAND		
	645281.7	4902183	239.79	13.72	Cable Tool	12.19	7	31.822	GPM	Domestic	Water Supply	12.19		GREY	CLAY	SOFT	
6922039	645281.7	4902183	239.79	13.72	Cable Tool	12.19	7	31.822	GPM	Domestic	Water Supply	13 .72	0		COARSE SAND	LOOSE	

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644971	4902097	236.68	17.68	Rotary (Air)	16.15	10	45.46	GPM	Domestic	Water Supply	5.18		BROWN	CLAY	STONES	HARD
	644971	4902097	236.68	17.68	Rotary (Air)	16.15	10	45.46	GPM	Domestic	Water Supply	13 .72		GREY	CLAY	BOULDERS	HARD
	644971	4902097	236.68	17.68	Rotary (Air)	16.15	10	45.46	GPM	Domestic	Water Supply	14.33		GREY	CLAY	DENSE	
6922256	644971	4902097	236.68	17.68	Rotary (Air)	16.15	10	45.46	GPM	Domestic	Water Supply	17.68	0	BLACK	FINE SAND	CLEAN	
	644382	4901885	234.04	21.34	Rotary (Air)	21.34	10	45.46	GPM	Domestic	Water Supply	4.57		BROWN	SAND	PACKED	
	644382	4901885	234.04	21.34	Rotary (Air)	21.34	10	45.46	GPM	Domestic	Water Supply	15.85		GREY	CLAY	GRAVEL	SOFT
6922931	644382	4901885	234.04	21.34	Rotary (Air)	21.34	10	45.46	GPM	Domestic	Water Supply	21.34	B	GREY	LIMESTONE	HARD	
	644395	4902151	233.25	19.81	Rotary (Convent.)	12.50	10	45.46	GPM	Domestic	Water Supply	3.96		BROWN	SAND	STONES	LOOSE
	644395	4902151	233.25	19.81	Rotary (Convent.)	12.50	10	45.46	GPM	Domestic	Water Supply	11.58		BLUE	CLAY	SILT	LAYERED
	644395	4902151	233.25	19.81	Rotary (Convent.)	12.50	10	45.46	GPM	Domestic	Water Supply	12.19		GREY	CLAY	STONES	CEMENTED
	644395	4902151	233.25	19.81	Rotary (Convent.)	12.50	10	45.46	GPM	Domestic	Water Supply	13 .41		GREY	LIMESTONE	SHALE	FILL
6923916	644395	4902151	233.25	19.81	Rotary (Convent.)	12.50	10	45.46	GPM	Domestic	Water Supply	19.81	B	GREY	LIMESTONE	FRACTURED	
	644876	4902397	233.03	25.91	Rotary (Convent.)	25.91	10	45.46	GPM	Domestic	Water Supply	5.18		BROWN	GRAVEL	CLAY	LOOSE
	644876	4902397	233.03	25.91	Rotary (Convent.)	25.91	10	45.46	GPM	Domestic	Water Supply	7.62		BROWN	STONES	CLAY	HARD
	644876	4902397	233.03	25.91	Rotary (Convent.)	25.91	10	45.46	GPM	Domestic	Water Supply	9.75		BLUE	CLAY	SOFT	
	644876	4902397	233.03	25.91	Rotary (Convent.)	25.91	10	45.46	GPM	Domestic	Water Supply	22.86		BROWN	SILT	GRAVEL	LOOSE
	644876	4902397	233.03	25.91	Rotary (Convent.)	25.91	10	45.46	GPM	Domestic	Water Supply	25.91			LIMESTONE		
6924775	644876	4902397	233.03	25.91	Rotary (Convent.)	25.91	10	45.46	GPM	Domestic	Water Supply	25.91	0	GREY	CLAY	SAND	STONES
	644977	4901980	244.13	23.47	Rotary (Air)	23.47	8	36.368	GPM	Domestic	Water Supply	3.66		BROWN	SAND	GRAVEL	LOOSE
	644977	4901980	244.13	23.47	Rotary (Air)	23.47	8	36.368	GPM	Domestic	Water Supply	17.68		GREY	CLAY	HARD	STONES
6924929	644977	4901980	244.13	23.47	Rotary (Air)	23.47	8	36.368	GPM	Domestic	Water Supply	23.47	B	GREY	LIMESTONE	HARD	
	645244	4902199	236.30	28.90	Rotary (Convent.)		36	36	LPM	Domestic	Water Supply	0.60		BROWN	TOPSOIL	SOFT	
	645244	4902199	236.30	28.90	Rotary (Convent.)		36	36	LPM	Domestic	Water Supply	2.40		RED	SAND		LOOSE
	645244	4902199	236.30	28.90	Rotary (Convent.)		36	36	LPM	Domestic	Water Supply	5.70		BROWN	SAND	STONES	LOOSE
	645244	4902199	236.30	28.90	Rotary (Convent.)		36	36	LPM	Domestic	Water Supply	7.30		BROWN	CLAY	SAND	SOFT
	645244	4902199	236.30	28.90	Rotary (Convent.)		36	36	LPM	Domestic	Water Supply	15.40		GREY	CLAY	DENSE	DENSE

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	645244	4902199	236.30	28.90	Rotary (Convent.)		36	36	LPM	Domestic	Water Supply	17.30		BROWN	SAND	GRAVEL	LAYERED
	645244	4902199	236.30	28.90	Rotary (Convent.)		36	36	LPM	Domestic	Water Supply	24.60		GREY	GRAVEL	CEMENTED	
6928377	645244	4902199	236.30	28.90	Rotary (Convent.)		36	36	LPM	Domestic	Water Supply	28.90	B	GREY	LIMESTONE	ROCK	HARD
	645005	4902103	236.52	11.28	Rotary (Air)	11.00	38	38	LPM	Domestic	Water Supply	5.19		BROWN	SAND		
6929631	645005	4902103	236.52	11.28	Rotary (Air)	11.00	38	38	LPM	Domestic	Water Supply	11.28	0	BROWN	SAND	GRAVEL	
	645317.5	4902132	244.39	19.20	Cable Tool	17.98	90	409.14	GPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		
	645317.5	4902132	244.39	19.20	Cable Tool	17.98	90	409.14	GPM	Domestic	Water Supply	8.23		BROWN	CLAY		
	645317.5	4902132	244.39	19.20	Cable Tool	17.98	90	409.14	GPM	Domestic	Water Supply	8.53		BROWN	GRAVEL	CLAY	
	645317.5	4902132	244.39	19.20	Cable Tool	17.98	90	409.14	GPM	Domestic	Water Supply	15 .85		BLUE	CLAY	STONES	
	645317.5	4902132	244.39	19.20	Cable Tool	17.98	90	409.14	GPM	Domestic	Water Supply	17.98		GREY	GRAVEL	CLAY	
6929653	645317.5	4902132	244.39	19.20	Cable Tool	17.98	90	409.14	GPM	Domestic	Water Supply	19.20	0	GREY	SAND	GRAVEL	
	644976	4902127	235.04	14.02	Cable Tool	14.00	22.7	22.7	LPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		
	644976	4902127	235.04	14.02	Cable Tool	14.00	22.7	22.7	LPM	Domestic	Water Supply	12.81			HARDPAN		
6929882	644976	4902127	235.04	14.02	Cable Tool	14.00	22.7	22.7	LPM	Domestic	Water Supply	14.02	0		SAND	GRAVEL	
	644493	4901921	234.64	21.60	Rotary (Convent.)		22	22	LPM	Domestic	Water Supply	1.80		RED	SAND	LOOSE	
	644493	4901921	234.64	21.60	Rotary (Convent.)		22	22	LPM	Domestic	Water Supply	7.00		GREY	CLAY	SOFT	
	644493	4901921	234.64	21.60	Rotary (Convent.)		22	22	LPM	Domestic	Water Supply	11.80		GREY	STONES	CLAY	HARD
	644493	4901921	234.64	21.60	Rotary (Convent.)		22	22	LPM	Domestic	Water Supply	15 .80		GREY	SAND	STONES	CLAY
	644493	4901921	234.64	21.60	Rotary (Convent.)		22	22	LPM	Domestic	Water Supply	17.00		GREY	LIMESTONE	CLAY	FRACTURED
6931097	644493	4901921	234.64	21.60	Rotary (Convent.)		22	22	LPM	Domestic	Water Supply	21.60	B	GREY	LIMESTONE	HARD	
	644972	4901654	260.36	32.61	Rotary (Air)	31.39	3	13.638	GPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		
	644972	4901654	260.36	32.61	Rotary (Air)	31.39	3	13.638	GPM	Domestic	Water Supply	4.88		BROWN	SAND	SILTY	GRAVEL
	644972	4901654	260.36	32.61	Rotary (Air)	31.39	3	13.638	GPM	Domestic	Water Supply	13.41		GREY	CLAY	SANDY	GRAVEL
	644972	4901654	260.36	32.61	Rotary (Air)	31.39	3	13.638	GPM	Domestic	Water Supply	17.37		GREY	CLAY	SANDY	GRAVEL
	644972	4901654	260.36	32.61	Rotary (Air)	31.39	3	13.638	GPM	Domestic	Water Supply	31.39		GREY	GRAVEL	CLAY	SANDY
	644972	4901654	260.36	32.61	Rotary (Air)	31.39	3	13.638	GPM	Domestic	Water Supply	32.61		GREY	SAND	GRAVEL	

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
7041217	644972	4901654	260.36	32.61	Rotary (Air)	31.39	3	13.638	GPM	Domestic	Water Supply		0	GREY	GRAVEL	SANDY	CLAY
	644941	4901609	260.75	39.01	Rotary (Air)	37.80	4	18.184	GPM	Domestic	Water Supply	6.10		BROWN	CLAY	SANDY	GRAVEL
	644941	4901609	260.75	39.01	Rotary (Air)	37.80	4	18.184	GPM	Domestic	Water Supply	27.13		GREY	CLAY	SANDY	GRAVEL
	644941	4901609	260.75	39.01	Rotary (Air)	37.80	4	18.184	GPM	Domestic	Water Supply	37.80		GREY	CLAY	SANDY	GRAVEL
	644941	4901609	260.75	39.01	Rotary (Air)	37.80	4	18.184	GPM	Domestic	Water Supply	39.01		GREY	SAND	SILT	GRAVEL
7041233	644941	4901609	260.75	39.01	Rotary (Air)	37.80	4	18.184	GPM	Domestic	Water Supply		0	GREY	CLAY	SANDY	GRAVEL
	644972		260.36	53.64	Rotary (Air)					Domestic	Abandoned-Supply	0.30		BLACK	TOPSOIL		
	644972		260.36	53.64	Rotary (Air)					Domestic	Abandoned-Supply	5.18		BROWN	SAND	SILTY	GRAVEL
	644972		260.36	53.64	Rotary (Air)					Domestic	Abandoned-Supply	6.10		BROWN	SAND	SILTY	GRAVEL
	644972		260.36	53.64	Rotary (Air)					Domestic	Abandoned-Supply	20.73		GREY	CLAY	SANDY	GRAVEL
	644972		260.36	53.64	Rotary (Air)					Domestic	Abandoned-Supply	24.99		GREY	GRAVEL	CLAY	SANDY
	644972		260.36	53.64	Rotary (Air)					Domestic	Abandoned-Supply	39.01		GREY	CLAY	SANDY	GRAVEL
	644972		260.36	53.64	Rotary (Air)					Domestic	Abandoned-Supply	42.98		GREY	CLAY	GRAVEL	
7041243	644972	4901654	260.36	53.64	Rotary (Air)					Domestic	Abandoned-Supply	53.64	7041243	GREY	LIMESTONE		
	644789	4901490	258.63	42.97	Rotary (Convent.)	40.00	18.92	18.92	LPM	Domestic	Water Supply	1.82		BROWN	SAND	STONES	
	644789	4901490	258.63	42.97	Rotary (Convent.)	40.00	18.92	18.92	LPM	Domestic	Water Supply	3.35		GREY	CLAY	TILL	STONES
	644789	4901490	258.63	42.97	Rotary (Convent.)	40.00	18.92	18.92	LPM	Domestic	Water Supply	10.05		GREY	CLAY	TILL	
	644789	4901490	258.63	42.97	Rotary (Convent.)	40.00	18.92	18.92	LPM	Domestic	Water Supply	21.03		GREY	CLAY	TILL	BOULDERS
	644789	4901490	258.63	42.97	Rotary (Convent.)	40.00	18.92	18.92	LPM	Domestic	Water Supply	26.21		GREY	CLAY	TILL	STONES
	644789	4901490	258.63	42.97	Rotary (Convent.)	40.00	18.92	18.92	LPM	Domestic	Water Supply	39.62		GREY	CLAY	TILL	SAND
7049148	644789	4901490	258.63	42.97	Rotary (Convent.)	40.00	18.92	18.92	LPM	Domestic	Water Supply	42.97	B	GREY	LIMESTONE	HARD	
	644817	4901404	261.24	47.54	Rotary (Convent.)	44.00	11.35	11.35	LPM	Domestic	Water Supply	5.48		BROWN	CLAY	TILL	STONES
	644817	4901404	261.24	47.54	Rotary (Convent.)	44.00	11.35	11.35	LPM	Domestic	Water Supply	17.06		GREY	CLAY	TILL	STONES
	644817	4901404	261.24	47.54	Rotary (Convent.)	44.00	11.35	11.35	LPM	Domestic	Water Supply	29.56		GREY	CLAY		
	644817	4901404	261.24	47.54	Rotary (Convent.)	44.00	11.35	11.35	LPM	Domestic	Water Supply	33.22		GREY	CLAY	STONES	DENSE
	644817	4901404	261.24	47.54	Rotary (Convent.)	44.00	11.35	11.35	LPM	Domestic	Water Supply	43.89		GREY	CLAY	TILL	SAND

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
7049149	644817	4901404	261.24	47.54	Rotary (Convent.)	44.00	11.35	11.35	LPM	Domestic	Water Supply	47.54	B	GREY	LIMESTONE	HARD	
	644750	4901548	254.11	39.01	Rotary (Air)	37.80	6	27.276	GPM	Domestic	Water Supply	2.74		BROWN	SILT	GRAVEL	
	644750	4901548	254.11	39.01	Rotary (Air)	37.80	6	27.276	GPM	Domestic	Water Supply	5.79		BROWN	SAND	SILT	
	644750	4901548	254.11	39.01	Rotary (Air)	37.80	6	27.276	GPM	Domestic	Water Supply	15.24		BROWN	GRAVEL	SANDY	CLAY
	644750	4901548	254.11	39.01	Rotary (Air)	37.80	6	27.276	GPM	Domestic	Water Supply	18 .59		GREY	GRAVEL	SANDY	CLAY
	644750	4901548	254.11	39.01	Rotary (Air)	37.80	6	27.276	GPM	Domestic	Water Supply	21.03		GREY	SILT	CLAY	GRAVEL
	644750	4901548	254.11	39.01	Rotary (Air)	37.80	6	27.276	GPM	Domestic	Water Supply	22.25		GREY	SILT	SAND	CLAY
	644750	4901548	254.11	39.01	Rotary (Air)	37.80	6	27.276	GPM	Domestic	Water Supply	23.16		GREY	CLAY	GRAVEL	
7049373	644750	4901548	254.11	39.01	Rotary (Air)	37.80	6	27.276	GPM	Domestic	Water Supply	39.01	0	GREY	GRAVEL	CLAYEY	
	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	6.10		BROWN	SAND	CLAY	GRAVEL
	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	20.42		GREY	SAND	CLAY	GRAVEL
	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	21.95		GREY	SAND	CLAY	GRAVEL
	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	24.99		GREY	SAND	CLAY	GRAVEL
	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	26.21		GREY	SAND	CLAY	GRAVEL
	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	29.87		GREY	GRAVEL		
	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	34.14		GREY	SAND	CLAY	GRAVEL
	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	41.30		GREY	SAND	CLAY	GRAVEL
7049388	644837	4901572	258.65	47.85	Rotary (Convent.)	21.95	1.5	6.819	GPM	Domestic	Water Supply	47.85	B	GREY	LIMESTONE		
	644794	4901555	256.52	60.20	Rotary (Air)	40.54	2	9.092	GPM	Domestic	Water Supply	5.49		BROWN	SILT	GRAVEL	
	644794	4901555	256.52	60.20	Rotary (Air)	40.54	2	9.092	GPM	Domestic	Water Supply	25.60		GREY	CLAY	GRAVEL	
	644794	4901555	256.52	60.20	Rotary (Air)	40.54	2	9.092	GPM	Domestic	Water Supply	35.97		GREY	SILT	GRAVEL	
	644794	4901555	256.52	60.20	Rotary (Air)	40.54	2	9.092	GPM	Domestic	Water Supply	39.01		GREY	CLAY	GRAVEL	
	644794	4901555	256.52	60.20	Rotary (Air)	40.54	2	9.092	GPM	Domestic	Water Supply	40.54		GREY	GRAVEL	SAND	
7049432	644794	4901555	256.52	60.20	Rotary (Air)	40.54	2	9.092	GPM	Domestic	Water Supply	60.20	B	GREY	LIMESTONE		
	644943	4901926	249.55	42.07	Rotary (Air)	33.00	24	24	LPM	Domestic	Water Supply	9.15		BROWN	CLAY	GRAVEL	HARD
	644943	4901926	249.55	42.07	Rotary (Air)	33.00	24	24	LPM	Domestic	Water Supply	33.84		GREY	CLAY	STONES	HARD

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
7054419	644943	4901926	249.55	42.07	Rotary (Air)	33.00	24	24	LPM	Domestic	Water Supply	42.07	B	GREY	LIMESTONE		HARD
	644836	4901346	261.24	47.86	Rotary (Air)	25.00	40	40	LPM	Domestic	Water Supply	5.19		BROWN	CLAY		HARD
	644836	4901346	261.24	47.86	Rotary (Air)	25.00	40	40	LPM	Domestic	Water Supply	24.38		GREY	CLAY	STONES	HARD
	644836	4901346	261.24	47.86	Rotary (Air)	25.00	40	40	LPM	Domestic	Water Supply	25.91		GREY	SAND		LOOSE
	644836	4901346	261.24	47.86	Rotary (Air)	25.00	40	40	LPM	Domestic	Water Supply	39.01		GREY	CLAY		DENSE
	644836	4901346	261.24	47.86	Rotary (Air)	25.00	40	40	LPM	Domestic	Water Supply	42.37		GREY	GRAVEL	CLAY	LAYERED
7106763	644836	4901346	261.24	47.86	Rotary (Air)	25.00	40	40	LPM	Domestic	Water Supply	47.86	B	GREY	LIMESTONE		HARD
	644800	4901463	260.24	46.02	Rotary (Convent.)	42.37	8	36.368	GPM	Domestic	Water Supply	3.35		GREY	SAND		LOOSE
	644800	4901463	260.24	46.02	Rotary (Convent.)	42.37	8	36.368	GPM	Domestic	Water Supply	7.01		GREY	CLAY	TILL	STONES
	644800	4901463	260.24	46.02	Rotary (Convent.)	42.37	8	36.368	GPM	Domestic	Water Supply	14.02		GREY	CLAY	TILL	STONES
	644800	4901463	260.24	46.02	Rotary (Convent.)	42.37	8	36.368	GPM	Domestic	Water Supply	17.07		GREY	CLAY	TILL	SAND
	644800	4901463	260.24	46.02	Rotary (Convent.)	42.37	8	36.368	GPM	Domestic	Water Supply	27.74		GREY	CLAY	TILL	HARD
	644800	4901463	260.24	46.02	Rotary (Convent.)	42.37	8	36.368	GPM	Domestic	Water Supply	41.76		GREY	CLAY	TILL	FINE GRAVEL
7108812	644800	4901463	260.24	46.02	Rotary (Convent.)	42.37	8	36.368	GPM	Domestic	Water Supply	46.02	B	GREY	LIMESTONE		HARD
	644338	4901827	234.25	18.80	Cable Tool	18.80	40	40	LPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		SOFT
	644338	4901827	234.25	18.80	Cable Tool	18.80	40	40	LPM	Domestic	Water Supply	3.60		BROWN	SAND	CLAY	
	644338	4901827	234.25	18.80	Cable Tool	18.80	40	40	LPM	Domestic	Water Supply	14.60		GREY	CLAY	STONES	MEDIUM-GRAINED
7109162	644338	4901827	234.25	18.80	Cable Tool	18.80	40	40	LPM	Domestic	Water Supply	18.80	B	GREY	LIMESTONE	CLAY	HARD
	644871	4901578	260.04	48.16	Rotary (Convent.)	48.16	4	18.184	GPM	Domestic	Water Supply	10.67		BROWN	CLAY		HARD
	644871	4901578	260.04	48.16	Rotary (Convent.)	48.16	4	18.184	GPM	Domestic	Water Supply	35.66		GREY	CLAY	SAND	HARD
	644871	4901578	260.04	48.16	Rotary (Convent.)	48.16	4	18.184	GPM	Domestic	Water Supply	42.06		GREY	CLAY		DENSE
7115000	644871	4901578	260.04	48.16	Rotary (Convent.)	48.16	4	18.184	GPM	Domestic	Water Supply	48.16	B	GREY	LIMESTONE		HARD
	644829	4902301	233.44	18.80	Cable Tool	18.00	16	16	LPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		LOOSE
	644829	4902301	233.44	18.80	Cable Tool	18.00	16	16	LPM	Domestic	Water Supply	3.60		BROWN	SAND	CLAY	MEDIUM SAND
	644829	4902301	233.44	18.80	Cable Tool	18.00	16	16	LPM	Domestic	Water Supply	12.10		GREY	CLAY	STONES	
	644829	4902301	233.44	18.80	Cable Tool	18.00	16	16	LPM	Domestic	Water Supply	13.70		BROWN	SAND		LOOSE

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644829	4902301	233.44	18.80	Cable Tool	18.00	16	16	LPM	Domestic	Water Supply	16.40		GREY	CLAY		SOFT
7115881	644829	4902301	233.44	18.80	Cable Tool	18.00	16	16	LPM	Domestic	Water Supply	18.80	0	BROWN	SAND	CLAY	PACKED
	644824	4902312	232.91	31.30	Cable Tool	31.00	8	8	LPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		LOOSE
	644824	4902312	232.91	31.30	Cable Tool	31.00	8	8	LPM	Domestic	Water Supply	1.80		BROWN	SAND	CLAY	MEDIUM SAND
	644824	4902312	232.91	31.30	Cable Tool	31.00	8	8	LPM	Domestic	Water Supply	21.30		GREY	CLAY	STONES	MEDIUM-GRAINED
7115882	644824	4902312	232.91	31.30	Cable Tool	31.00	8	8	LPM	Domestic	Water Supply	31.30	B	GREY	LIMESTONE	CLAY	HARD
	644750	4901824	244.42	42.67	Rotary (Convent.)		2	9.092	GPM	Domestic	Water Supply	2.74		BROWN	SAND	STONES	
	644750	4901824	244.42	42.67	Rotary (Convent.)		2	9.092	GPM	Domestic	Water Supply	10.36		BROWN	CLAY	STONES	
	644750	4901824	244.42	42.67	Rotary (Convent.)		2	9.092	GPM	Domestic	Water Supply	10.67		GREY	CLAY	STONES	
	644750	4901824	244.42	42.67	Rotary (Convent.)		2	9.092	GPM	Domestic	Water Supply	12.50		GREY	GRAVEL	SAND	
	644750	4901824	244.42	42.67	Rotary (Convent.)		2	9.092	GPM	Domestic	Water Supply	24.38		GREY	CLAY	STONES	SILTY
	644750	4901824	244.42	42.67	Rotary (Convent.)		2	9.092	GPM	Domestic	Water Supply	29.57		BROWN	LIMESTONE		
7135152	644750	4901824	244.42	42.67	Rotary (Convent.)		2	9.092	GPM	Domestic	Water Supply	42.67	B	GREY	LIMESTONE		
	644679	4901706	243.50	21.34	Rotary (Convent.)	20.12	10	45.46	GPM	Domestic	Water Supply	3.05		BROWN	SAND	CLAY	STONES
	644679	4901706	243.50	21.34	Rotary (Convent.)	20.12	10	45.46	GPM	Domestic	Water Supply	5.18		GREY	CLAY	STONES	
	644679	4901706	243.50	21.34	Rotary (Convent.)	20.12	10	45.46	GPM	Domestic	Water Supply	6.40		GREY	GRAVEL	SAND	
	644679	4901706	243.50	21.34	Rotary (Convent.)	20.12	10	45.46	GPM	Domestic	Water Supply	20.12		GREY	CLAY	STONES	SILTY
7139353	644679	4901706	243.50	21.34	Rotary (Convent.)	20.12	10	45.46	GPM	Domestic	Water Supply	21.34	0	GREY	COARSE SAND		
	645171	4902072	239.93	21.90	Cable Tool	21.00	24	24	LPM	Domestic	Water Supply	0.30		BLACK	TOPSOIL		MEDIUM-GRAINED
	645171	4902072	239.93	21.90	Cable Tool	21.00	24	24	LPM	Domestic	Water Supply	2.10		BROWN	SAND		MEDIUM-GRAINED
	645171	4902072	239.93	21.90	Cable Tool	21.00	24	24	LPM	Domestic	Water Supply	12.80		BROWN	CLAY	SAND	SOFT
	645171	4902072	239.93	21.90	Cable Tool	21.00	24	24	LPM	Domestic	Water Supply	20.70		GREY	CLAY	STONES	MEDIUM-GRAINED
7181940	645171	4902072	239.93	21.90	Cable Tool	21.00	24	24	LPM	Domestic	Water Supply	21.90	0	BROWN	SAND	GRAVEL	LOOSE
	644513	4901889	234.69	21.34	Rotary (Convent.)	21.34	10	45.46	GPM	Domestic	Water Supply	1.52		BROWN	SAND	GRAVEL	LOOSE
	644513	4901889	234.69	21.34	Rotary (Convent.)	21.34	10	45.46	GPM	Domestic	Water Supply	3.66		BROWN	SAND	CLAY	
	644513	4901889	234.69	21.34	Rotary (Convent.)	21.34	10	45.46	GPM	Domestic	Water Supply	14.63		GREY	CLAY	STONES	HARD

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644513	4901889	234.69	21.34	Rotary (Convent.)	21.34	10	45.46	GPM	Domestic	Water Supply	15.85		BROWN	SAND	CLAY	LAYERED
	644513	4901889	234.69	21.34	Rotary (Convent.)	21.34	10	45.46	GPM	Domestic	Water Supply	16.15		GREY	CLAY		HARD
7199420	644513	4901889	234.69	21.34	Rotary (Convent.)	21.34	10	45.46	GPM	Domestic	Water Supply	21.34	B	GREY	LIMESTONE		HARD
	644925	4902181	235.09	27.43	Rotary (Convent.)	27.43	6	27.276	GPM	Domestic	Water Supply	7.62		BROWN	SAND	PACKED	
	644925	4902181	235.09	27.43	Rotary (Convent.)	27.43	6	27.276	GPM	Domestic	Water Supply	21.34		GREY	CLAY	SOFT	
	644925	4902181	235.09	27.43	Rotary (Convent.)	27.43	6	27.276	GPM	Domestic	Water Supply	21.95		GREY	GRAVEL	SILT	LOOSE
7217107	644925	4902181	235.09	27.43	Rotary (Convent.)	27.43	6	27.276	GPM	Domestic	Water Supply	27.43	B	GREY	LIMESTONE		HARD
	644902	4901340	261.71	39.62	Rotary (Air)	41.15	10	45.46	GPM	Domestic	Water Supply	5.49		BROWN	SAND		SOFT
	644902	4901340	261.71	39.62	Rotary (Air)	41.15	10	45.46	GPM	Domestic	Water Supply	6.10		GREY	GRAVEL	SAND	LOOSE
	644902	4901340	261.71	39.62	Rotary (Air)	41.15	10	45.46	GPM	Domestic	Water Supply	12.19		BROWN	SILT	SANDY	SOFT
	644902	4901340	261.71	39.62	Rotary (Air)	41.15	10	45.46	GPM	Domestic	Water Supply	32.61		GREY	CLAY	TILL	DENSE
	644902	4901340	261.71	39.62	Rotary (Air)	41.15	10	45.46	GPM	Domestic	Water Supply	33.22		GREY	SILT	FINE SAND	SILT
	644902	4901340	261.71	39.62	Rotary (Air)	41.15	10	45.46	GPM	Domestic	Water Supply	38.10		GREY	CLAY	TILL	DENSE
7225617	644902	4901340	261.71	39.62	Rotary (Air)	41.15	10	45.46	GPM	Domestic	Water Supply	39.62	0	GREY	SAND	GRAVEL	SILT
	644932	4901335	261.74	41.10	Rotary (Convent.)	41.00	40	40	LPM	Domestic	Water Supply	5.40		BROWN	CLAY	SAND	
	644932	4901335	261.74	41.10	Rotary (Convent.)	41.00	40	40	LPM	Domestic	Water Supply	11.20		GREY	CLAY		SOFT
	644932	4901335	261.74	41.10	Rotary (Convent.)	41.00	40	40	LPM	Domestic	Water Supply	13.70		BROWN	GRAVEL	SAND	LOOSE
	644932	4901335	261.74	41.10	Rotary (Convent.)	41.00	40	40	LPM	Domestic	Water Supply	36.50		GREY	CLAY	BOULDERS	
	644932	4901335	261.74	41.10	Rotary (Convent.)	41.00	40	40	LPM	Domestic	Water Supply	39.60		GREY	CLAY		HARD
	644932	4901335	261.74	41.10	Rotary (Convent.)	41.00	40	40	LPM	Domestic	Water Supply	40.20		GREY	GRAVEL	SAND	PACKED
7226011	644932	4901335	261.74	41.10	Rotary (Convent.)	41.00	40	40	LPM	Domestic	Water Supply	41.10	B	GREY	LIMESTONE	CLAY	HARD
	644941	4902197	235.18	27.00	Rotary (Convent.)	25.00	16	16	LPM	Domestic	Water Supply	4.60		BROWN	SAND	CLAY	
	644941	4902197	235.18	27.00	Rotary (Convent.)	25.00	16	16	LPM	Domestic	Water Supply	8.80		GREY	CLAY		
	644941	4902197	235.18	27.00	Rotary (Convent.)	25.00	16	16	LPM	Domestic	Water Supply	10.60		GREY	SAND	CLAY	LOOSE
	644941	4902197	235.18	27.00	Rotary (Convent.)	25.00	16	16	LPM	Domestic	Water Supply	22.50		GREY	CLAY	STONES	
7227616	644941	4902197	235.18	27.00	Rotary (Convent.)	25.00	16	16	LPM	Domestic	Water Supply	27.00	B	GREY	LIMESTONE	CLAY	HARD

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	645040	4901686	258.31	48.46	Rotary (Convent.)	48.46	20	90.92	GPM	Domestic	Water Supply	5.79		BROWN	CLAY		TILL
	645040	4901686	258.31	48.46	Rotary (Convent.)	48.46	20	90.92	GPM	Domestic	Water Supply	35.66		GREY	CLAY	STONES	HARD
	645040	4901686	258.31	48.46	Rotary (Convent.)	48.46	20	90.92	GPM	Domestic	Water Supply	39.93		GREY	CLAY	SILT	LAYERED
7231878	645040	4901686	258.31	48.46	Rotary (Convent.)	48.46	20	90.92	GPM	Domestic	Water Supply	48.46	B	GREY	LIMESTONE		HARD
	645006	4901370	261.22	41.15	Rotary (Air)	41.15	5	22.73	GPM	Domestic	Water Supply	7.62		GREY	SAND	CLAY	LAYERED
	645006	4901370	261.22	41.15	Rotary (Air)	41.15	5	22.73	GPM	Domestic	Water Supply	11 .28		BROWN	SAND		SOFT
	645006	4901370	261.22	41.15	Rotary (Air)	41.15	5	22.73	GPM	Domestic	Water Supply	28.96		GREY	CLAY	TILL	DENSE
	645006	4901370	261.22	41.15	Rotary (Air)	41.15	5	22.73	GPM	Domestic	Water Supply	37.19		GREY	CLAY		STICKY
7242530	645006	4901370	261.22	41.15	Rotary (Air)	41.15	5	22.73	GPM	Domestic	Water Supply	41.15	0	BROWN	SAND	SILT	STONES
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	0.30			TOPSOIL		
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	1.22		BROWN	FINE SAND		
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	4.27			CLAY	STONES	GRAVEL
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	6.40		GREY	CLAY	GRAVEL	STONES
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	10.67			COARSE GRAVEL	CLAY	STONES
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	19.81			COARSE GRAVEL	SILTY	STONES
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	20.73		GREY	CLAY		
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	23.77			FINE SAND	CLAY	GRAVEL
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	24.69		GREY	MEDIUM SAND		
	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	26.21		GREY	MEDIUM SAND	CLAY	
1909049	645218	4901359	264.82	29.26	Rotary (Reverse)	23.77	3	13.638	GPM	Livestock	Water Supply	29.26	0	GREY	CLAY	SAND	GRAVEL
	645079.7	4901397	261.10	47.55	Cable Tool	45.72	4	18.184	GPM	Livestock	Water Supply	6.10		BROWN	CLAY		
	645079.7	4901397	261.10	47.55	Cable Tool	45.72	4	18.184	GPM	Livestock	Water Supply	37.19			HARDPAN		
	645079.7	4901397	261.10	47.55	Cable Tool	45.72	4	18.184	GPM	Livestock	Water Supply	37.49			MEDIUM		
	645079.7	4901397	261.10	47.55	Cable Tool	45.72	4	18.184	GPM	Livestock	Water Supply	45.42		BLUE	CLAY		
	645079.7	4901397	261.10	47.55	Cable Tool	45.72	4	18.184	GPM	Livestock	Water Supply	45.72			MEDIUM SAND	GRAVEL	
4602451	645079.7	4901397	261.10	47.55	Cable Tool	45.72	4	18.184	GPM	Livestock	Water Supply	47.55	B		LIMESTONE		

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
SAND																	
	645351.7	4901442	263.47	32.00	Cable Tool	32.00	9	40.914	GPM	Livestock	Water Supply	5.49		RED	CLAY		
	645351.7	4901442	263.47	32.00	Cable Tool	32.00	9	40.914	GPM	Livestock	Water Supply	25.30		BLUE	CLAY	STONES	
	645351.7	4901442	263.47	32.00	Cable Tool	32.00	9	40.914	GPM	Livestock	Water Supply	27.43			GRAVEL	CLAY	SILT
	645351.7	4901442	263.47	32.00	Cable Tool	32.00	9	40.914	GPM	Livestock	Water Supply	30.48			HARDPAN		
	645351.7	4901442	263.47	32.00	Cable Tool	32.00	9	40.914	GPM	Livestock	Water Supply	32.00			MEDIUM SAND	GRAVEL	
	644774.7	4901823	247.09	21.03	Cable Tool	20.73	8	36.368	GPM	Livestock	Water Supply	5.49		RED	MEDIUM SAND	CLAY	
	644774.7	4901823	247.09	21.03	Cable Tool	20.73	8	36.368	GPM	Livestock	Water Supply	20.73			HARDPAN		
4602473	644774.7	4901823	247.09	21.03	Cable Tool	20.73	8	36.368	GPM	Livestock	Water Supply	21.03	0		GRAVEL		
	644968.7	4902325	234.77	9.75	Boring	9.14	10	45.46	GPM	Livestock	Water Supply	9.14		BLUE	CLAY	STONES	
6901068	644968.7	4902325	234.77	9.75	Boring	9.14	10	45.46	GPM	Livestock	Water Supply	9.75	6901068		GRAVEL		
7281698	644947	4901704	259.87		Boring					Monitoring	Test Hole		7281698				
7281699	644967	4901864	252.69		Boring					Monitoring	Test Hole		7281699				
7281700	644834	4901797	252.12		Boring					Monitoring	Test Hole		7281700				
	645030		258.78	9.14	Other Method					Not Used	Observation Wells	4.57		BROWN	SAND	SILT	
	645030		258.78	9.14	Other Method					Not Used	Observation Wells	7.62		BROWN	SILT	SAND	
1917544	645030	4901625	258.78	9.14	Other Method					Not Used	Observation Wells	9.14	1917544	GREY	SILT	SAND	
	644881.7	4902114	235.97	28.65	Rotary (Convent.)	22.25	7	31.822	GPM	Public	Water Supply	0.61		BROWN	SAND	TOPSOIL	SOFT
	644881.7	4902114	235.97	28.65	Rotary (Convent.)	22.25	7	31.822	GPM	Public	Water Supply	4.88		BROWN	CLAY	STONES	HARD
	644881.7	4902114	235.97	28.65	Rotary (Convent.)	22.25	7	31.822	GPM	Public	Water Supply	18 .90		GREY	CLAY	STONES	HARD
	644881.7	4902114	235.97	28.65	Rotary (Convent.)	22.25	7	31.822	GPM	Public	Water Supply	21.34		GREY	GRAVEL	SAND	SILT
	644881.7	4902114	235.97	28.65	Rotary (Convent.)	22.25	7	31.822	GPM	Public	Water Supply	22.25		GREY	CLAY	STONES	HARD
6919246	644881.7	4902114	235.97	28.65	Rotary (Convent.)	22.25	7	31.822	GPM	Public	Water Supply	28.65	B	GREY	LIMESTONE	HARD	
	644736		244.61	30.48	Rotary (Convent.)				GPM	Test Hole	Abandoned-Supply	2.13		BROWN	SAND	GRAVEL	SILT
	644736		244.61	30.48	Rotary (Convent.)				GPM	Test Hole	Abandoned-Supply	9.14		BROWN	CLAY	STONES	SILT
	644736		244.61	30.48	Rotary (Convent.)				GPM	Test Hole	Abandoned-Supply	10.67		GREY	SAND	FINE SAND	

Table A-1 MECP Wells

Project : J&J Developments, Udora Water Balance Evaluation (22012.00)

Well ID	X	y	Elevation (m)	Well Depth (m)	Construction Method	Water Level (m)	Water Yield	LPM	Units of Measurement	Water Use	Water Status	Formation Depth(m)	Overburden or Bedrock?	Material Colour	Material 1	Material 2	Material 3
	644736		244.61	30.48	Rotary (Convent.)				GPM	Test Hole	Abandoned-Supply	24.08		GREY	CLAY	STONES	
7145922	644736	4901785	244.61	30.48	Rotary (Convent.)				GPM	Test Hole	Abandoned-Supply	30.48	7145922	GREY	LIMESTONE		HARD

Table A-2 Water Well Reconnaissance Survey
Project: J&J Developments Udora Water Balance Evaluation (22012.00)
Hamlet of Udora, Durham Region

1- Taken either at the well or at the middle of the drive way

Address	Owner Present at Time of Site Visit (y/n)	Conduct Inspection (CI) or Left Letters (LL)	Well Types	Well Depth (ft)	Well Depth (m)	GPS Coordinate NAD 83[1] Zone	Easting	Northing	Consent to Monitor	Water Level 2018-09-25 (m bTOP)	2018-09-27 (m bTOP)	2018-03-10 (m bTOP)	Well Age (years)	Diameter (inch)	Type of Casing	Casing Condition	Stick Up (m)	Comments
1 Birdie Smith	y	LL	Drilled			17 T	0645022	4901696	yes	15.87			12	10			1.02	request an email or text prior to coming onsite
5 Bagshaw	y	CI	Drilled	151	46.0	17 T	0645029	4901408	No				2	6			1	89 ft original water depth (May 2016)
7 Bagshaw	n	-	Unknown			17 T												hostile dogs, left without approaching
9 Bagshaw	y	LL	Unknown			17 T	0644983	4901378										will consult with husband
? Bagshaw	n	LL	drilled			17 T	0644878	4901564										
11 Bagshaw	y	LL	Unkown			17 T	0644968	4901368	No									afraid of contamination
13 Bagshaw	n	LL	Drilled			17 T	0644881	4901344										
14 Bagshaw	y	LL	Drilled			17 T	0644910	4901362										will consult with husband
15 Bagshaw	n	LL	Drilled	150	45.7	17 T	0644861	4901340	No				14	8				returned quetionnaire via email, no water level taken
17 Bagshaw	y	LL	Drilled			17 T	0644823	4901373	Yes									
19 Bagshaw	y	LL	Drilled			17 T	0644817	4901401	Yes	12.62							0.70	
21 Bagshaw	y	LL	Drilled			17 T	0644818	4901438	No									extremely rude
23 Bagshaw	n	LL	Drilled			17 T	0644792	4901487										
27 Bagshaw	n	LL	Drilled			17 T	0644840	4901552										
25 Bagshaw	y	-	Drilled			17 T	0644799	4901536	No									very against the development, claims many homes already have water issues at times with multiple flushed toilet/ showers, watering lawn and filling pool
28 Bagshaw	y	CI	Drilled		38.0	17 T	0644843	4901461	Yes	19.415			>14	10			1.1	occasional water pressure issues, incomplete see notes
30 Bagshaw	n	LL	Unknown			17 T	0644898	4901547										
31 Bagshaw	n	LL	Unknown			17 T												
32 Bagshaw	y	LL	Drilled			17 T	0644931	4901556										will likely participate
2 Birdie Smith	n	LL	Unknown (assumed drilled)			17 T	0644963	4901634										
4 Birdie Smith	n	LL	Unknown (assumed drilled)			17 T	0644943	4901664										
27 Linda	n	LL	Unknown			17 T	0644413	4902096										
31 Linda	n	LL	Unknown			17 T	0644406	4902098										
37 Linda	n	LL	Unknown			17 T	0644391	4902139										
40 Linda	n	LL	Unknown			17 T	0644369	4902212										
41 Linda	n	LL	Unknown			17 T	0644373	4902210										
689 Ravenshoe	n	LL	Drilled			17 T	0644817	4901914										will look over information
687 Ravenshoe	n	LL	Drilled			17 T	0644791	4901919										
685 Ravenshoe	y	CI	Drilled			17 T	0644774	4901855	Yes		4.57		47	9				water pressure issues, house built in 1971, high iron for the last two years
683 Ravenshoe	n	LL	Drilled			17 T	0644716	4901891	Yes						Steel	Good		Received e-mail response. Well became contaminated in 2006. A UV system and additional treatment methods were installed after a few years to overcome contamination. Water is not clean but the residents do not drink.
709 Ravenshoe	y	LL	Drilled			17 T	0645123	4902030										
705 Ravenshoe	n	LL	Unknown			17 T	0645080	4902008										
701 Ravenshoe	y	LL	Drilled			17 T	0645058	1902001										
717 Ravenshoe	n	LL	Unknown			17 T	0645274	4902083										
715 Ravenshoe	n	LL	Drilled			17 T	0645248	4902064										
711 Ravenshoe	n	LL	Unknown			17 T	0645210	4902065										
10324 Ravenshoe	n	LL	Unknown			17 T	0645238	4902078										
10332 Ravenshoe	n	LL	Unknown			17 T	0645267	4902093										
10342 Ravenshoe	n	LL	Unknown			17 T	0645268	4902095										
10252 Regional Rd 1	n	LL	Unknown			17 T	0645042	4902022										
10256 Regional Rd 1	n	LL	Unknown			17 T	0645079	4902023										
10268 Regional Rd 1	n	LL	Dug			17 T	0645096	4902040										
10278 Regional Rd 1	y	LL	Drilled			17 T	0645128	4902045										concrete sealed
10292 Regional Rd 1	y	LL	Drilled			17 T	0645156	4902066										will consult with partner
10296 Regional Rd 1	n	LL	Drilled			17 T	0645178	4902067										
10300 Regional Rd 1	y	CI	Drilled			17 T	0645193	4902063	No			3.76						see sheet for info
10314 Regional Rd 1	n	LL	Unknown			17 T												
14750 Regional Rd 1	n	LL	Dug			17T	0645109	4901664							Concrete			newer well
14996 Regional Rd 1	n	LL	Drilled			17 T	0645019	4901933	Yes						Concrete	Good		Questionnaire emailed to us. Water 3.0 m down.
14970 Regional Rd 1	n	LL	Unknown			17 T	0645018	4901931										
14975 Regional Rd 1	y	LL	Dug			17 T	0645027	4901931										Owners not present, left information packet with daughter
14949 Regional Rd 1	n	LL	Dug			17 T	0645057	4901904										
14925 Regional Rd 1	y	CI	Drilled			17 T			Yes	15.55			>20	10				very old well
14899 Regional Rd 1	y	LL	Dug			17 T	0645059	4901847										Will give letter to husband
14877 Regional Rd 1	n	LL	dug			17 T	0645097	4901817										
14853 Regional Rd 1	n	LL	Unknown			17 T	0645082	4901787										
14827 Regional Rd 1	n	LL	Dug			17 T	0645117	4901769										
14757 Regional Rd 1		LL	Unknown			17 T	0645092	4901729										
14753 Regional Rd 1	n	LL	Dug			17 T	0645099	4901717										
14749 Regional Rd 1	y	LL	Dug			17 T	0645111	4901687										Concerned about damaging well, good water pressure
14720 Regional Rd 1	n	LL	Unknown			17 T	0645115	4901616										
14780 Regional Rd 1	y	LL	Dug			17 T	0645109	4901664										concrete sealed, newer well
14768 Regional Rd 1	y	LL	Drilled (assumed)			17 T	0645105	4901713					2					
14822 Regional Rd 1	n	LL	Drilled			17 T	0645065	4901718					11					good water pressure, will review docs
14870 Regional Rd 1	n	LL	Drilled			17 T	0645063	4901751										
14874 Regional Rd 1	y	LL	Drilled	80	24.4	17 T	0645052	4901771										concerned about damage, good water pressure
14900 Regional Rd 1	n	LL	Unknown			17 T	0645039	4901814										
14629 Regional Rd 1	n	LL	Unknown			17 T	0645309	4901476										
14996 Regional Rd 1	y	CI	Drilled			17 T	0644989	4901945	Yes						Concrete	Good		Water is 3m down. Well is accesible for sampling
4 Victoria Rd	y	LL	Drilled			17 T	0644986	4902009										Landlord not there, left information packet with tenant, new well, no water pressure problems

Table A-2 Water Well Reconnaissance Survey
Project: J&J Developments Udora Water Balance Evaluation (22012.00)
Hamlet of Udora, Durham Region

1- Taken either at the well or at the middle of the drive way

Address	Owner Present at Time of Site Visit (y/n)	Conduct Inspection (CI) or Left Letters (LL)	Well Types	Well Depth (ft)	Well Depth (m)	GPS Coordinate NAD 83[1] Zone	Easting	Northing	Consent to Monitor	Water Level 2018-09-25 (m bTOP)	Water Level 2018-09-27 (m bTOP)	Water Level 2018-03-10 (m bTOP)	Well Age (years)	Diameter (inch)	Type of Casing	Casing Condition	Stick Up (m)	Comments
9 Victoria Rd	y	LL	Unknown			17 T	0644970	4902073	No									Dog barking agressively, owner not present, Left Information Packet with son
10 Victoria Rd	y	LL	Unknown			17 T	0644968	4902038					>30					wanted to wait for wife
14 Victoria Rd	n	LL	Unknown			17 T	0644947	4902087										
16 Victoria Rd	n	LL	Unknown			17 T	0644952	4902107										
20 Victoria Rd	n	LL	Unknown			17 T	0644933	4902116										
22 Victoria Rd	n	LL	Unknown			17 T	0644927	4902129										
23 Victoria Rd	n	LL	Drilled			17 T	0644958	4902141										
25 Victoria Rd	y	LL	Unknown			17 T	0644942	4902167										Left Information Packet, underground well, will discuss with husband
28 Victoria Rd	n	LL	Unknown			17 T	0644924	4902194										
31 Victoria Rd	y	CI	Drilled	27	8.2	17 T	0644945	4902204	No	3.345			3	10				would not sign to give consent
32 Victoria Rd	y	LL	Dug			17 T	0644919	4902202					>50					Good water pressure
36 Victoria Rd	y	LL	Dug			17 T	0644913	4902221										Good water pressure, concrete sealed
37 Victoria Rd	n	LL	Unknown			17 T	0644913	4902268										
38 Victoria Rd	n	LL	Unknown			17 T	064886	4902259										
40 Victoria Rd	n	LL	Unknown			17 T	0644890	4902270										
46 Victoria Rd	n	LL	Unknown			17 T	0644878	4902306										
48 Victoria Rd	n	LL	Drilled	100	30.5	17 T	0644864	4902343										2 wells, active =100ft, one dry
52 Victoria Rd	y	-	Dug			17 T	0644832	4902335	Yes				>60		Concrete			sealed concrete, low water pressure
6 York	y	CI	Drilled				-	-	Yes	3.84				10			0.69	
7 York	n	LL	Drilled			17 T	0645016	4902096										
9 York	n	LL	Unknown			17 T	0645057	4902129										
10 York	n	LL	Unknown			17 T	0645038	4901124										
16 York	n	LL	Unknown			17 T	0645056	4902126										
19 York	y	LL	Unknown			17 T	0645097	4902141										in a rush, will read over and send documents
21 York	n	LL	Unknown			17 T	0645114	4902153										
25 York	y	CI	Drilled			17 T	0645123	4902153	Yes		1.79		>40	8			0.28	no water pressure issues
27 York	n	LL	Drilled			17 T	0645148	4902154										
28 York	y	LL	Unknown			17 T	0645105	4902164										
32 York	y	LL	Drilled			17 T	0645150	4902176										Does not want to consent because of impending change of ownership
33 York	n	LL	Drilled			17 T	0645190	4902181										
35 York	n	LL	Unknown			17 T	0645221	4902194										
36 York	n	LL	Unknown			17 T	0648196	4902178										
37 York	n	LL	Unknown			17 T	0645229	4902201										
40 York	n	LL	Unknown			17 T	0645237	4902242										
43 York	y	LL	Drilled			17 T	0645265	4902186										angry we did not provide envelopes, will review information
45 York	n	LL	Drilled			17 T	0645288	4902210										
49 York	y	LL	Drilled			17 T	0645302	4902224										will review information, does not believe the study will make a differene in the end
39/41 York	n	LL	Unknown			17 T	0645247	4902204										
Community Center, Lions Club	n	LL	Unknown			17 T	0644938	4902168										

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Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Print Below) A230052

Tag#: A 230052

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Well Owner's Information

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

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
161 Oxford Street	Richmond Hill	ON	L4C 4L6	416 948 1659

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
693 Ravenshoe Road	Uxbridge / Scott	35	7

County/District/Municipality	City/Town/Village	Province	Postal Code
Durham	Uxbridge	Ontario	L9P 1R2

UTM Coordinates Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	17 641418	4901166		

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
	Top Soil			0	1
Brown	Sand + Gravel	Seams Brown Clay	Cobbles	1	19
Grey	Clay Till	Stones + Boulders	Hard	19	84
Grey	Coarse Sand + Fine Peb Gravel	Layers of Broken Limestone		84	99

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	20	Bentonite Slurry	

Method of Construction

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

Well Use

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

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
6 1/4	Steel	.188	+3	88
5 1/2	Steel with K-Packer on top and bottom		86 1/2	97
5	1 1/2 Ft. Slotted. Open Hole		97	99

Construction Record - Screen

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

Status of Well

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

Water Details

Water found at Depth (m/ft)	Kind of Water	Gas	Other, specify
96-99	☐ Fresh ☑ Untested	☐	
	☐ Fresh ☐ Untested	☐	
	☐ Fresh ☐ Untested	☐	

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)
0	20	10
20	88	7 7/8
88	99	6 1/8

Results of Well Yield Testing

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

If pumping discontinued, give reason: ____

Pump intake set at (m/ft): 85

Pumping rate (l/min / GPM): 5

Duration of pumping: 1 hrs + ____ min

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

If flowing give rate (l/min / GPM): ____

Recommended pump depth (m/ft): ____

Recommended pump rate (l/min / GPM): ____

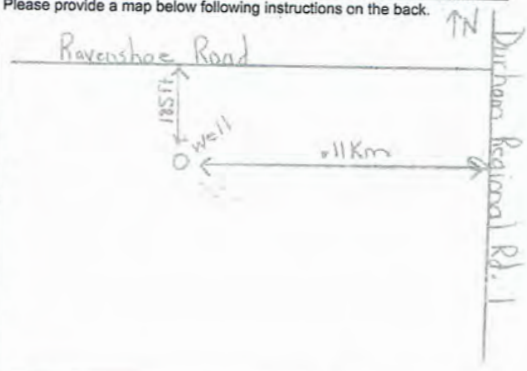
Well production (l/min / GPM): 9

Disinfected? ☑ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level		31' 9"		
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40		62' 10"	40	
50			50	
60		67' 6"	60	

Map of Well Location

Please provide a map below following instructions on the back.



Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Roger Broadway Ent. Ltd.	1114113

Business Address (Street Number/Name)	Municipality
P.O. Box 397, Sutton W	York

Province	Postal Code	Business E-mail Address
ON	L0E 1R0	broadwaywells@bellnet.ca

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
9057272536	Brown, Phil

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
10315	Phil Brown	2017/12/14

Comments: Test Well TW1

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☑ No		Audit No. Z264126
	Date Work Completed: 2017/09/18	Received

0506E (2014/11)

Contractor's Copy

Ontario — Ministry of the Environment and Climate Change

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. (Place Sticker and/or Print Below) A257079

Tag#:A257079

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Well Owner's Information

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

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
161 Oxford Street	Richmond Hill	ON	L4C4L6	4169488659

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
Birdie Smith Cres.	Uxbridge	34	6

County/District/Municipality	City/Town/Village	Province	Postal Code
Durham	Uxbridge	Ontario	L4P0A9

UTM Coordinates Zone	Easting	Northing	Municipal Plan and Subdivision Number	Other
NAD 83	17644981490175 4			

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brown	Clay	Pebbles	Hard	0	38
Grey	Clay	Stones	Hard	38	90
Grey	Gravel	Silt Sand	Mixed	90	117
Grey	Gravel	Clay Sand	Layered	117	137
Grey	Limestone		Fractured	137	149
Grey	Limestone		Hard	149	159

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	20	Benseal	

Method of Construction

☐ Cable Tool ☑ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify ____

☐ Diamond ☐ Jetting ☐ Driving ☐ Digging

Well Use

☐ Public ☑ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ____

☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning

☐ Not used ☐ Dewatering ☐ Monitoring

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
6 1/4	Steel	188	+2	137
6 1/8	Open Hole		137	159

Construction Record - Screen

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

Status of Well

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

Water Details

Water found at Depth	Kind of Water	Hole Diameter Depth From	To	Diameter (cm/in)
159 (m/ft) ☐ Gas	☑ Fresh ☐ Untested ☐ Other, specify ____	0	20	10
(m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify ____	+2	137	6 5/8
(m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify ____	137	159	6 1/8

Results of Well Yield Testing

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

If pumping discontinued, give reason: ____

Pump intake set at (m/ft): 107

Pumping rate (l/min / GPM): 10

Duration of pumping: 1 hrs + ____ min

Final water level end of pumping (m/ft): 77

If flowing give rate (l/min / GPM): ____

Recommended pump depth (m/ft): 107

Recommended pump rate (l/min / GPM): 8

Well production (l/min / GPM): 15

Disinfected? ☐ Yes ☐ No

Draw Down Time (min)	Water Level (m/ft)	Recovery Time (min)	Water Level (m/ft)
Static Level	46		
1	63	1	74
2	65	2	71.5
3	67	3	70
4	68	4	68
5	69	5	67
10	70	10	63
15	71	15	61
20	72	20	
25	73	25	
30	74	30	
40	75	40	
50	76	50	
60	77	60	

Map of Well Location

Please provide a map below following instructions on the back.

Comments: Test Well TW19-1

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Roger Boadway Env. Ltd.	1113

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
P.O. Box 397 Sutton W	York	ON	L0E1R0	boadwaywells@bellnet.ca

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
9057253613	Boadway Grant	0021	Grant Boadway	Y Y Y Y M M D D

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☑ Yes ☐ No	2019 03 19	2019 03 19

Ministry Use Only

Audit No. Z304737

Received

0506E (2014/11)

Ministry's Copy

APPENDIX B

BOREHOLE LOGS

LOG OF BOREHOLE MW1

WSP

project |	PART OF LOT 35 CONCESSION 6, UDORA, ONTARIO			**project no. |**	161-09454-00
client |	TONI RISI, CAPRIS INVESTMENT LTD.	**rig type |**	CME 75, track-mounted	**date started |**	2016/07/25
location |	UDORA, ONTARIO	**method |**	Hollow stem augers, 215 mm dia.	**supervisor |**	EJP
position |	E: 644831 N: 4901800 (17T, Geodetic)	**coring |**	*n/a*	**reviewer |**	DAO

Depth Scale (m)	Elev / Depth (m)	STRATIGRAPHY	Graphic Plot	Sample Number	Sample Type	SPT N-Value / Core Recovery	Elevation Scale (mASL)
		(continued)					
8		SANDY SILT TILL: BROWN SANDY SILT TILL, SOME TO TRACE GRAVEL, SOME TO TRACE CLAY, TRACE COBBLES, MOIST TO WET, COMPACT *(continued)*		9	SS	96 / 200mm	245
9				10	SS	87 / 225mm	244
10							243
11		...at 10.7 m, light brown sandy silt till, some to trace gravel, some to trace clay, trace cobbles, compact, moist to wet to 15.3 m		11	SS	50 / 50mm	242
12				12	SS	50 / 50mm	241
13							240
14				13	SS	50 / 100mm	239
							238

Penetration Test Values (Blows / 0.3m)
× Dynamic Cone
10 20 30 40
Undrained Shear Strength (kPa)
○ Unconfined + Field Vane
● Pocket Penetrometer ■ Lab Vane
40 80 120 160

Water Content (%) & Plasticity
PL MC LL
10 20 30

PID Readings: 0 ppm

Well Details

Lab Data and Comments
GRAIN SIZE DISTRIBUTION (%) (MIT)
GR SA SI CL

(continued next page)

LOG OF BOREHOLE MW1

project |	PART OF LOT 35 CONCESSION 6, UDORA, ONTARIO			**project no. |**	161-09454-00
client |	TONI RISI, CAPRIS INVESTMENT LTD.	**rig type |**	CME 75, track-mounted	**date started |**	2016/07/25
location |	UDORA, ONTARIO	**method |**	Hollow stem augers, 215 mm dia.	**supervisor |**	EJP
position |	E: 644831 N: 4901800 (17T, Geodetic)	**coring |**	*n/a*	**reviewer |**	DAO

Depth Scale (m)	Elev / Depth (m)	STRATIGRAPHY	Graphic Plot	Sample Number	Sample Type	SPT N-Value / Core Recovery	Elevation Scale (mASL)	Penetration Test Values (Blows / 0.3m) / Undrained Shear Strength (kPa)	Water Content (%) & Plasticity	PID Readings	Well Details	Lab Data and Comments
15		*(continued)*						Dynamic Cone: 10 20 30 40 · Unconfined / Pocket Penetrometer / Field Vane / Lab Vane: 40 80 120 160	PL MC LL: 10 20 30			GRAIN SIZE DISTRIBUTION (%) (MIT) GR SA SI CL
	237.4											
	15.3	BOREHOLE TERMINATED AT 15.3m BELOW GROUND SURFACE IN SANDY SILT TILL.		14	SS	50 / 50mm				0 ppm		
		END OF BOREHOLE										

Borehole was dry and open upon completion.

50 mm monitoring well installed.
No. 10 screen installed.

WATER LEVEL MONITORING

Date	Depth (m)	Elevation (m)
Aug 3, 2016	10.3	242.4

LOG OF BOREHOLE MW2

WSP

project |	PART OF LOT 35 CONCESSION 6, UDORA, ONTARIO			**project no. |**	161-09454-00
client |	TONI RISI, CAPRIS INVESTMENT LTD.	**rig type |**	CME 75, track-mounted	**date started |**	2016/07/26
location |	UDORA, ONTARIO	**method |**	Hollow stem augers, 215 mm dia.	**supervisor |**	EJP
position |	E: 644966 N: 4901867 (17T, Geodetic)	**coring |**	*n/a*	**reviewer |**	DAO

Depth Scale (m)	Elev / Depth (m)	STRATIGRAPHY	Graphic Plot	Sample Number	Sample Type	SPT N-Value / Core Recovery
0	253.5	**GROUND SURFACE**				
	253.3 / 0.2	TOPSOIL: 600mm OF DARK BROWN TOPSOIL, SOME ORGANICS, MOIST		1	SS	7
		SANDY SILT TILL: BROWN SANDY SILT TILL, SOME TO TRACE GRAVEL, SOME TO TRACE CLAY, TRACE COBBLES, MOIST TO WET, LOOSE TO COMPACT		2	SS	10
1				3	SS	11
2	251.2 / 2.3	CLAYEY SILT: BROWN CLAYEY SILT, SOME SAND, TRACE GRAVEL, MOIST, LOOSE TO COMPACT, WET		4	SS	9
	250.6 / 2.9	SANDY SILT TILL: BROWN SANDY SILT TILL, SOME TO TRACE GRAVEL, SOME TO TRACE CLAY, TRACE COBBLES, MOIST TO WET, LOOSE TO COMPACT		5	SS	21
3				6	SS	54
4				7	SS	83
5						
6				8	SS	50 / 75mm
7						

Elevation Scale (mASL): 253, 252, 251, 250, 249, 248, 247

Penetration Test Values (Blows / 0.3m) — Dynamic Cone: 10 20 30 40

Undrained Shear Strength (kPa) — Unconfined, Pocket Penetrometer, Field Vane, Lab Vane: 40 80 120 160

Water Content (%) & Plasticity — PL MC LL: 10 20 30

PID Readings: 0 ppm

Well Details

Lab Data and Comments

GRAIN SIZE DISTRIBUTION (%) (MIT) — GR SA SI CL

SS3 chemistry: M&I

2 21 56 21

SS4 chemistry: PAHs

SS5 chemistry: CCME(F1-F4), BTEX, VOCs, PHCs

SS6 chemistry: PCBs

(continued next page)

LOG OF BOREHOLE MW2

WSP

project |	PART OF LOT 35 CONCESSION 6, UDORA, ONTARIO			**project no. |**	161-09454-00
client |	TONI RISI, CAPRIS INVESTMENT LTD.	**rig type |**	CME 75, track-mounted	**date started |**	2016/07/26
location |	UDORA, ONTARIO	**method |**	Hollow stem augers, 215 mm dia.	**supervisor |**	EJP
position |	E: 644966 N: 4901867 (17T, Geodetic)	**coring |**	*n/a*	**reviewer |**	DAO

Depth Scale (m)	Elev / Depth (m)	STRATIGRAPHY	Graphic Plot	Sample Number	Sample Type	SPT N-Value / Core Recovery	Elevation Scale (mASL)	Penetration Test Values (Blows / 0.3m) / Undrained Shear Strength (kPa)	Water Content (%) & Plasticity	PID Readings	Well Details	Lab Data and Comments
		(continued)										GRAIN SIZE DISTRIBUTION (%) (MIT) GR SA SI CL
8		SANDY SILT TILL: BROWN SANDY SILT TILL, SOME TO TRACE GRAVEL, SOME TO TRACE CLAY, TRACE COBBLES, MOIST TO WET, LOOSE TO COMPACT *(continued)*		9	SS	50 / 25mm	246			0 ppm		
9				10	SS	50 / 25mm	245			0 ppm		
10							244					
11				11	SS	50 / 75mm	243			0 ppm		
12				12	SS	50 / 50mm	242					
13		...at 12.7 m, brown medium to coarse grained sand, some gravel, very dense, wet to 12.8 m					241			0 ppm		
14	239.2 / 14.3	SAND: BROWN MEDIUM TO COARSE GRAINED SAND, SOME GRAVEL,VERY DENSE, WET		13	SS	50 / 25mm	240			0 ppm		...at 14.3m, slight odour in soil sample to 16.9m
							239					

Penetration Test Values (Blows / 0.3m): Dynamic Cone 10 20 30 40

Undrained Shear Strength (kPa): Unconfined, Pocket Penetrometer, Field Vane, Lab Vane — 40 80 120 160

Water Content (%) & Plasticity: PL MC LL — 10 20 30

(continued next page)

LOG OF BOREHOLE MW2

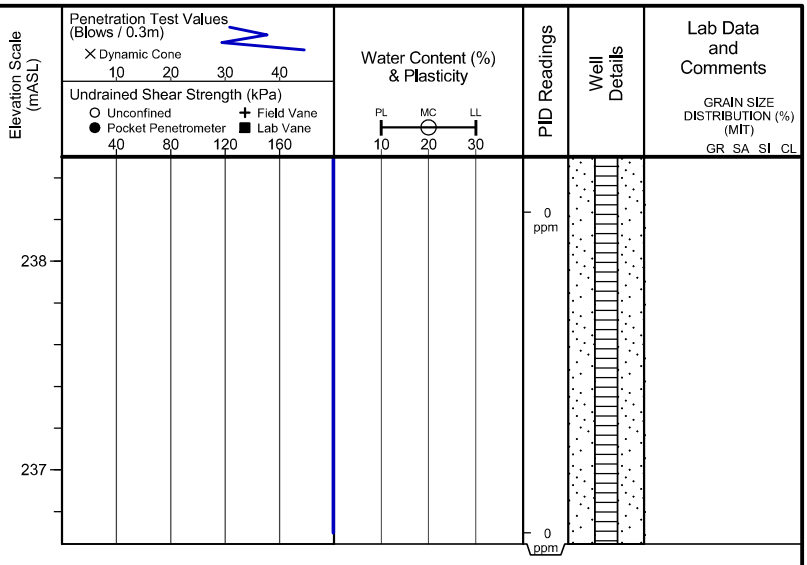
project |	PART OF LOT 35 CONCESSION 6, UDORA, ONTARIO			**project no. |**	161-09454-00
client |	TONI RISI, CAPRIS INVESTMENT LTD.	**rig type |**	CME 75, track-mounted	**date started |**	2016/07/26
location |	UDORA, ONTARIO	**method |**	Hollow stem augers, 215 mm dia.	**supervisor |**	EJP
position |	E: 644966 N: 4901867 (17T, Geodetic)	**coring |**	*n/a*	**reviewer |**	DAO

Depth Scale (m)	Elev / Depth (m)	STRATIGRAPHY	Graphic Plot	Sample Number	Sample Type	SPT N-Value / Core Recovery
15		*(continued)*				
		SAND: BROWN MEDIUM TO COARSE GRAINED SAND, SOME GRAVEL,VERY DENSE, WET *(continued)*		14	SS	50 / 50mm
16						
	236.6			15	SS	50 / 75mm
	16.9	BOREHOLE TERMINATED AT 16.9m BELOW GROUND SURFACE IN SAND.				

END OF BOREHOLE

Borehole was dry and open upon completion.

50 mm monitoring well installed.
No. 10 screen installed.



WATER LEVEL MONITORING

Date	Depth (m)	Elevation (m)
Aug 3, 2016	13.2	240.3
Aug 10, 2016	13.6	239.9

LOG OF BOREHOLE MW3

WSP

project |	PART OF LOT 35 CONCESSION 6, UDORA, ONTARIO			**project no. |**	161-09454-00
client |	TONI RISI, CAPRIS INVESTMENT LTD.	**rig type |**	CME 75, track-mounted	**date started |**	2016/07/25
location |	UDORA, ONTARIO	**method |**	Hollow stem augers, 215 mm dia.	**supervisor |**	EJP
position |	E: 644953 N: 4901706 (17T, Geodetic)	**coring |**	*n/a*	**reviewer |**	DAO

Depth Scale (m)	Elev Depth (m)	STRATIGRAPHY	Graphic Plot	Sample Number	Sample Type	SPT N-Value / Core Recovery
0	259.8	**GROUND SURFACE**				
	259.6 / 0.2	TOPSOIL: 100mm OF DARK BROWN TOPSOIL, SOME ORGANICS, MOIST		1	SS	35
		SAND: BROWN MEDIUM GRAINED SAND, SOME TO TRACE ORGANICS, SOME TO TRACE CLAY, GRAVEL, DRY, LOOSE TO COMPACT				
1	259.0 / 0.8	SAND AND GRAVEL: BROWN SAND AND GRAVEL FILL, DRY, COMPACT		2	SS	22
		SANDY SILT TILL: BROWN SANDY SILT TILL, SOME TO TRACE GRAVEL, SOME TO TRACE CLAY, TRACE COBBLES, MOIST TO WET, LOOSE TO COMPACT				
2	258.3 / 1.5	SAND: BROWN MEDIUM TO COARSE GRAINED SAND, SOME GRAVEL, LOOSE TO COMPACT, DRY		3	SS	13
	257.5 / 2.3	SANDY SILT TILL: BROWN SANDY SILT TILL, SOME TO TRACE GRAVEL, SOME TO TRACE CLAY, TRACE COBBLES, MOIST TO WET, LOOSE TO COMPACT		4	SS	19
3				5	SS	65
4				6	SS	58
				7	SS	62
5						
6		...at 6.1 m, brown medium to coarse grained sand lens, trace gravel, wet to saturated to 6.3 m		8	SS	50 / 75mm
7						

Elevation Scale (mASL): 259, 258, 257, 256, 255, 254, 253

Penetration Test Values (Blows / 0.3m): × Dynamic Cone; 10 20 30 40

Undrained Shear Strength (kPa): ○ Unconfined, + Field Vane, ● Pocket Penetrometer, ■ Lab Vane; 40 80 120 160

Water Content (%) & Plasticity: PL MC LL; 10 20 30; Water level on completion

PID Readings: 0 ppm

Well Details

Lab Data and Comments

GRAIN SIZE DISTRIBUTION (%) (MIT): GR SA SI CL

SS3 chemistry: M&I

14 40 34 12

(continued next page)

LOG OF BOREHOLE MW3

WSP

project |	PART OF LOT 35 CONCESSION 6, UDORA, ONTARIO			**project no. |**	161-09454-00
client |	TONI RISI, CAPRIS INVESTMENT LTD.	**rig type |**	CME 75, track-mounted	**date started |**	2016/07/25
location |	UDORA, ONTARIO	**method |**	Hollow stem augers, 215 mm dia.	**supervisor |**	EJP
position |	E: 644953 N: 4901706 (17T, Geodetic)	**coring |**	*n/a*	**reviewer |**	DAO

Depth Scale (m)	Elev / Depth (m)	STRATIGRAPHY	Graphic Plot	Sample Number	Sample Type	SPT N-Value / Core Recovery	Elevation Scale (mASL)
		(continued)					
8		SANDY SILT TILL: BROWN SANDY SILT TILL, SOME TO TRACE GRAVEL, SOME TO TRACE CLAY, TRACE COBBLES, MOIST TO WET, LOOSE TO COMPACT *(continued)* ...at 7.7 m, brown medium to coarse grained sand lens, trace silt, trace clay, saturated to 8.0 m		9	SS	58	252
9		...at 9.1 m, brown medium to coarse grained sand lens, trace silt, trace clay, saturated to 9.4 m		10	SS	80 / 250mm	251
10							250
11		...at 10.7 m, greyish brown medium to coarse grained sand lens, trace silt, trace clay, saturated to 10.8 m		11	SS	100 / 225mm	249
12				12	SS	70	248
13							247
14				13	SS	90 / 175mm	246
							245

Penetration Test Values (Blows / 0.3m) — Dynamic Cone; 10 20 30 40

Undrained Shear Strength (kPa) — Unconfined, Pocket Penetrometer, Field Vane, Lab Vane; 40 80 120 160

Water Content (%) & Plasticity — PL MC LL; 10 20 30; Water level on completion

PID Readings: 0 ppm

Well Details

Lab Data and Comments — GRAIN SIZE DISTRIBUTION (%) (MIT) GR SA SI CL

(continued next page)

LOG OF BOREHOLE MW3

project |	PART OF LOT 35 CONCESSION 6, UDORA, ONTARIO			**project no. |**	161-09454-00
client |	TONI RISI, CAPRIS INVESTMENT LTD.	**rig type |**	CME 75, track-mounted	**date started |**	2016/07/25
location |	UDORA, ONTARIO	**method |**	Hollow stem augers, 215 mm dia.	**supervisor |**	EJP
position |	E: 644953 N: 4901706 (17T, Geodetic)	**coring |**	*n/a*	**reviewer |**	DAO

Depth Scale (m)	Elev / Depth (m)	STRATIGRAPHY	Graphic Plot	SAMPLE Number	SAMPLE Type	SPT N-Value / Core Recovery	Elevation Scale (mASL)	Penetration Test Values (Blows / 0.3m) / Undrained Shear Strength (kPa)	Water Content (%) & Plasticity	PID Readings	Well Details	Lab Data and Comments
15		*(continued)*										
		SANDY SILT TILL: BROWN SANDY SILT TILL, SOME TO TRACE GRAVEL, SOME TO TRACE CLAY, TRACE COBBLES, MOIST TO WET, LOOSE TO COMPACT *(continued)*		14	SS	74				0 ppm		
	244.0						244					
	15.9	BOREHOLE TERMINATED AT 15.8m BELOW GROUND SURFACE IN SANDY SILT TILL.										
		END OF BOREHOLE										

Penetration Test Values (Blows / 0.3m): Dynamic Cone — 10, 20, 30, 40

Undrained Shear Strength (kPa): Unconfined, Pocket Penetrometer, Field Vane, Lab Vane — 40, 80, 120, 160

Water Content (%) & Plasticity: PL, MC, LL — 10, 20, 30; Water level on completion

PID Readings: 0 ppm

Well Details

Lab Data and Comments: GRAIN SIZE DISTRIBUTION (%) (MIT) — GR SA SI CL

Unstabilized water level at 15.5 m below ground surface; borehole was open upon completion.

50 mm monitoring well installed.
No. 10 screen installed.

WATER LEVEL MONITORING

Date	Depth (m)	Elevation (m)
Aug 3, 2016	7.0	252.8
Aug 10, 2016	7.2	252.6

BOREHOLE NO. MW17-1

PROJECT NAME: UDORA PHASE TWO ESA
PROJECT NO.: 161-09454-00
CLIENT: CAPRIS INV. INC.
DATE COMPLETED: Sep 20, 2017
BOREHOLE TYPE: SPLIT SPOON / HOLLOW STEM AUGER
SUPERVISOR: DAO / JW
GROUND ELEVATION: 250.2 mASL
REVIEWER: SJD

DEPTH (m)	STRATIGRAPHIC DESCRIPTION	STRATIGRAPHY	MONITOR DETAILS	SAMPLE TYPE	SAMPLE N VALUE	SAMPLE % WATER	SAMPLE % RECOVERY	SAMPLE PID/TOV (ppm)	CONE PENETRATION "N" VALUE / SHEAR STRENGTH (Intact (MaX) Cu, Remoulded Cu)	WATER CONTENT % (W_P, W_L)	REMARKS
0.0											
0.4	SAND TOPSOIL:DARK BROWN SAND TOPSOIL, TRACE TO SOME SILT, TRACE ROOTLETS / ORCANICS, MOIST.			SS1	4		0	0.0			
	SAND FILL: ORANGY BROWN, SAND FILL, TRACE TO NO SILT, TRACE ROOTLETS, MOIST, LOOSE.										
1.0				SS2	13		1	0.0			WATER LEVEL AT 0.82 mBGS ON SEPT. 20, 2017
1.2	SILTY SAND TILL: GREYISH BROWN SILTY SAND TILL, TRACE GRAVEL, TRACE CLAY, MOIST TO WET, LOOSE.										
2.0				SS3	8		0	0.0			WATER LEVEL AT 2.04 mBGS ON SEPT. 22, 2017
2.3	SILTY SAND TILL: GREYISH BROWN SILTY SAND TILL, SOME COBBLES, TRACE TO SOME CLAY, MOIST TO WET, LOOSE TO DENSE. - 0.1 m OF COBBLES FROM 2.63 m TO 2.74 m			SS4	17		1	0.0			
3.0				SS5	26		1	0.0			
4.0											
4.6	SAND AND GRAVEL: BROWN, SAND AND FINE GRAVEL, SOME COBBLES, VERY DENSE, SATURATED.			SS6	50 for 3"		0	0.0			
5.0											
6.0				SS7	50 for 2"		0	0.0			
6.7	BOREHOLE TERMINATED AT 6.7 m IN SAND AND GRAVEL.										
7.0											
8.0											
9.0											
10.0											

BOREHOLE NO. MW17-2

PROJECT NAME: UDORA PHASE TWO ESA
PROJECT NO.: 161-09454-00
CLIENT: CAPRIS INV. INC.
DATE COMPLETED: Sep 21, 2017
BOREHOLE TYPE: SPLIT SPOON / HOLLOW STEM AUGER
SUPERVISOR: DAO / JW
GROUND ELEVATION: 251.8 mASL
REVIEWER: SJD

DEPTH (m)	STRATIGRAPHIC DESCRIPTION	STRATIGRAPHY	MONITOR DETAILS	SAMPLE TYPE	SAMPLE N VALUE	SAMPLE % WATER	SAMPLE % RECOVERY	SAMPLE PID/TOV (ppm)	CONE PENETRATION "N" VALUE / SHEAR STRENGTH (Intact (MaX) Cu, Remoulded Cu)	WATER CONTENT % (W_P, W_L)	REMARKS
0.0											
0.2	SAND TOPSOIL: SOME SILT, TRACE ORGANICS.										
	SAND: DARK BROWN, SAND, SOME SILT, TRACE TO SOME ORGANICS, MOIST, LOOSE.			SS1	5		0	0.0			
1.0				SS2	9		0	0.0			
1.1	SILTY SAND TILL: BROWN, SILTY SAND TILL, TRACE CLAY, TRACE GRAVEL, TRACE ORGANICS, MOIST, LOOSE.										
1.5	SILTY SAND / SANDY SILT TILL: BROWN TO GREYISH BROWN, SILTY SAND TO SANDY SILT TILL, TRACE CLAY, TRACE GRAVEL, TRACE COBBLES, MOIST TO WET, LOOSE TO COMPACT.			SS3	12		0	0.0			
2.0											
				SS4	12		1	0.0			WATER LEVEL AT 5.67 mBGS ON SEPT. 21, 2017
3.0				SS5	11		1	0.0			
4.0				SS6	20		1	0.0			
4.6	SANDY SILT TILL: SANDY SILT TILL, VARVED CLAY LAYERS, SOME CLAY, TRACE COBBLES, TRACE GRAVEL, VERY DENSE			SS7	59		1	0.0	84		
5.0											
6.0											WATER LEVEL AT 2.75 mBGS ON SEPT. 22, 2017
6.1	SANDY SILT TILL: LIGHT BROWN TO GREY SANDY SILT TILL, TRACE TO SOME GRAVEL, TRACE COBBLES, MOIST, VERY DENSE.			SS8	60 for 3"		0				
6.7	BOREHOLE TERMINATED AT 6.7 m IN SANDY SILT TILL.										
7.0											
8.0											
9.0											
10.0											

WSP GEOTECH (METRIC) 161-09454-00 MW LOGS.GPJ WSP_ENV_V1.GDT 10/31/17

BOREHOLE NO. MW17-3

PROJECT NAME: UDORA PHASE TWO ESA
PROJECT NO.: 161-09454-00
CLIENT: CAPRIS INV. INC.
DATE COMPLETED: Sep 20, 2017
BOREHOLE TYPE: SPLIT SPOON / HOLLOW STEM AUGER
SUPERVISOR: DAO / JW
GROUND ELEVATION: 250.8 mASL
REVIEWER: SJD

DEPTH (m)	STRATIGRAPHIC DESCRIPTION	STRATIGRAPHY	MONITOR DETAILS	SAMPLE TYPE	SAMPLE N VALUE	SAMPLE % WATER	SAMPLE % RECOVERY	SAMPLE PID/TOV (ppm)	CONE PENETRATION "N" VALUE / SHEAR STRENGTH (Intact (MaX) Cu, Remoulded Cu)	WATER CONTENT % (W_P, W_L)	REMARKS
0.0	SAND TOPSOIL: BROWN, TRACE ROOTLETS, MOIST.			SS1	8		0	0.0			
0.4	SAND FILL: BROWN TO ORANGEY BROWN, SAND FILL, MOIST, LOOSE TO COMPACT.			SS2	23		0	0.0			
1.0											
1.5	SILTY SAND TO SANDY SILT TILL: GREYISH BROWN, SILTY SAND TO SANDY SILT TILL, TRACE CLAY, TRACE COBBLES, TRACE GRAVEL, MOIST TO SATURATED, COMPACT.			SS3	34		0	0.0			
2.0				SS4	19		1	0.0			WATER LEVEL AT 2.44 mBGS ON SEPT. 22, 2017 WATER LEVEL AT 2.7 mBGS ON SEPT. 20, 2017
3.0											
3.1	SANDY SILT TILL: GREYISH BROWN, SANDY SILT TILL, SOME COBBLES, TRACE CLAY, TRACE GRAVEL, VERY SATURATED.			SS5	10		0	0.0			
3.8	SILTY SAND TO SANDY SILT TILL: SILTY SAND TO SANDY SILT TILL, FINE GRAVEL, COMPACT TO DENSE, VERY SATURATED.			SS6	18		1	0.0			
4.0											
4.6	BOREHOLE TERMINATED AT 4.6 m IN SILTY SAND TO SANDY SILT TILL.										
5.0											
6.0											
7.0											
8.0											
9.0											
10.0											

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: MW1-22
DATE COMPLETED: 31 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' Value	SAMPLE PID (ppm)
0	TOPSOIL, organic	0.06	Concrete					
	SANDY SILT, trace organics, brown, dry	0.30		1		45	2	0.4
0.5	SANDY SILT, trace gravel, brown, dry							
1.0				2		75	14	0.3
1.5				3		100	24	0.2
2.0								
2.5				4		100	21	0.9
3.0								
3.5				5		100	50	0.7
4.0			Bentonite					
4.5								
5.0				6		100	57	0.8
5.5								
6.0								
6.5				7		100	81	0.6

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66\12585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: MW1-22
DATE COMPLETED: 31 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' Value	SAMPLE PID (ppm)
7.5								
8.0				8		100	58	0.6
8.5								
9.0								
9.5				9		100	85	0.6
10.0			Sand Pack					
10.5			Well Screen					
11.0	SAND, trace silt, grey, wet	10.97		10		100	70	0.9
11.5								
12.0								
12.5	END OF BOREHOLE @ 12.19m BGS	12.19						
13.0								
13.5								

WELL DETAILS
Screened interval:
9.14 to 12.19m BGS
Length: 3.05m
Diameter: 51mm
Slot Size: #10
Material: PVC
Sand Pack:
7.62 to 12.19m BGS
Material: Silica

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (10)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66\21\2585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: MW2-22
DATE COMPLETED: 24 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' Value	PID (ppm)
0	TOPSOIL, organic	0.06	Concrete					
	SILTY SAND, trace gravel, brown, dry, trace organics			1		45	10	0.3
0.5	SAND, brown, dry	0.46 0.53						
	SILTY SAND, trace gravel, trace organics, brown, dry			2		75	17	0.4
1.0								
1.5	SAND, trace gravel, brown, dry	1.52		3		100	40	0.4
2.0	SILTY SAND, trace gravel, brown, dry	1.98						
2.5				4		100	24	
3.0								
3.5				5		100	50	0.7
4.0			Bentonite					
4.5								
5.0				6		100	50/5	0.7
5.5								
6.0	SILT, trace sand, trace gravel, brown, dry	6.10						
6.5				7		100	50/5	0.4

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1)

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: MW2-22
DATE COMPLETED: 24 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' Value	SAMPLE PID (ppm)
7.5	- grey at 7.62m BGS							
8.0				8		100	50/5	0.9
8.5								
9.0								
9.5				9		100	50/5	0.8
10.0			Sand Pack					
10.5	SAND, trace silt, brown, wet	10.67	Well Screen					
11.0				10		100	50/5	1.0
11.5								
12.0		12.19						
12.5	END OF BOREHOLE @ 12.19m BGS		WELL DETAILS Screened interval: 9.14 to 12.19m BGS Length: 3.05m Diameter: 51mm Slot Size: #10 Material: PVC Sand Pack: 7.62 to 12.19m BGS Material: Silica					
13.0								
13.5								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (10)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66\21\2585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: BH3-22
DATE COMPLETED: 31 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' Value	PID (ppm)
0.0	TOPSOIL, organic, brown, wet	0.06						
	SAND, brown, wet	0.23						
	SANDY SILT, trace gravel, brown, moist			1		60	8	0
0.5								
1.0				2		60	9	0
1.5								
2.0				3		100	10	0
	- dry at 2.29m BGS		Bentonite					
2.5				4		55	23	0
3.0								
3.5				5		100	34	0
	- grey/brown at 3.81m BGS							
4.0				6		100	69	0
	- boulder at 4.27m BGS							
4.5								
	END OF BOREHOLE @ 4.57m BGS	4.57						
5.0								
5.5								
6.0								
6.5								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66\12585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: BH4-22
DATE COMPLETED: 1 November 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' Value	PID (ppm)
0	TOPSOIL, organic	0.12						
	SANDY SILT, trace gravel, brown, dry			1		45	15	0
0.5								
1.0				2		100	15	0.2
1.5				3		20	21	0
2.0								
	- wet at 2.29m BGS		Bentonite					
2.5				4		80	8	0.2
3.0								
	- dry at 3.35m BGS			5		80	17	0
3.5								
4.0				6		100	19	0
	- sand lens, dry at 4.27m BGS							
4.5	END OF BOREHOLE @ 4.57m BGS	4.57						
5.0								
5.5								
6.0								
6.5								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66\12585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: BH5-22
DATE COMPLETED: 31 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' Value	PID (ppm)
0	TOPSOIL, organic, brown, dry	0.06						
	SANDY SILT, trace gravel, brown, dry			1		55	12	0
0.5								
1.0				2		100	17	0
1.5				3		95	10	0
2.0			Bentonite					
2.5	- boulder at 2.44m BGS			4		80	21	0
3.0	- grey/brown at 3.05m BGS			5		100	13	0
3.5								
4.0				6		70	19	0
	SAND, trace silt, grey, wet	4.27						
4.5	END OF BOREHOLE @ 4.57m BGS	4.57						
5.0								
5.5								
6.0								
6.5								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66\12585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: BH6-22
DATE COMPLETED: 1 November 2022
DRILLING METHOD: SSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' Value	PID (ppm)
0.5	TOPSOIL, organic			1		55	2	0.2
		0.67						
1.0	SANDY SILT, trace gravel, brown, dry			2		75	14	0.1
1.5				3		25	24	0.1
2.0								
		2.29	Bentonite					
2.5	SAND, trace silt, brown, wet			4		55	34	0.2
3.0	- boulder at 2.90m BGS							
3.5				5		75	27	0.4
4.0	- boulder at 3.96m BGS			6		95	64	0.1
4.5		4.57						
	END OF BOREHOLE @ 4.57m BGS							
5.0								
5.5								
6.0								
6.5								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66\12585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: MW1-22
DATE COMPLETED: 31 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' Value	PID (ppm)
0	TOPSOIL, organic	0.06	Concrete					
	SANDY SILT, trace organics, brown, dry			1		45	2	0.4
	SANDY SILT, trace gravel, brown, dry	0.30						
0.5								
1.0				2		75	14	0.3
1.5				3		100	24	0.2
2.0								
2.5				4		100	21	0.9
3.0								
3.5				5		100	50	0.7
4.0			Bentonite					
4.5								
5.0				6		100	57	0.8
5.5								
6.0								
6.5				7		100	81	0.6

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66211\2585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: MW1-22
DATE COMPLETED: 31 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' Value	SAMPLE PID (ppm)
7.5								
8.0				8		100	58	0.6
8.5								
9.0								
9.5				9		100	85	0.6
10.0			Sand Pack					
10.5			Well Screen					
11.0	SAND, trace silt, grey, wet	10.97		10		100	70	0.9
11.5								
12.0								
12.5	END OF BOREHOLE @ 12.19m BGS	12.19						
13.0								
13.5								

WELL DETAILS
Screened interval:
9.14 to 12.19m BGS
Length: 3.05m
Diameter: 51mm
Slot Size: #10
Material: PVC
Sand Pack:
7.62 to 12.19m BGS
Material: Silica

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (10)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66211\25856433\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: MW2-22
DATE COMPLETED: 24 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	REC (%)	'N' Value	PID (ppm)
0	TOPSOIL, organic	0.06	Concrete	1		45	10	0.3
	SILTY SAND, trace gravel, brown, dry, trace organics	0.46						
0.5	SAND, brown, dry	0.53						
	SILTY SAND, trace gravel, trace organics, brown, dry			2		75	17	0.4
1.0								
1.5	SAND, trace gravel, brown, dry	1.52		3		100	40	0.4
2.0	SILTY SAND, trace gravel, brown, dry	1.98		4		100	24	
2.5								
3.0				5		100	50	0.7
3.5								
4.0			Bentonite					
4.5								
5.0				6		100	50/5	0.7
5.5								
6.0	SILT, trace sand, trace gravel, brown, dry	6.10		7		100	50/5	0.4
6.5								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66211\2585643\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Phase Two Environmental Site Assessment
PROJECT NUMBER: 12585643
CLIENT: 2695867 Ontario Inc.
LOCATION: Part of Lot 35, Conc. 6, Udora, Ontario

HOLE DESIGNATION: MW2-22
DATE COMPLETED: 24 October 2022
DRILLING METHOD: HSA
FIELD PERSONNEL: D. Blair

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' Value	SAMPLE PID (ppm)
7.5	- grey at 7.62m BGS							
8.0				8		100	50/5	0.9
8.5								
9.0								
9.5				9		100	50/5	0.8
10.0			Sand Pack					
10.5	SAND, trace silt, brown, wet	10.67	Well Screen					
11.0				10		100	50/5	1.0
11.5								
12.0								
12.5	END OF BOREHOLE @ 12.19m BGS	12.19						
13.0								
13.5								

WELL DETAILS
Screened interval:
9.14 to 12.19m BGS
Length: 3.05m
Diameter: 51mm
Slot Size: #10
Material: PVC
Sand Pack:
7.62 to 12.19m BGS
Material: Silica

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (10)

File: \\GHDNET\GHD\CA\TORONTO\PROJECTS\66211\25856433\TECH\GINT\12585643-MI.GPJ Library File: GHD_ENVIRO_V07.GLB Report: OVERBURDEN LOG Date: 16/11/22

ENVISION
CONSULTANTS LTD

LOG OF BOREHOLE BH/MW24-1

PROJECT: Capris Subdivision Udora
CLIENT: J&J Development Group
PROJECT LOCATION: Udora, ON
DATUM: Geodetic
BH LOCATION: N 4901797.173 E 644983.609

Method: Hollow Stem Auger
Diameter: 152 mm
Date: Mar-08-2024 to Mar-08-2024
Equipment: Pontil Drilling CME

REF. NO.: 22-0223a
ENCL NO.:
ORIGINATED BY SH
COMPILED BY PD
CHECKED BY RB

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors PID (ppm) 10 20 30 40	CGD (ppm) 10 20 30 40	PLASTIC LIMIT W_P / NATURAL MOISTURE CONTENT W / LIQUID LIMIT W_L WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
256.2	Ground Surface												
256.0	**TOPSOIL:** 76 mm												
0.1	**SANDY SILT:** trace gravel, brown, moist, loose		1	SS			256						
							255						
			2	SS			254						
253.2													
3.0	**SANDY SILT TILL:** trace gravel, light brown, moist		3	SS	40		253						
							Bentonite						
							252						
251.7													
4.6	**SILTY SAND TILL:** some gravel, light brown, moist		4	SS	59	▽	W. L. 251.1 m Mar 08, 2024						
250.1													
6.1	**SANDY SILT TILL:** trace gravel, brown, moist		5	SS	99/ 275mm		250						
							249						
248.6													
7.6	**SILTY SAND:** brown, wet		6	SS	100/ 225mm		248						
							Sand						
247.1							Screen						
9.1	**SILTY SAND:** trace clay, grey, wet		7	SS	76		247						

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st ▽ 2nd ▼ 3rd ▼ 4th ▼

GRAPH NOTES
+ 3, × 3: Numbers refer to Sensitivity
○ 8 =3% Strain at Failure

ENVISION
CONSULTANTS LTD

LOG OF BOREHOLE BH/MW24-1

PROJECT: Capris Subdivision Udora
REF. NO.: 22-0223a
CLIENT: J&J Development Group
Method: Hollow Stem Auger
ENCL NO.:
PROJECT LOCATION: Udora, ON
Diameter: 152 mm
ORIGINATED BY SH
DATUM: Geodetic
Date: Mar-08-2024 to Mar-08-2024
COMPILED BY PD
BH LOCATION: N 4901797.173 E 644983.609
Equipment: Pontil Drilling CME
CHECKED BY RB

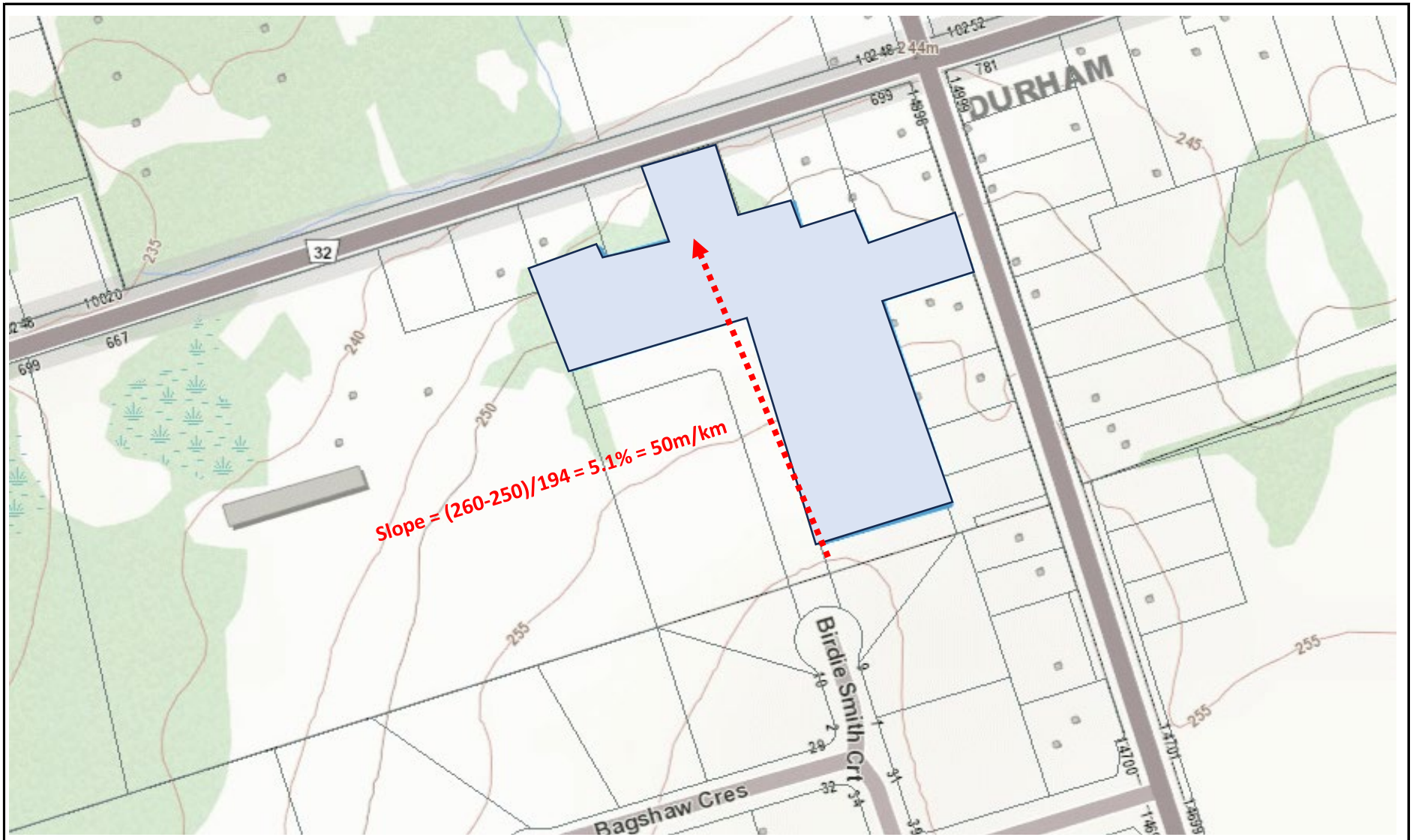
(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors: PID (ppm) 10 20 30 40	Soil Head Space Vapors: CGD (ppm) 10 20 30 40	PLASTIC LIMIT W_P / NATURAL MOISTURE CONTENT W / LIQUID LIMIT W_L — WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued												
245.6	**SILTY SAND:** trace clay, grey, wet(Continued)						246						
10.7	**END OF BOREHOLE** Notes: 1) 50 mm dia. monitoring well was installed upon completion of drilling, screened from 7.62 m to 10.67 m. Water Level Readings: Date W.L. Depth (mbgs) March 8, 2024 5.15												

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES
+ 3, × 3: Numbers refer to Sensitivity
○ ε=3% Strain at Failure

APPENDIX C

WATER BUDGET



NOTES

Site Location

Topography Infiltration Factor

Udora Estates Water Balance Evaluation, Revision 2

Part Lot 35, Con. 6, TWP Uxbridge

For 2695867 Ontario Inc.

Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

GAMAN Consultants Inc.

Figure C-1

TABLE C-1: INFILTRATION FACTORS

Project: Udora Estates Water Balance Evaluation Revision 2, Part Lots 24 & 35, Con. 6 TWP Uxbridge (22012.04)

MOECC 1995 Hydrogeological Technical Information Requirements (page 4-62)

Desription of Area/Development Site		**Pre-development**		**Post-development**	
TOPOGRAPHY	**Factor**	Description	Factor	Description	Factor
Flat lying, average slope < 0.6m/km	0.3	Hilly land	0.1	Hilly land	0.1
Rolling land average slope of 2.8-3.8m	0.2				
Hilly land, average slopes of 28-47 metres	0.1				
SOILS					
Tight impervious Clay	0.1	Medium Loam to Sandy Loam	0.35	Med. Loam - Sandy Loam	0.35
Medium combinations of clay and loam	0.2			Impermeable Surfaces	0
open sandy loam	0.4				
COVER					
Cultivated land	0.1	Shrubs	0.15	Urban Lawn	0.15
Woodland	0.2				
Total Infiltration factor for pervious areas with medium loam to sandy loam pre-development and post-development.			**0.6**	Med. Loam to Sandy Loam	**0.6**
Total Infiltration factor for impermeable surfaces			**Not applicable**	Driveways and Rooftops	**0**

TABLE C-2: PRE-DEVELOPMENT AND POST-DEVELOPMENT WATER BUDGETS

Project: Udora Estates Water Balance Evaluation Revision 2, Part Lots 24 & 35, Con. 6 TWP Uxbridge (22012.04)

	PRE-DEVELOPMENT WATER BUDGET	
	Water Surplus (mm/yr) Average Silt Loam to F.Sandy Loam from LSRCA	314.0
	Infiltration Areas (m2) is gross property area pre-development	27,100
	Pre-Development Infiltration Factor	0.6
	Infiltration Rate (mm/yr)	188.4
A	Total Recharge m3/yr	5,106
	Total Recharge mm/yr	188
	Runoff m3/year	3,404

	POST-DEVELOPMENT RECHARGE RATES BY CATCHMENT AREA	Total	Catchment Area					
			A1	A2	A3	A4	B1	B2
	Water Surplus Ubran Lawns (mm/yr)	321	321	321	321	321	321	321
1	Infiltration Rate (mm/year) Urban Lawns WS x Infiltration Factor	0.6	193	193	193	193	193	193
2	Catchment Area (ha) (see Figure 12)	2.71	0.39	0.74	0.8	0.02	0.21	0.55
	% impermeable (See Figure 12)		17%	17%	17%	0%	38%	38%
3	% permeable		83%	83%	83%	100%	62%	62%
B	Recharge Rate (m3/yr) "B" = "1" x "2" x "3"	4,031	623	1183	1279	39	251	657
C	Recharge Deficit (m3/year) = "A" - "B"	1,074	21%					

Assumptions:

***Impervious areas include: Roads, Driveways, Dwellings & Lined Pond. Runoff from Rooftop Area is only source of clean water for mitigation.**

Table C-3: Recharge Mitigation

Project: Udora Estates Water Balance Evaluation Revision 2, Part Lots 24 & 35, Con. 6 TWP Uxbridge (22012.04)

	Source of Recharge	Rooftop Area (m2)	50% Roof runoff	Total Precip (mm/yr)	Total Rooftop Recharge (m3/year)
D	Total Recharge from Rooftop Runoff assumed 8 roofs at 297m2/roof	297	0.5	897	1,066
E=D-C	Recharge Deficit after mitigation **(E)**				9
F = E / A	Percent reduction **(F)** in pre-development LSRCA recharge target is <7%				0.2%

NOTE: Roof top areas consistent with SCS FSSR areas

APPENDIX D

GROUNDWATER CHEMISTRY

TABLE D-1: SHALLOWS GROUNDWATER QUALITY RESULTS
PROEJECT: Udora Estates Water Balance Evaluation Revision 2 (22012.04)

Parameters	UNIT	ODWQS [(1)]	MW17-1	MW17-2	MW17-3
Sample Date			20-Feb-19	20-Feb-19	20-Feb-19
Calculated Parameters					
Anion Sum	me/L	-	8.92	7.55	8.92
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	-	510	436	517
Calculated TDS	mg/L	500	473	451	531
Carb. Alkalinity (calc. as CaCO3)	mg/L	30-500	<10	<10	<10
Cation Sum	me/L	-	7.58	8.81	10.6
Hardness (CaCO3)	mg/L	80-100	369	430	517
Ion Balance (% Difference)	%	-	85	117	119
Langelier Index	N/A	-	0.7	0.6	0.6
Saturation pH	N/A	-	6.66	6.65	6.54
Inorganics					
Total Ammonia-N	mg/L	-	0.01	<0.010	0.014
Conductivity	umho/cm	-	600	710	824
Dissolved Organic Carbon	mg/L	5	7.04	6.38	7.31
Orthophosphate (P)	mg/L	-	<0.0030	0.019	<0.0030
pH	pH	6.5-8.5	7.35	7.25	7.12
Dissolved Sulphate (SO4)	mg/L	500	14.1	7.91	14.1
Alkalinity (Total as CaCO3)	mg/L	30-500	510	436	517
Dissolved Chloride (Cl)	mg/L	250	8.05	2.52	4.14
Nitrite (N)	mg/L	1[1]	0.01	<0.010	<0.010
Nitrate (N)	mg/L	10[1]	0.302	2.12	0.201
Nitrate + Nitrite (N)	mg/L	10	0.312	2.12	0.201
Metals					
Dissolved Aluminum (Al)	mg/L	0.1	<0.0050	<0.0050	<0.0050
Dissolved Antimony (Sb)	mg/L	0.006[1]	<0.00010	<0.00010	<0.00010
Dissolved Arsenic (As)	mg/L	0.01[1]	0.00013	0.00039	0.00025
Dissolved Barium (Ba)	mg/L	1[1]	0.0518	0.0532	0.0536
Dissolved Beryllium (Be)	mg/L	0.004	<0.00010	<0.00010	<0.00010
Dissolved Boron (B)	mg/L	5[1]	0.03	0.1	0.051
Dissolved Cadmium (Cd)	mg/L	0.05[1]	<0.000010	<0.000010	0.000032
Dissolved Calcium (Ca)	mg/L	-	125	153	174
Dissolved Chromium (Cr)	mg/L	0.05[1]	0.00051	0.00097	<0.00050
Dissolved Cobalt (Co)	mg/L	0.0038	<0.00010	<0.00010	<0.00010
Dissolved Copper (Cu)	mg/L	1	0.00326	0.00103	0.00463
Dissolved Iron (Fe)	mg/L	0.3	<0.010	<0.010	<0.010
Dissolved Lead (Pb)	mg/L	0.01	0.00015	<0.000050	0.000108
Dissolved Magnesium (Mg)	mg/L	-	14	11.7	20.1
Dissolved Manganese (Mn)	mg/L	0.05	<0.00050	0.0005	0.00071
Dissolved Molybdenum (Mo)	mg/L	0.07	0.00008	0.000144	0.000067

TABLE D-1: SHALLOWS GROUNDWATER QUALITY RESULTS
PROEJECT: Udora Estates Water Balance Evaluation Revision 2 (22012.04)

Parameters	UNIT	ODWQS (1)	MW17-1	MW17-2	MW17-3
Sample Date			20-Feb-19	20-Feb-19	20-Feb-19
Calculated Parameters					
Dissolved Nickel (Ni)	mg/L	0.1	<0.00050	<0.00050	0.00075
Dissolved Phosphorus (P)	mg/L	-	<0.050	<0.050	<0.050
Dissolved Potassium (K)	mg/L	-	0.728	0.855	0.819
Dissolved Selenium (Se)	mg/L	0.05[1]	0.000261	0.00062	0.000205
Dissolved Silicon (Si)	mg/L	-	6.34	6.93	7.67
Dissolved Silver (Ag)	mg/L	0.0015	<0.000050	<0.000050	<0.000050
Dissolved Sodium (Na)	mg/L	200	4.24	4.52	6.55
Dissolved Strontium (Sr)	mg/L	-	0.244	0.278	0.327
Dissolved Thallium (Tl)	mg/L	0.002	<0.000010	<0.000010	<0.000010
Dissolved Titanium (Ti)	mg/L	-	<0.00030	<0.00030	<0.00030
Dissolved Uranium (U)	mg/L	0.02[1]	0.000305	0.000362	0.000342
Dissolved Vanadium (V)	mg/L	0.0062	<0.00050	0.00075	<0.00050
Dissolved Zinc (Zn)	mg/L	5	0.003	0.0012	0.0146

NOTES

1) Superscript indicated a MAC, other values are AO.
2) Yellow shading indicates parameter reportable detection limit exceeds ODWQS
3) Ontario Drinking Water Quality Standard for use under O.Reg. 169/03 of the Safe Drinking Water Act (2002).

Table D-2: Groundwater Quality

Project: Udora Estates Water Balance Evaluation, Rev, Part Lot 35, Con. 6, TWP Uxbridge(22012.04)

Nitrate Concentrations (mg/L)

Date	MW17-1 (A-235172)	MW17-2	MW17-3	MW3	MW2-22	MW24-1	OW05-1
16-Mar-24	<0.05	2.33	0.06	<0.05	<0.05	0.46	<0.05
10-Apr-24	0.07	1.5	0.09	<0.05	<0.05	0.53	1.87
6-May-24	0.11	0.63	0.11	0.07	0.06	0.64	2.3
27-Jul-24	0.14	0.12	0.11	<0.05	<0.05	0.54	3.97
30-Sep-24	0.66	<0.05	0.45	<0.05	0.27	1.76	5.35
30-Nov-24	0.6	0.25	0.62	0.21	0.1	1.46	3.89
Average	**0.32**	**0.97**	**0.24**	**0.14**	**0.14**	**0.90**	**3.48**

Orthophosphate Concentrations (mg/L)

Date	MW17-1 (A-235172)	MW17-2	MW17-3	MW3	MW2-22	MW24-1	OW05-1
16-Mar-24	0.006	0.005	0.004	0.004	0.004	0.002	<0.002
10-Apr-24	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
6-May-24	0.003	0.005	0.002	0.004	<0.002	0.002	0.002
27-Jul-24	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
30-Sep-24	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
30-Nov-24	0.018	0.012	0.01	0.012	0.01	0.008	0.006
Average	**0.009**	**0.007**	**0.005**	**0.007**	**0.007**	**0.004**	**0.004**

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CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: -

REPORT No: 24-007186 - Rev. 0

Report To:
Gaman Consultants Inc
7 Pinsent Court
Barrie, ON L4N 6E3

CADUCEON Environmental Laboratories
112 Commerce Park Dr Unit L
Barrie, ON L4N 8W8

Attention: Gary Hendy

DATE RECEIVED: 2024-Mar-18
DATE REPORTED: 2024-Mar-20
SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: Udora Estates
P.O. NUMBER: 22012.02

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	7	OTTAWA	PCURIEL	2024-Mar-19	A-IC-01	SM 4110B
Orthophosphate (Liquid)	7	KINGSTON	JYEARWOOD	2024-Mar-20	NH3-001	SM 4500NH3

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

		Parameter	Nitrate (N)	Nitrite (N)	o-Phosphate (P)
		Units	mg/L	mg/L	mg/L
		R.L.	0.05	0.05	0.002
		Limits	10.0	1.0	
		DWG	MAC	MAC	
Client I.D.	Sample I.D.	Date Collected	-	-	-
MW17-1	24-007186-1	2024-Mar-16	<0.05	<0.05	0.006
MW17-2	24-007186-2	2024-Mar-16	2.33	<0.05	0.005
MW17-3	24-007186-3	2024-Mar-16	0.06	<0.05	0.004
MW3	24-007186-4	2024-Mar-16	<0.05	<0.05	0.004
MW2-22	24-007186-5	2024-Mar-16	<0.05	<0.05	0.004
MW24-1	24-007186-6	2024-Mar-16	0.46	<0.05	0.002
OW5-1	24-007186-7	2024-Mar-16	<0.05	<0.05	<0.002

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

Michelle Dubien
Data Specialist

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C.O.C.: -

REPORT No: 24-007186 - Rev. 0

Report To:
Gaman Consultants Inc
7 Pinsent Court
Barrie, ON L4N 6E3

CADUCEON Environmental Laboratories
112 Commerce Park Dr Unit L
Barrie, ON L4N 8W8

Attention: Gary Hendy

DATE RECEIVED: 2024-Mar-18
DATE REPORTED: 2024-Mar-20
SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: Udora Estates
P.O. NUMBER: 22012.02

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	7	OTTAWA	PCURIEL	2024-Mar-19	A-IC-01	SM 4110B
Orthophosphate (Liquid)	7	KINGSTON	JYEARWOOD	2024-Mar-20	NH3-001	SM 4500NH3

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

		Parameter	Nitrate (N)	Nitrite (N)	o-Phosphate (P)
		Units	mg/L	mg/L	mg/L
		R.L.	0.05	0.05	0.002
		Limits	10.0	1.0	
		DWG	MAC	MAC	
Client I.D.	Sample I.D.	Date Collected	-	-	-
MW17-1	24-007186-1	2024-Mar-16	<0.05	<0.05	0.006
MW17-2	24-007186-2	2024-Mar-16	2.33	<0.05	0.005
MW17-3	24-007186-3	2024-Mar-16	0.06	<0.05	0.004
MW3	24-007186-4	2024-Mar-16	<0.05	<0.05	0.004
MW2-22	24-007186-5	2024-Mar-16	<0.05	<0.05	0.004
MW24-1	24-007186-6	2024-Mar-16	0.46	<0.05	0.002
OW5-1	24-007186-7	2024-Mar-16	<0.05	<0.05	<0.002

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

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REPORT No: 24-012724 - Rev. 0

Report To:
Gaman Consultants Inc
7 Pinsent Court
Barrie, ON L4N 6E3

CADUCEON Environmental Laboratories
112 Commerce Park Dr Unit L
Barrie, ON L4N 8W8

Attention: Gary Hendy

DATE RECEIVED: 2024-May-07
DATE REPORTED: 2024-May-13
SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: Udora Estates
P.O. NUMBER: 22012.02

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	7	OTTAWA	LMACGREGOR	2024-May-09	A-IC-01	SM 4110B
Orthophosphate (Liquid)	7	KINGSTON	JYEARWOOD	2024-May-10	NH3-001	SM 4500NH3

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

		Parameter	Nitrate (N)	o-Phosphate (P)
		Units	mg/L	mg/L
		R.L.	0.05	0.002
		Limits		
		DWG		
Client I.D.	Sample I.D.	Date Collected	-	-
MW17-1	24-012724-1	2024-May-06	0.11	0.005
MW17-2	24-012724-2	2024-May-06	0.63	0.003
MW17-3	24-012724-3	2024-May-06	0.11	0.002
MW3	24-012724-4	2024-May-06	0.07	0.004
MW2-22	24-012724-5	2024-May-06	0.06	<0.002
MW24-1	24-012724-6	2024-May-06	0.64	0.002
OW5-1	24-012724-7	2024-May-06	2.30	0.002

DWG - Drinking Water Guidelines
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IMAC - Interim Maximum Acceptable Concentration
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ODWO - D-5-5 Objective
OG - Operational Guidelines
WL - Warning Level - Sodium Restricted Diets

Michelle Dubien
Data Specialist

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REPORT No: 24-022883 - Rev. 0

Report To:
Gaman Consultants Inc
7 Pinsent Court
Barrie, ON L4N 6E3

CADUCEON Environmental Laboratories
112 Commerce Park Dr Unit L
Barrie, ON L4N 8W8

Attention: Gary Hendy

DATE RECEIVED: 2024-Jul-29
DATE REPORTED: 2024-Jul-31
SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: Udora Estates
P.O. NUMBER: 22012.02

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	7	OTTAWA	PCURIEL	2024-Jul-30	A-IC-01	SM 4110B
Orthophosphate (Liquid)	7	KINGSTON	JYEARWOOD	2024-Jul-31	NH3-001	SM 4500NH3

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

		Parameter	Nitrate (N)	o-Phosphate (P)
		Units	mg/L	mg/L
		R.L.	0.05	0.002
		Limits	10.0	
		DWG	MAC	
Client I.D.	Sample I.D.	Date Collected	-	-
MW 17-1	24-022883-1	2024-Jul-27	0.14	<0.002
MW 17-2	24-022883-2	2024-Jul-27	0.12	<0.002
MW 17-3	24-022883-3	2024-Jul-27	0.11	<0.002
MW3	24-022883-4	2024-Jul-27	<0.05	<0.002
MW 2-22	24-022883-5	2024-Jul-27	<0.05	<0.002
MW 24-1	24-022883-6	2024-Jul-27	0.54	<0.002
OW 5-1	24-022883-7	2024-Jul-27	3.97	<0.002

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MAC - Maximum Acceptable Concentration
ODWO - D-5-5 Objective
OG - Operational Guidelines
WL - Warning Level - Sodium Restricted Diets

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REPORT No: 24-030604 - Rev. 0

Report To:
Gaman Consultants Inc
7 Pinsent Court
Barrie, ON L4N 6E3

CADUCEON Environmental Laboratories
112 Commerce Park Dr Unit L
Barrie, ON L4N 8W8

Attention: Gary Hendy

DATE RECEIVED: 2024-Oct-02
DATE REPORTED: 2024-Oct-09
SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: Udora Estates
P.O. NUMBER: 22012.02

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	7	OTTAWA	LMACGREGOR	2024-Oct-07	A-IC-01	SM 4110B
Orthophosphate (Liquid)	7	KINGSTON	JYEARWOOD	2024-Oct-08	NH3-001	SM 4500NH3

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

		Parameter	Nitrate (N)	o-Phosphate (P)
		Units	mg/L	mg/L
		R.L.	0.05	0.002
		Limits	10.0	
		DWG	MAC	
Client I.D.	Sample I.D.	Date Collected	-	-
MW17-1	24-030604-1	2024-Sep-30	0.66	<0.002
MW17-2	24-030604-2	2024-Sep-30	<0.05	<0.002
MW17-3	24-030604-3	2024-Sep-30	0.45	<0.002
MW3	24-030604-4	2024-Sep-30	<0.05	<0.002
MW2-22	24-030604-5	2024-Sep-30	0.27	<0.002
MW24-1	24-030604-6	2024-Sep-30	1.76	<0.002
OW5-1	24-030604-7	2024-Sep-30	5.35	<0.002

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

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Data Specialist

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Final Report

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REPORT No: 24-035442 - Rev. 0

Report To:
Gaman Consultants Inc
7 Pinsent Court
Barrie, ON L4N 6E3

CADUCEON Environmental Laboratories
112 Commerce Park Dr Unit L
Barrie, ON L4N 8W8

Attention: Gary Hendy

DATE RECEIVED: 2024-Nov-12
DATE REPORTED: 2024-Nov-20
SAMPLE MATRIX: Ground Water

CUSTOMER PROJECT: Udora Estates
P.O. NUMBER: 22012.02

Analyses	Qty	Site Analyzed	Authorized	Date Analyzed	Lab Method	Reference Method
Anions (Liquid)	7	OTTAWA	LMACGREGOR	2024-Nov-15	A-IC-01	SM 4110B
Orthophosphate (Liquid)	7	KINGSTON	JYEARWOOD	2024-Nov-15	NH3-001	SM 4500NH3

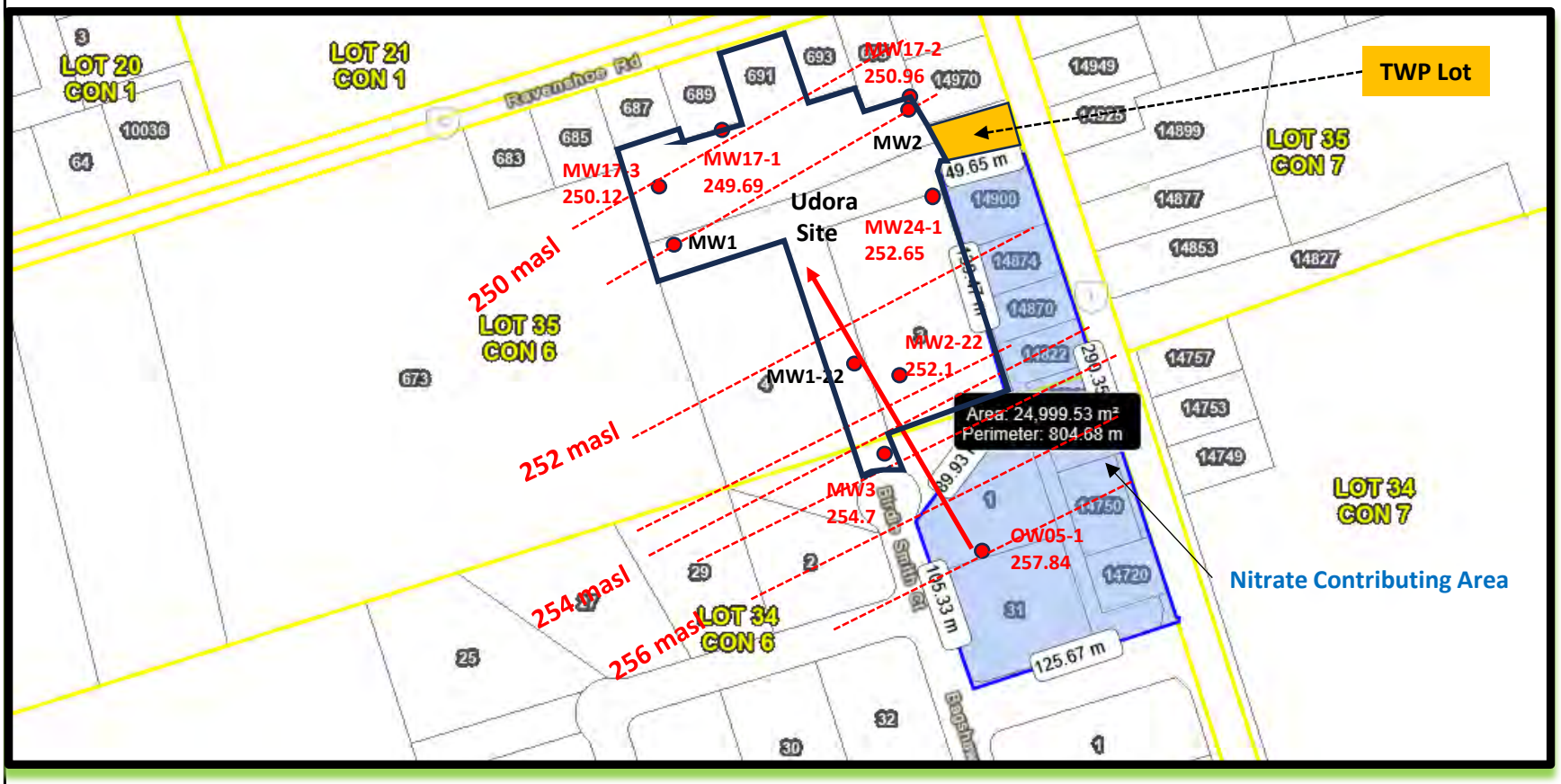
R.L. = Reporting Limit
NC = Not Calculated
Test methods may be modified from specified reference method unless indicated by an *

		Parameter	Nitrate (N)	o-Phosphate (P)
		Units	mg/L	mg/L
		R.L.	0.05	0.002
Client I.D.	Sample I.D.	Date Collected	-	-
MW17-1	24-035442-1	2024-Nov-09	0.60	0.018
MW17-2	24-035442-2	2024-Nov-09	0.25	0.012
MW17-3	24-035442-3	2024-Nov-09	0.62	0.010
MW3	24-035442-4	2024-Nov-09	0.21	0.012
MW2-22	24-035442-5	2024-Nov-09	0.10	0.010
MW24-1	24-035442-6	2024-Nov-09	1.46	0.008
OW5-1	24-035442-7	2024-Nov-09	3.89	0.006

Michelle Dubien
Data Specialist

APPENDIX E

SHALLOW SOILS AND GROUNDWATER



NOTES

Interpreted direction shallow groundwater

255.1 / MW3 — Groundwaterm monitor location, designation, and water level elevation on April 9, 2024.

--------- Interpreted Groundwater Contour

MW1 & MW2 & MW1-22 Deep Monitors

Interpreted Shallow Groundwater Table (April 9, 2024)

Udora Estates Water Balance Evaluation, Revision 2 ,
Part Lot 35, Con. 6, TWP Uxbridge
For 2695867 Ontario Inc.

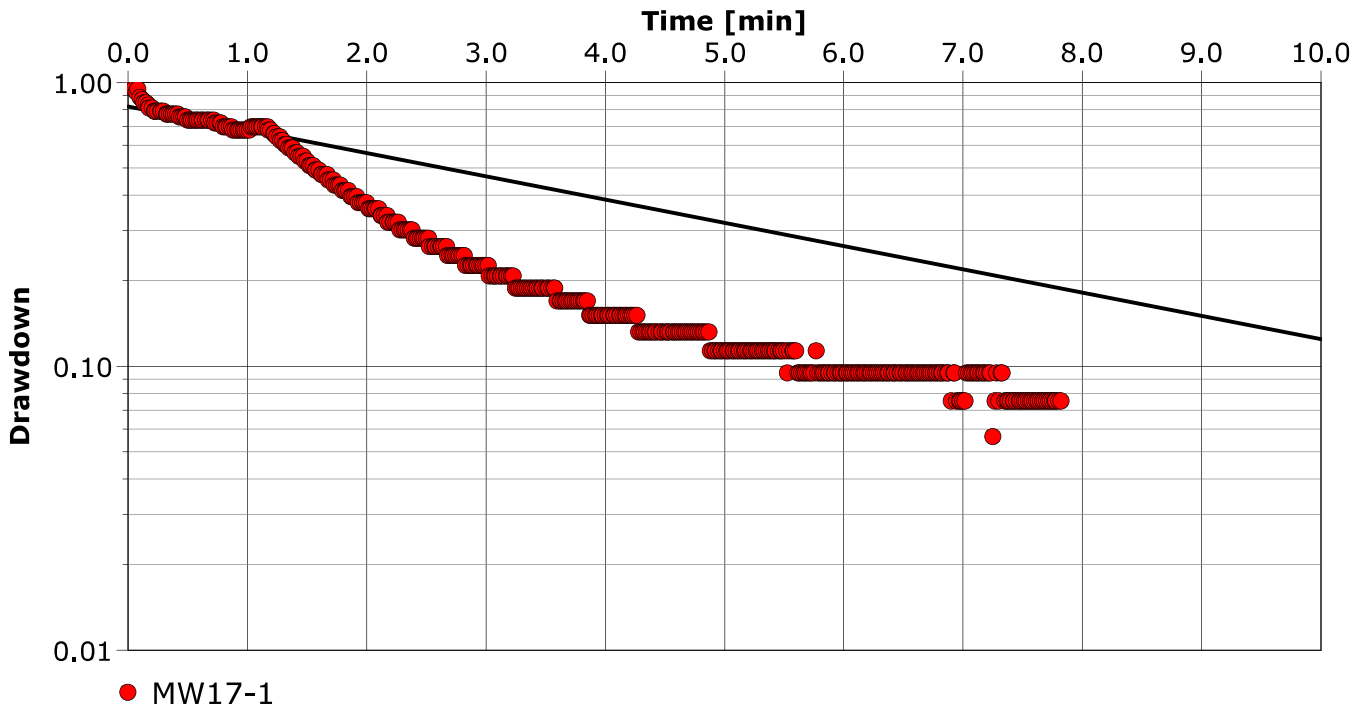
Date:	Dec-25	Scale:	AS SHOWN
Project:	22012.04	Ref No:	

GAMAN Consultants Inc.

Figure E-1

	Slug Test Analysis Report
	Project: Hydrgeological Investigation
	Number: 181-12360-00
	Client: Capris Investments Inc.

Location: Udora Subdivision	Slug Test: MW17-1 DL	Test Well: MW17-1
Test Conducted by: HEC		Test Date: 2/20/2019
Analysis Performed by: KJA	MW17-1	Analysis Date: 5/9/2019
Aquifer Thickness: 4.04 m		

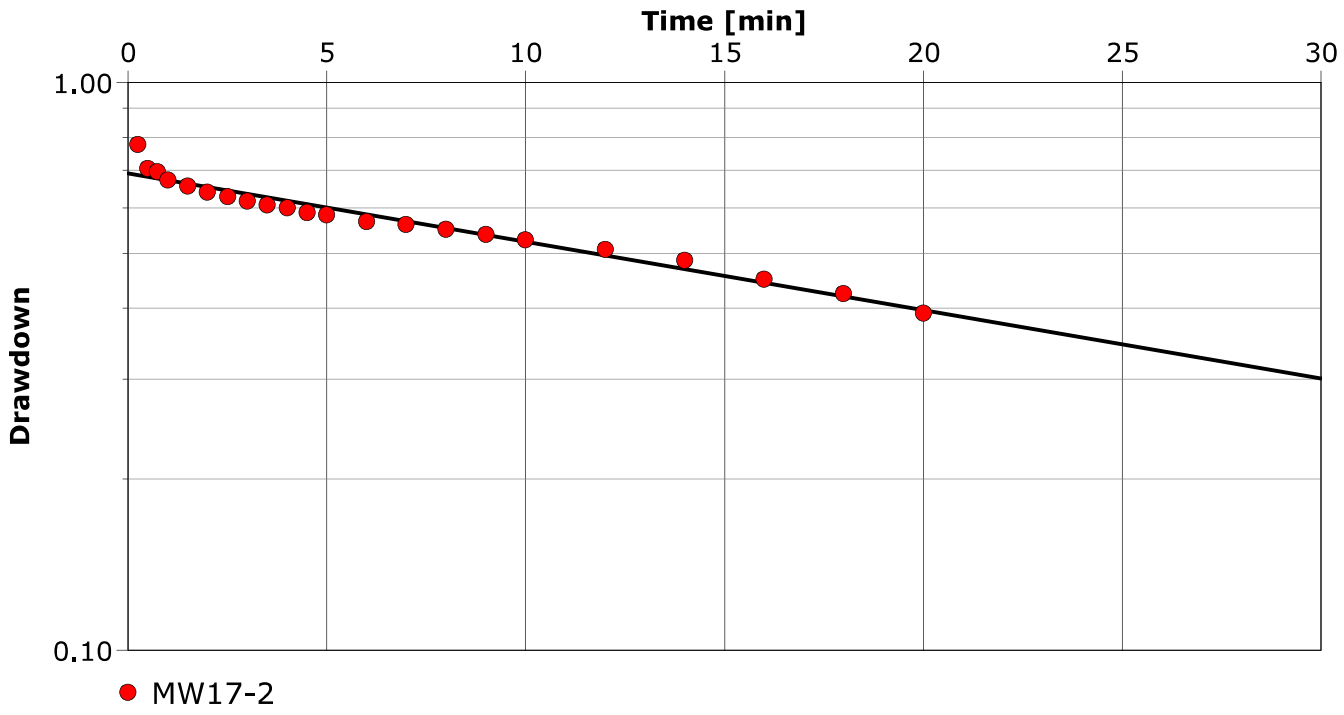


Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW17-1	1.56×10^{-6}	

	Slug Test Analysis Report
	Project: Hydrgeological Investigation
	Number: 181-12360-00
	Client: Capris Investments Inc.

Location: Udora Subdivision	Slug Test: MW17-2 Manuals	Test Well: MW17-2
Test Conducted by: HEC		Test Date: 2/20/2019
Analysis Performed by: KJA	MW17-2	Analysis Date: 5/9/2019
Aquifer Thickness: 3.26 m		

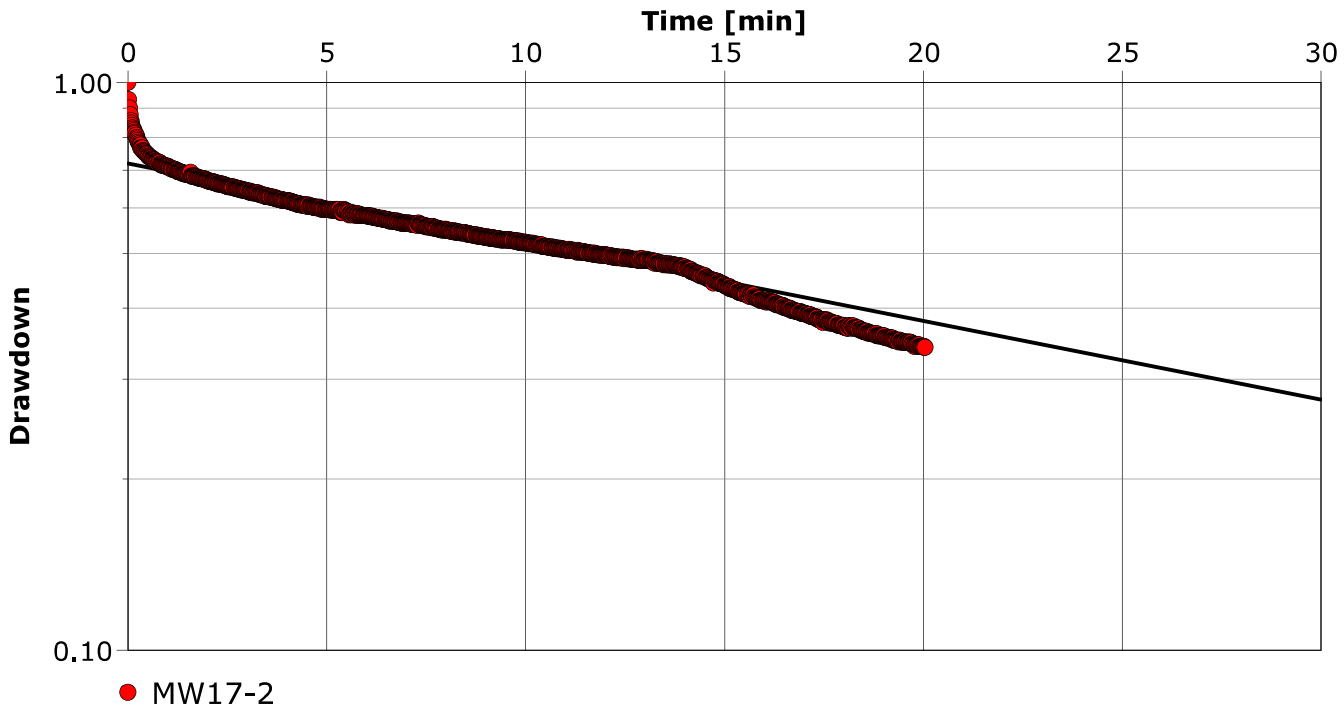


Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW17-2	2.28×10^{-7}	

	Slug Test Analysis Report
	Project: Hydrgeological Investigation
	Number: 181-12360-00
	Client: Capris Investments Inc.

Location: Udora Subdivision	Slug Test: MW17-2 DL	Test Well: MW17-2
Test Conducted by: HEC		Test Date: 2/9/2019
Analysis Performed by: KJA	MW17-2	Analysis Date: 5/9/2019
Aquifer Thickness: 3.26 m		

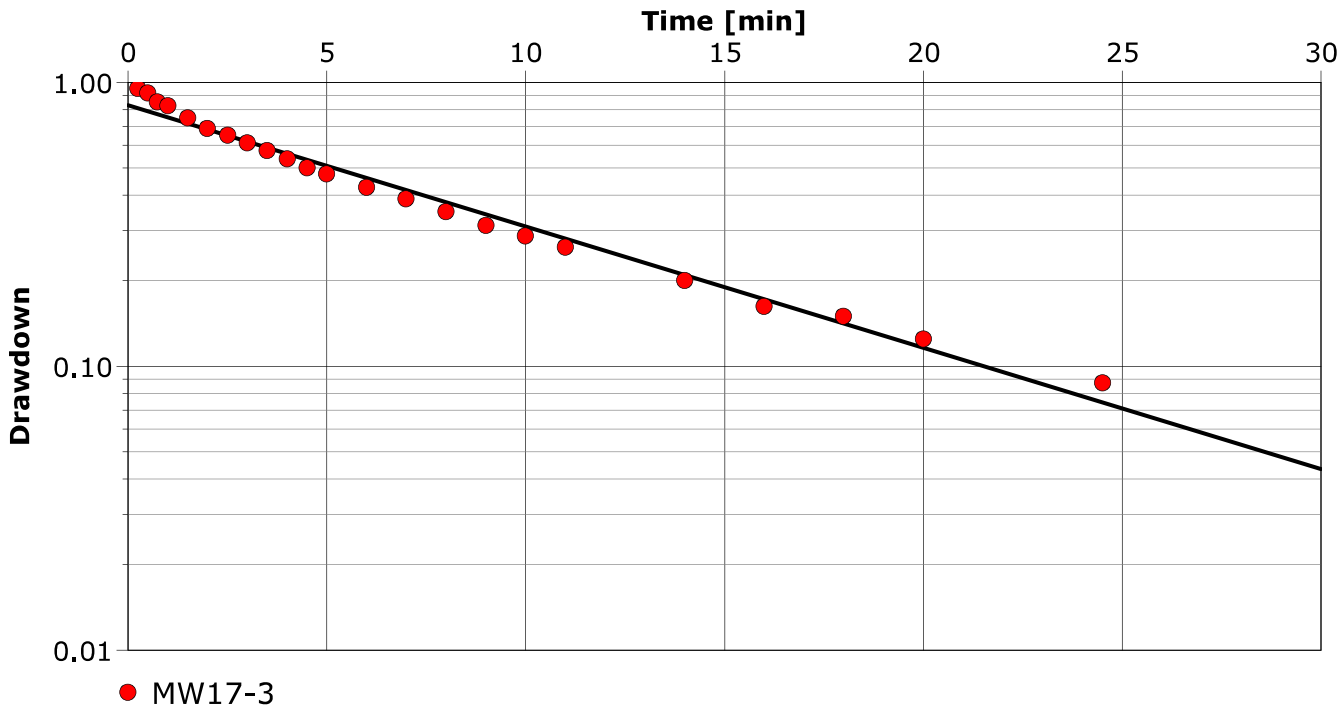


Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW17-2	2.64×10^{-7}	

	Slug Test Analysis Report
	Project: Hydrgeological Investigation
	Number: 181-12360-00
	Client: Capris Investments Inc.

Location: Udora Subdivision	Slug Test: MW17-3 Manuals	Test Well: MW17-3
Test Conducted by: HEC		Test Date: 2/20/2019
Analysis Performed by: KJA	MW17-3	Analysis Date: 5/9/2019
Aquifer Thickness: 1.90 m		

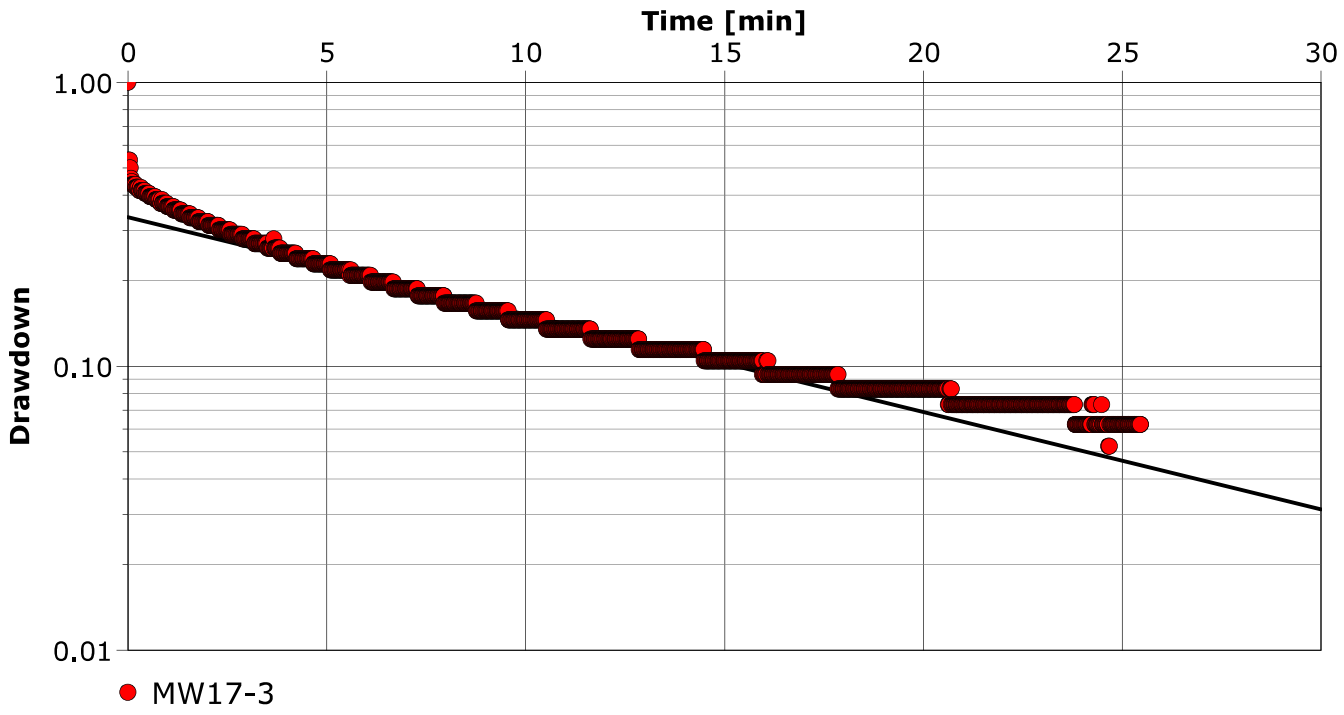


Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW17-3	8.13×10^{-7}	

	Slug Test Analysis Report
	Project: Hydrgeological Investigation
	Number: 181-12360-00
	Client: Capris Investments Inc.

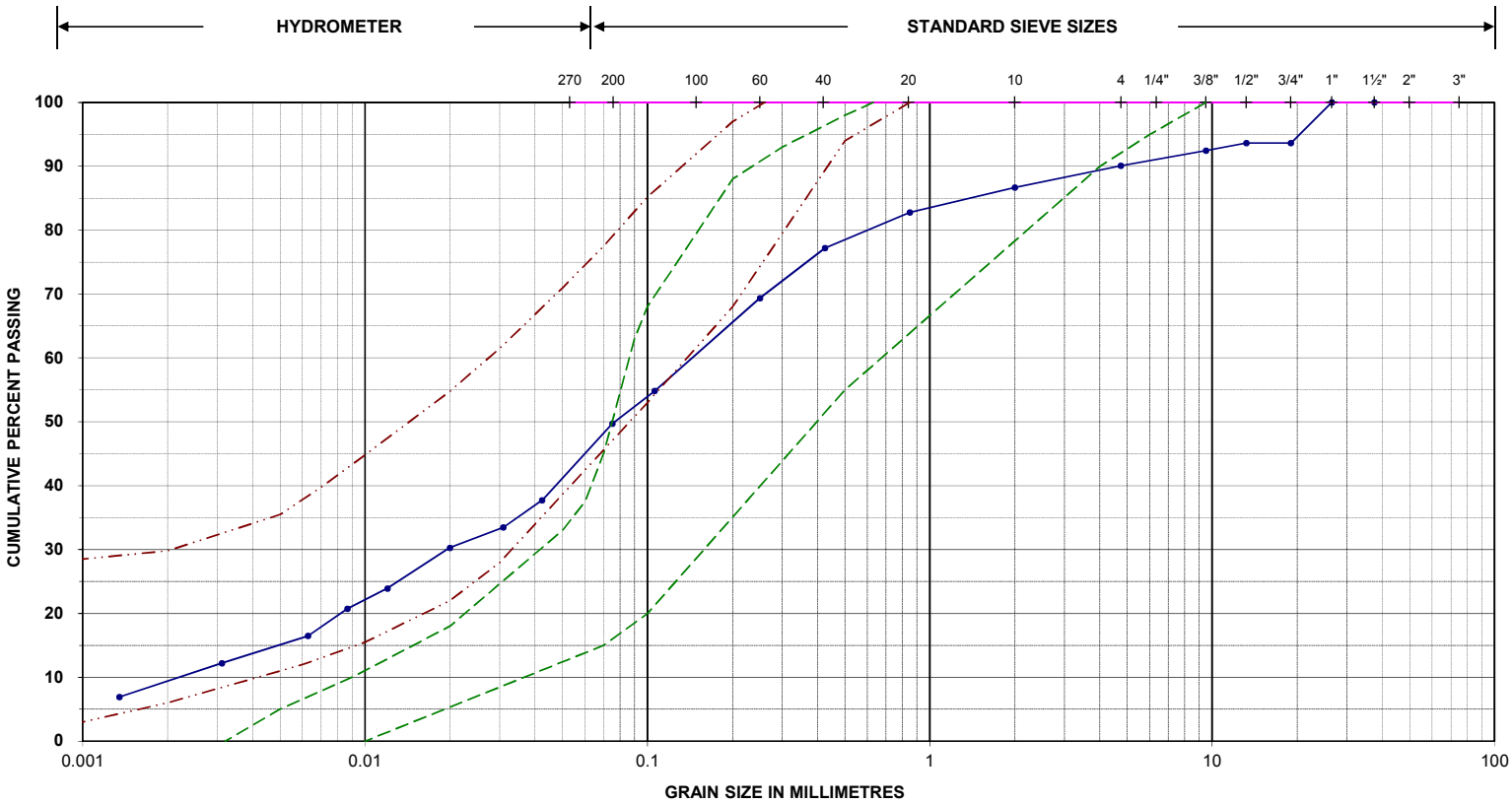
Location: Udora Subdivision	Slug Test: MW17-3 DL	Test Well: MW17-3
Test Conducted by: HEC		Test Date: 2/20/2019
Analysis Performed by: KJA	MW17-3	Analysis Date: 5/9/2019
Aquifer Thickness: 1.90 m		



Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW17-3	6.53×10^{-7}	

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	**10**	**%**
SAND	**40**	**%**
SILT	**43**	**%**
CLAY	**7**	**%**

---------- sm envelope T = 8 - 20 min/cm

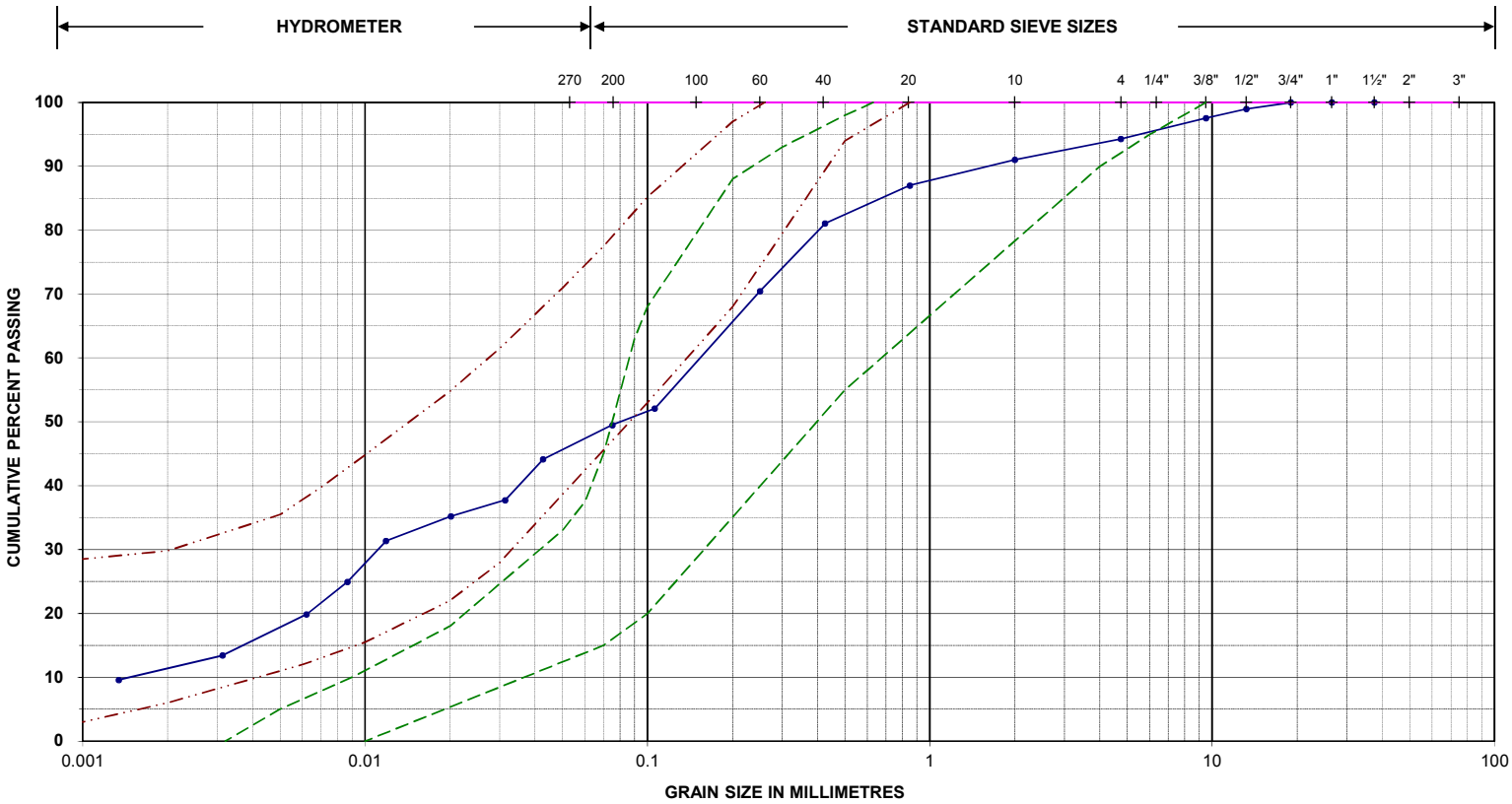
– – – – – – ml envelope T = 20 - 50 min/cm

Estimated T = 25 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-1	**Sample No./Depth:**	SS2

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	86.67	**0.042**	37.7
26.5 mm	100.0	**0.850 mm**	82.8	**0.020**	30.3
19.0 mm	93.7	**0.425 mm**	77.2	**0.009**	20.7
13.2 mm	93.7	**0.250 mm**	69.4	**0.003**	12.2
9.50 mm	92.4	**0.106 mm**	54.9	**0.001**	6.9
4.75 mm	90.1	**0.075 mm**	49.7		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	**6**	**%**
SAND	**45**	**%**
SILT	**40**	**%**
CLAY	**10**	**%**

---------- sm envelope T = 8 - 20 min/cm

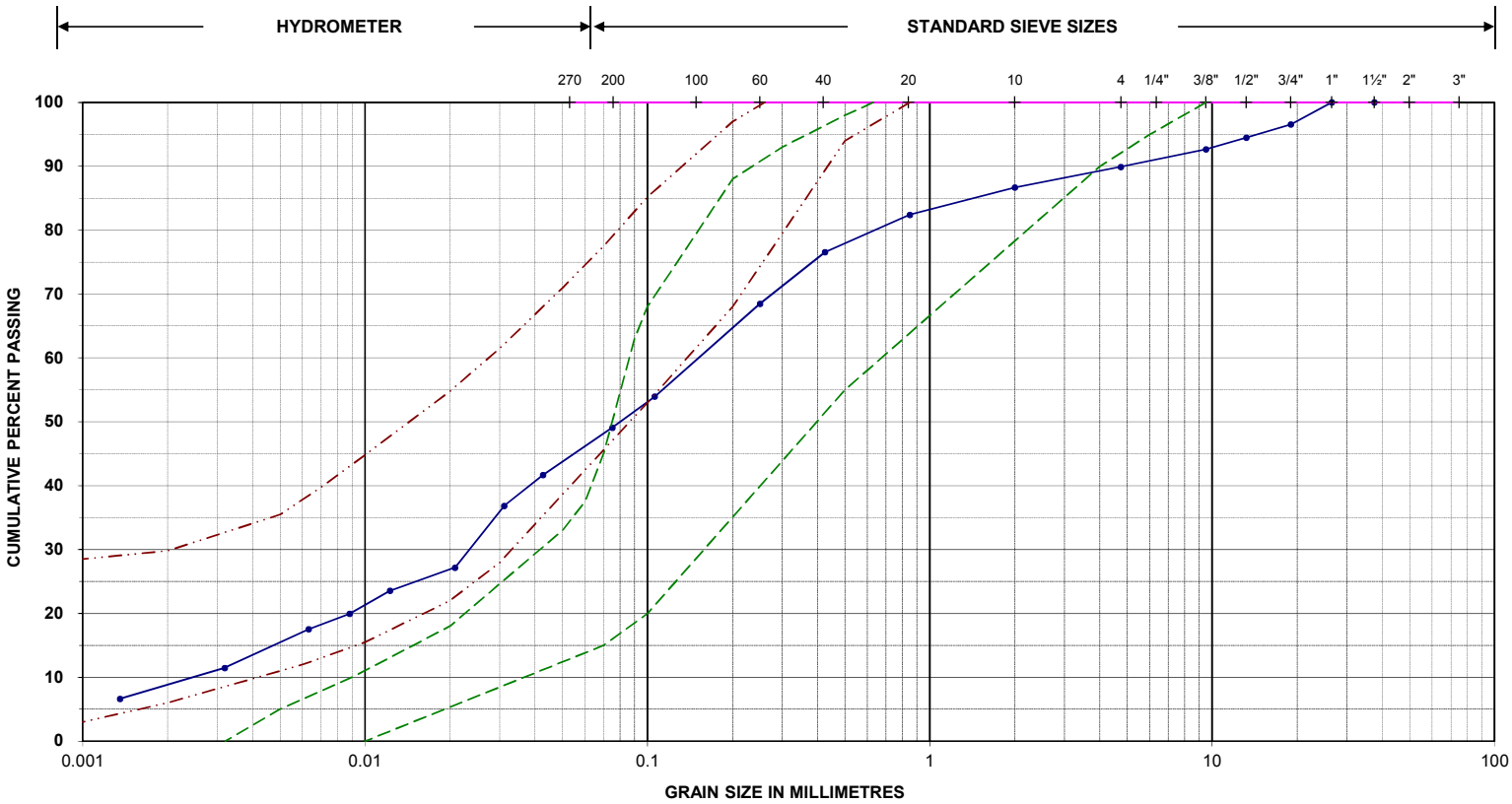
– – – – – – ml envelope T = 20 - 50 min/cm

Estimated T = 25 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-2	**Sample No./Depth:**	SS1

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	91.02	**0.043**	44.1
26.5 mm	100.0	**0.850 mm**	87.0	**0.020**	35.2
19.0 mm	100.0	**0.425 mm**	81.1	**0.009**	24.9
13.2 mm	99.0	**0.250 mm**	70.4	**0.003**	13.4
9.50 mm	97.6	**0.106 mm**	52.1	**0.001**	9.6
4.75 mm	94.3	**0.075 mm**	49.5		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	10	%
SAND	41	%
SILT	42	%
CLAY	7	%

---------- sm envelope T = 8 - 20 min/cm

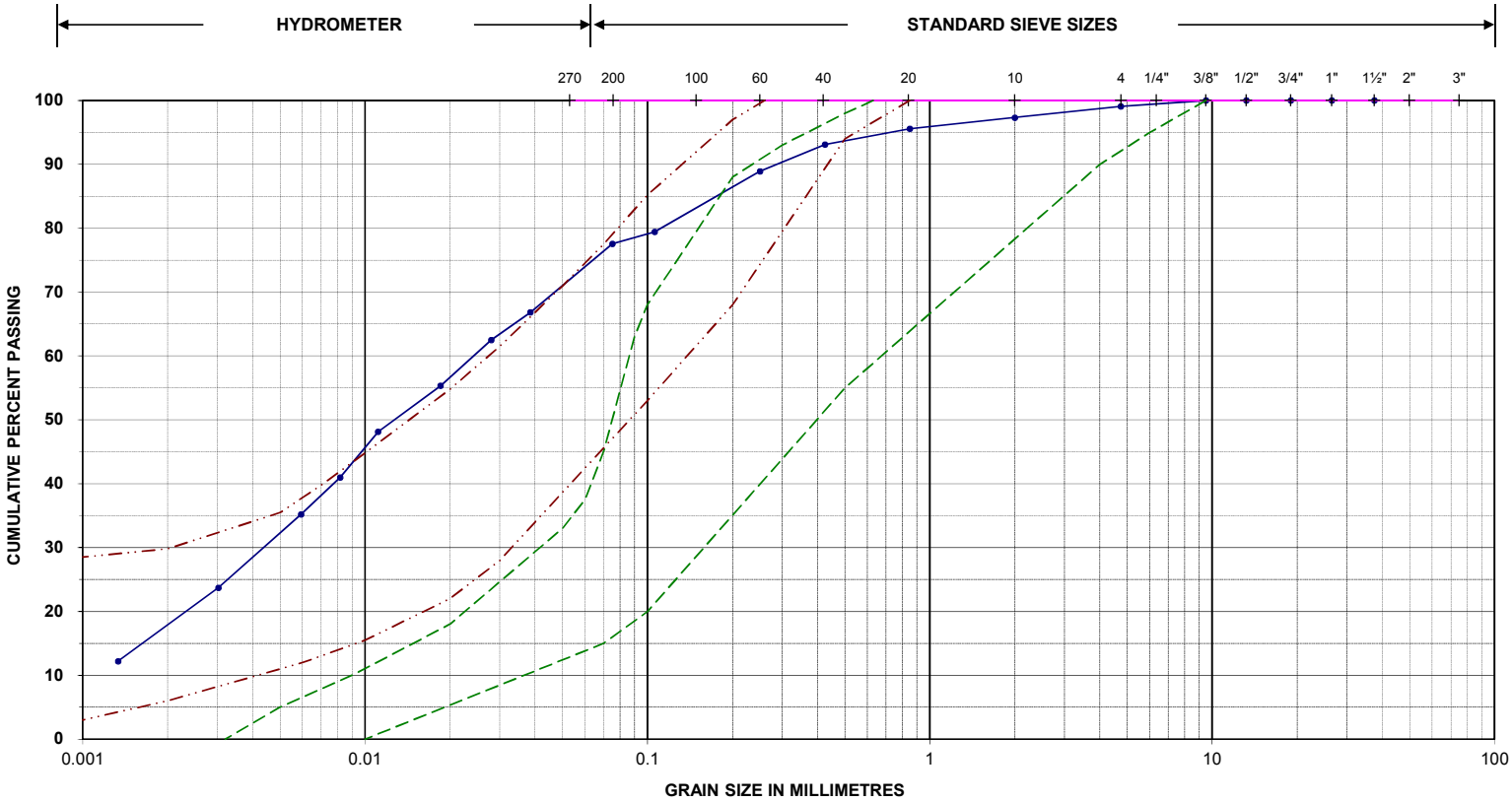
– – – – – – ml envelope T = 20 - 50 min/cm

Estimated T = 25 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-3	**Sample No./Depth:**	SS1

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	86.69	**0.043**	41.7
26.5 mm	100.0	**0.850 mm**	82.4	**0.021**	27.2
19.0 mm	96.6	**0.425 mm**	76.6	**0.009**	19.9
13.2 mm	94.5	**0.250 mm**	68.5	**0.003**	11.5
9.50 mm	92.7	**0.106 mm**	53.9	**0.001**	6.6
4.75 mm	89.9	**0.075 mm**	49.1		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	1	%
SAND	22	%
SILT	65	%
CLAY	12	%

---------- sm envelope T = 8 - 20 min/cm

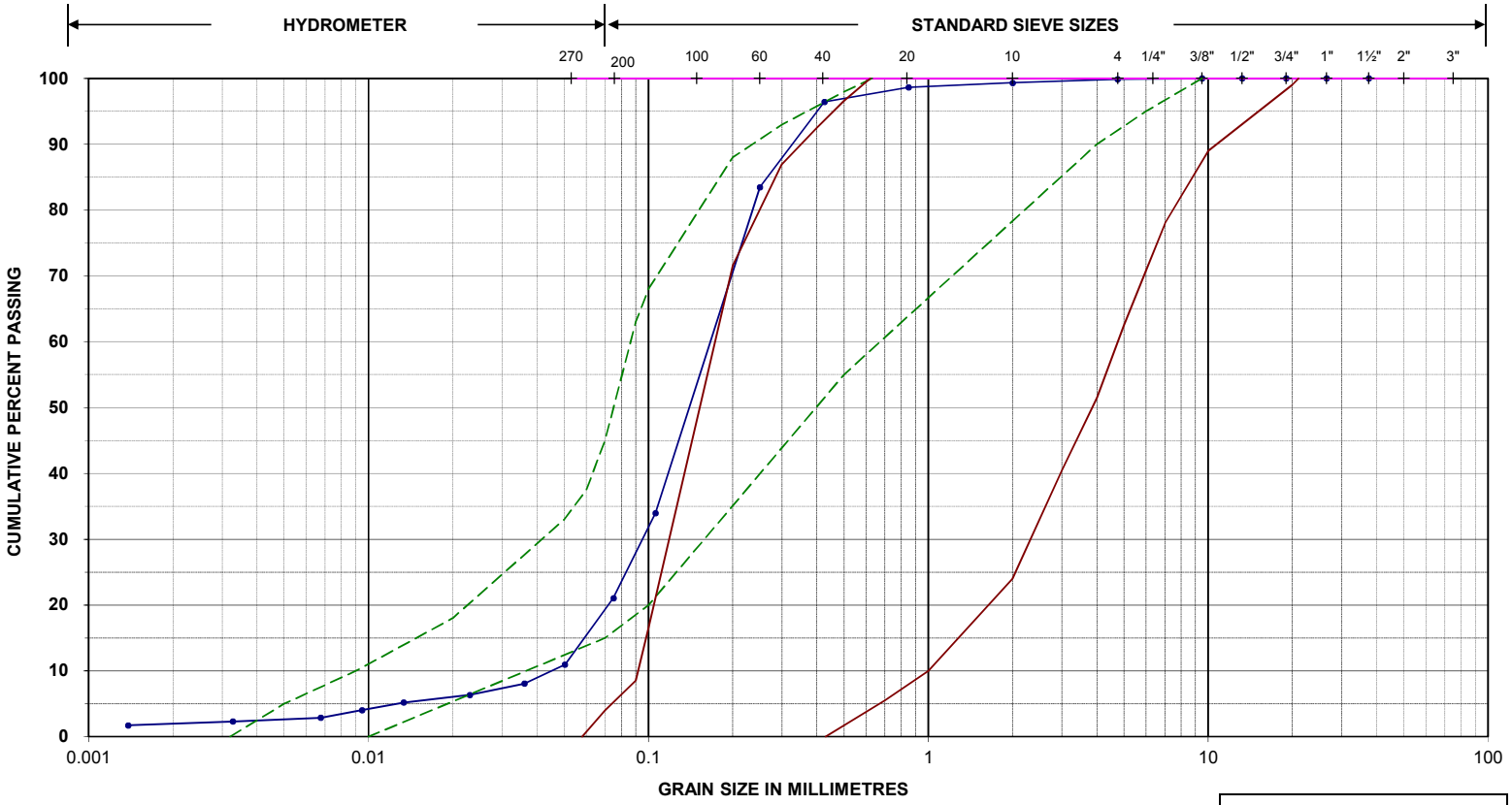
– – – – – – ml envelope T = 20 - 50 min/cm

Estimated T = 45 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-4	**Sample No./Depth:**	SS1

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	97.32	**0.038**	66.8
26.5 mm	100.0	**0.850 mm**	95.6	**0.018**	55.3
19.0 mm	100.0	**0.425 mm**	93.1	**0.008**	41.0
13.2 mm	100.0	**0.250 mm**	88.9	**0.003**	23.7
9.50 mm	100.0	**0.106 mm**	79.4	**0.001**	12.2
4.75 mm	99.1	**0.075 mm**	77.6		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	0	%
SAND	79	%
SILT	19	%
CLAY	2	%

---------- sm envelope T = 8 - 20 min/cm

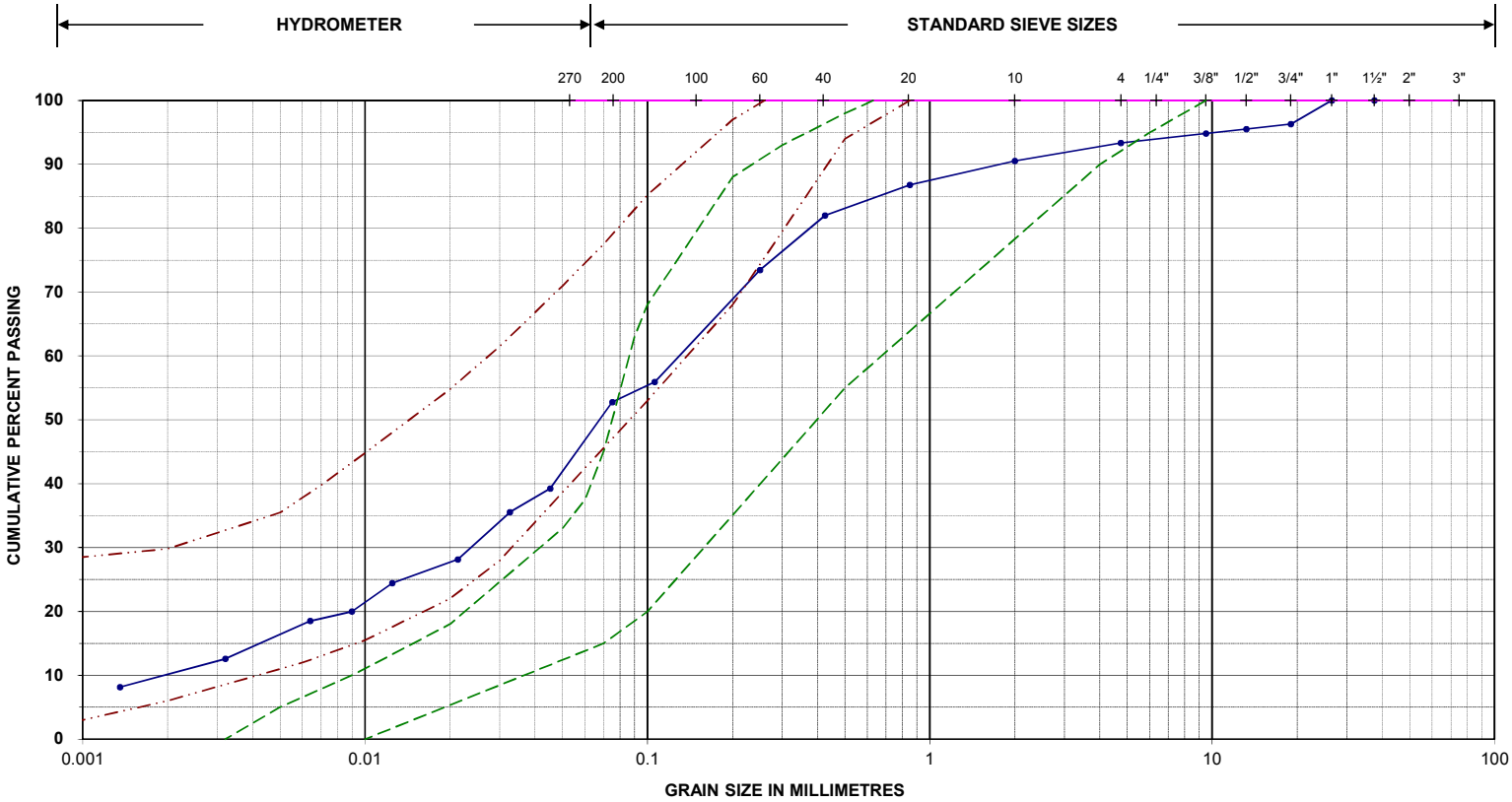
———— sp envelope T = 2 - 8 min/cm

Estimated T = 10 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-5	**Sample No./Depth:**	SS2

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	99.33	**0.050**	10.9
26.5 mm	100.0	**0.850 mm**	98.6	**0.023**	6.3
19.0 mm	100.0	**0.425 mm**	96.4	**0.009**	4.0
13.2 mm	100.0	**0.250 mm**	83.5	**0.003**	2.3
9.50 mm	100.0	**0.106 mm**	34.0	**0.000**	1.7
4.75 mm	99.9	**0.075 mm**	21.1		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	7	%
SAND	41	%
SILT	45	%
CLAY	8	%

---------- sm envelope T = 8 - 20 min/cm

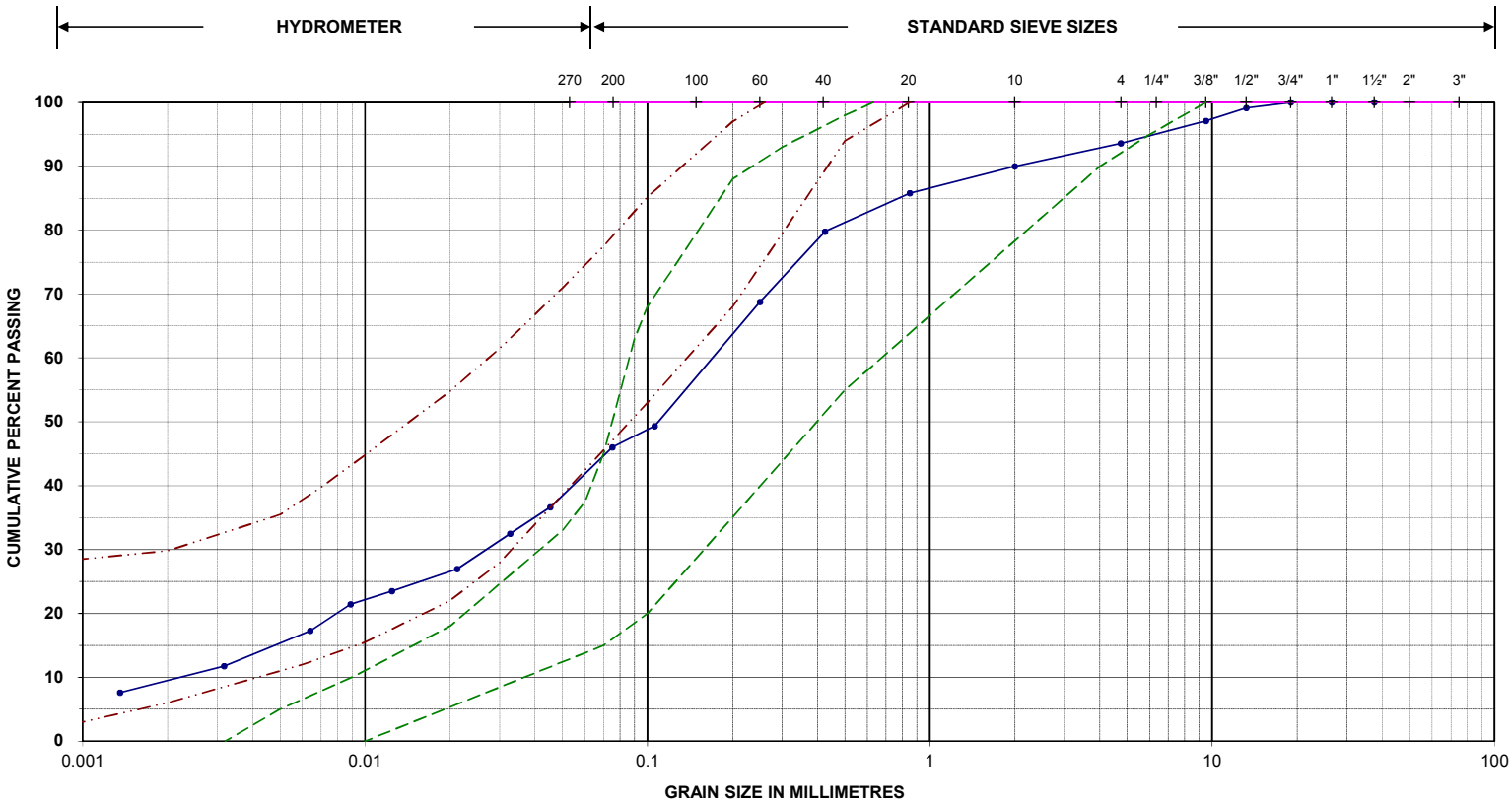
– – – – – – ml envelope T = 20 - 50 min/cm

Estimated T = 25 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-6	**Sample No./Depth:**	SS1

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	90.52	**0.045**	39.2
26.5 mm	100.0	**0.850 mm**	86.8	**0.021**	28.1
19.0 mm	96.3	**0.425 mm**	82.0	**0.009**	20.0
13.2 mm	95.5	**0.250 mm**	73.4	**0.003**	12.6
9.50 mm	94.8	**0.106 mm**	55.9	**0.001**	8.1
4.75 mm	93.4	**0.075 mm**	52.8		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	**6**	**%**
SAND	**48**	**%**
SILT	**38**	**%**
CLAY	**8**	**%**

---------- sm envelope T = 8 - 20 min/cm

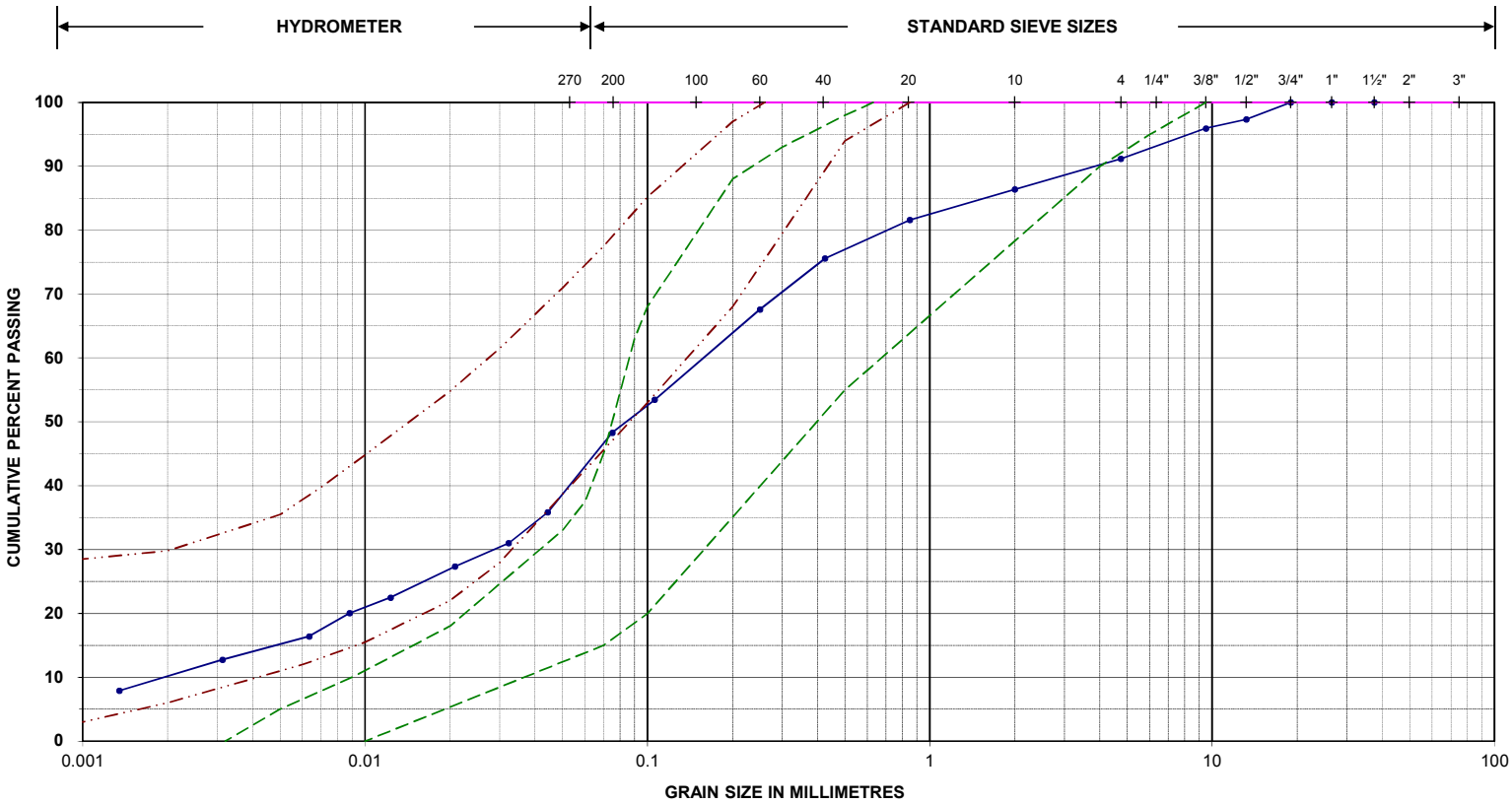
– – – – – – ml envelope T = 20 - 50 min/cm

Estimated T = 25 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-7	**Sample No./Depth:**	SS1

Sieve Size	% Passing Coarse	**Sieve Size**	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	90.00	**0.045**	36.6
26.5 mm	100.0	**0.850 mm**	85.8	**0.021**	26.9
19.0 mm	100.0	**0.425 mm**	79.8	**0.009**	21.4
13.2 mm	99.1	**0.250 mm**	68.8	**0.003**	11.7
9.50 mm	97.1	**0.106 mm**	49.3	**0.001**	7.6
4.75 mm	93.6	**0.075 mm**	46.0		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	9	%
SAND	43	%
SILT	40	%
CLAY	8	%

---------- sm envelope T = 8 - 20 min/cm

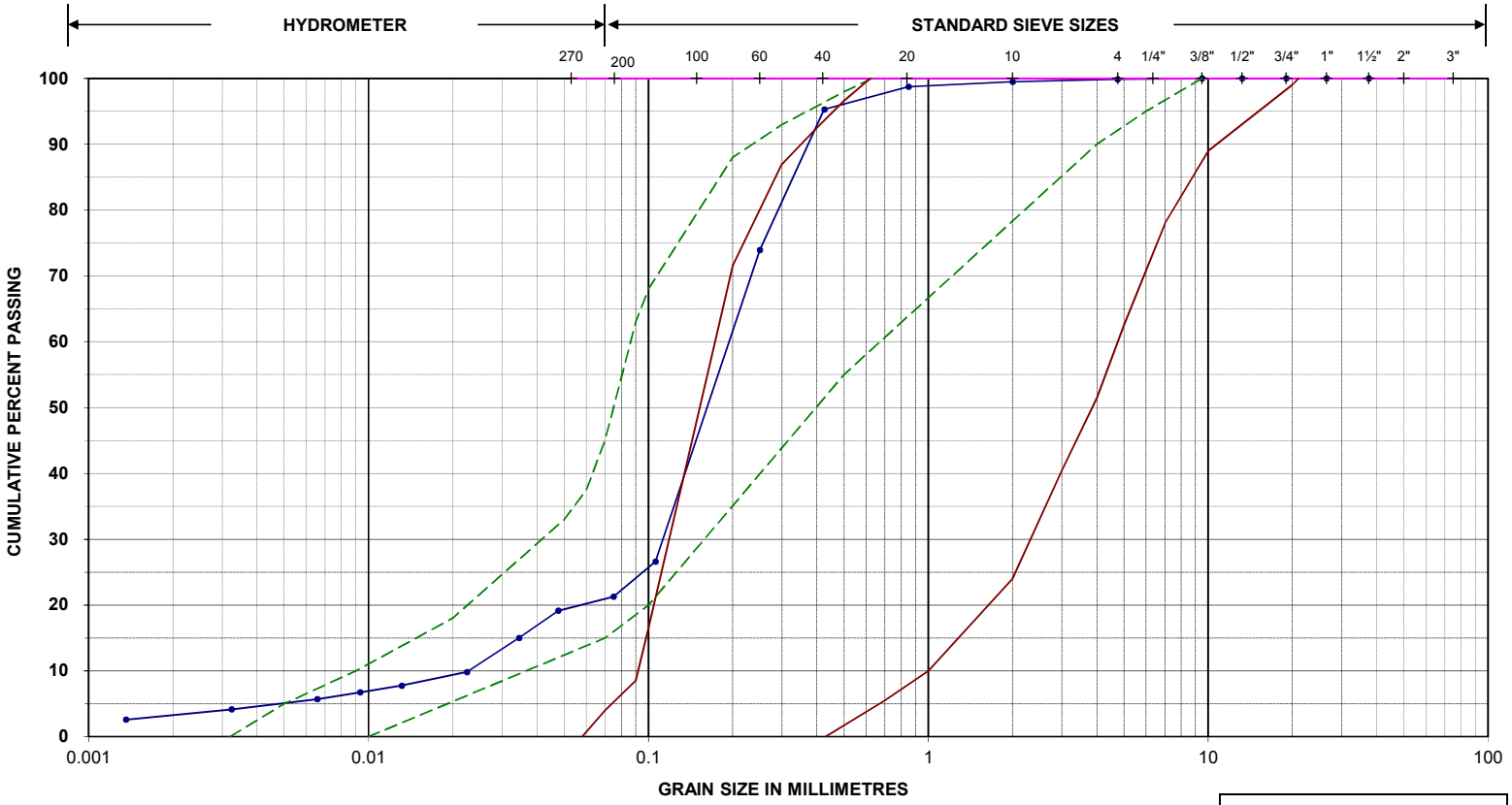
– – – – – – ml envelope T = 20 - 50 min/cm

Estimated T = 25 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-8	**Sample No./Depth:**	SS1

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	86.39	**0.044**	35.8
26.5 mm	100.0	**0.850 mm**	81.6	**0.021**	27.3
19.0 mm	100.0	**0.425 mm**	75.6	**0.009**	20.0
13.2 mm	97.4	**0.250 mm**	67.6	**0.003**	12.8
9.50 mm	95.9	**0.106 mm**	53.5	**0.001**	7.9
4.75 mm	91.2	**0.075 mm**	48.3		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	0	%
SAND	79	%
SILT	19	%
CLAY	3	%

---------- sm envelope T = 8 - 20 min/cm

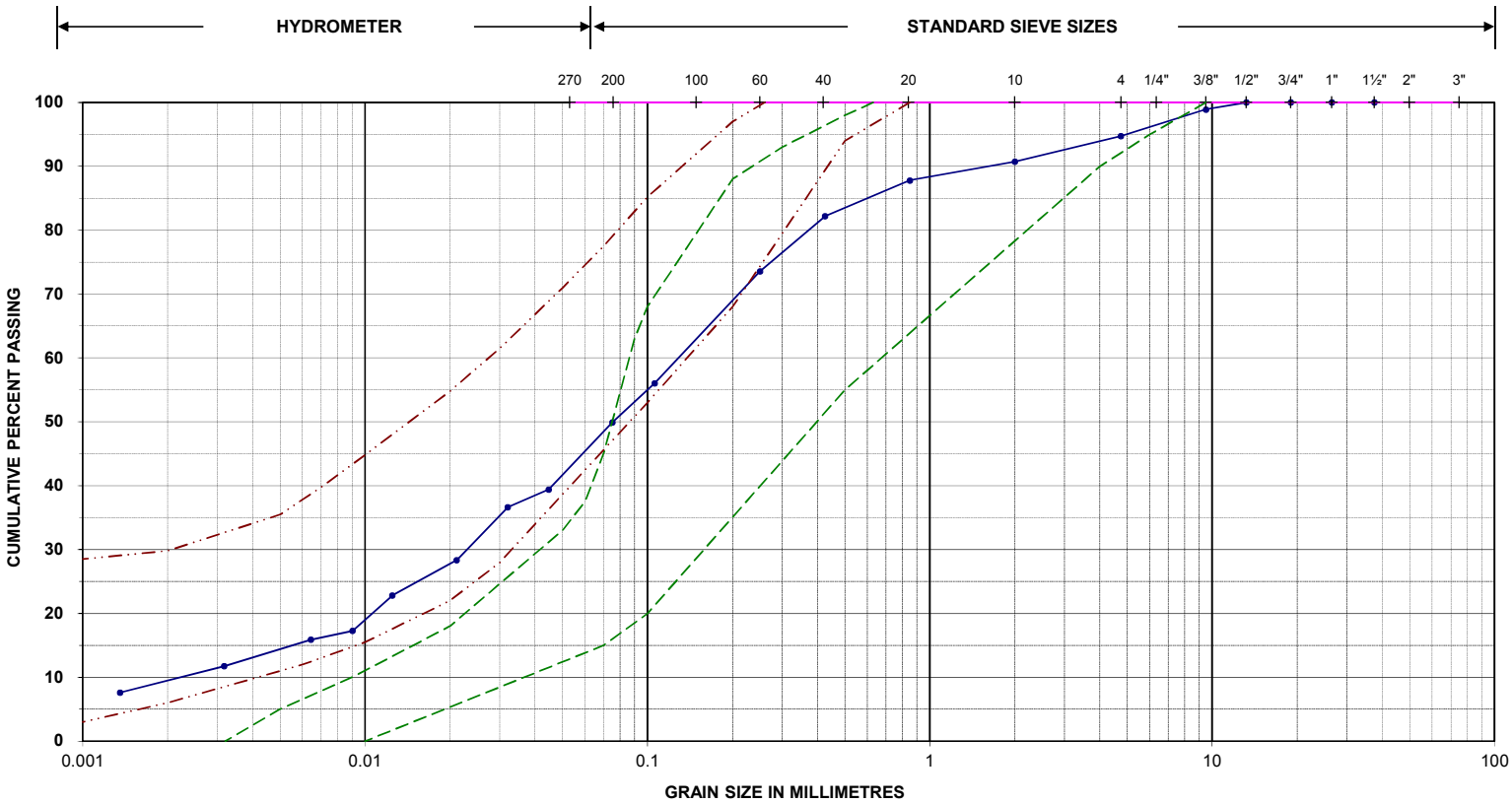
———— sp envelope T = 2 - 8 min/cm

Estimated T = 15 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-9	**Sample No./Depth:**	SS1

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	99.48	**0.048**	19.2
26.5 mm	100.0	**0.850 mm**	98.7	**0.022**	9.8
19.0 mm	100.0	**0.425 mm**	95.3	**0.009**	6.7
13.2 mm	100.0	**0.250 mm**	73.9	**0.003**	4.1
9.50 mm	100.0	**0.106 mm**	26.6	**0.000**	2.6
4.75 mm	99.9	**0.075 mm**	21.3		

PARTICLE SIZE DISTRIBUTION ASTM D422



Unified Classification System

SILT AND CLAY	SAND	GRAVEL

GRAVEL	5	%
SAND	45	%
SILT	42	%
CLAY	8	%

---------- sm envelope T = 8 - 20 min/cm

– – – – – – ml envelope T = 20 - 50 min/cm

Estimated T = 25 min/cm

Project Name:	Udora Subdivision	**Project No.:**	181-12360-00
Location ID.:	TP19-10	**Sample No./Depth:**	SS1

Sieve Size	% Passing Coarse	Sieve Size	% Passing Fine	Hydrometer (mm)	% Passing
37.5 mm	100.0	**2.00 mm**	90.74	**0.045**	39.4
26.5 mm	100.0	**0.850 mm**	87.8	**0.021**	28.3
19.0 mm	100.0	**0.425 mm**	82.2	**0.009**	17.3
13.2 mm	100.0	**0.250 mm**	73.5	**0.003**	11.8
9.50 mm	98.9	**0.106 mm**	56.1	**0.001**	7.6
4.75 mm	94.7	**0.075 mm**	49.9		

TABLE E-1: TEST PIT LOGS

181-12360-00
Udora Subdivision
Capris Investments Inc.
May 3, 2019

Depth	Description
TP19-1	
0.00 – 0.20 m	Black topsoil, silt, some sand, trace gravel, with organic material, compact, and wet.
0.20 – 0.50 m	Grey sandy silt fill, some clay and gravel, compact and wet.
0.50 – 0.80 m	Black topsoil, silt, some sand, trace gravel, with organic material, compact, and wet.
0.80 – 2.00 m	Silt and sand, some gravel and clay, boulders, compact and wet.
	— Sample SS1 taken at 0.40 m — Sample SS2 taken at 2.00 m — Test pit open and wet at 2.00 m — Groundwater seepage encountered at 1.80 m
TP19-2	
0.00 – 0.50 m	Black topsoil, trace gravel and boulders, with organic material, wet and loose.
0.50 – 1.20 m	Grey sand and silt, some clay and gravel, orange mottling, compact and wet.
1.20 – 2.00 m	Grey, silty gravel, some boulders, wet and loose.
	— Sample SS1 taken at 1.00 m — Sample SS2 taken at 2.00 m — Test pit caving and wet at 2.00 m — Groundwater seepage encountered at 0.70 m

Unit 2
126 Don Hillock Drive
Aurora, ON, Canada L4G 0G9

T: 905 750-3080
wsp.com

TP19-3

0.00 – 1.00 m	Black topsoil, silt, trace sand, with organic material, wet, loose, some debris present.
1.00 – 1.10 m	Concrete slab.
1.10 – 2.00 m	Grey silt and sand, some gravel and clay, trace boulders, orange mottling, compact and wet.

- Sample SS1 taken 2.00 m
- Test pit caving and wet at 2.00 m
- Groundwater seepage encountered at 1.00 m

TP19-4

0.00 – 0.20 m	Black topsoil, silt, trace sand, with organic material, compact and wet.
0.20 – 2.00 m	Grey silt and sand, some gravel and clay, orange mottling, compact and wet, debris encountered at top of layer.

- Sample SS1 taken at 2.00 m
- Test pit caving and wet at 2.00 m
- Groundwater seepage encountered at 0.30 m
- Car debris encountered at 0.30 m

TP19-5

0.00 – 0.25 m	Dark brown topsoil, silty sand, with organic material, loose, wet, debris present.
0.25 – 2.00 m	Half of the test pit found to be grey, gravelly silt, trace clay, compact and wet. Other half of the test pit found to be brown sand, some silt, trace clay, loose and wet.

- Sample SS1 taken at 2.00 m
- Sample SS2 taken at 2.00 m
- Test pit caving and wet at 2.00 m
- Groundwater seepage encountered at 1.50 m

TP19-6

0.00 – 0.20 m	Brown topsoil, silty sand, some gravel, with organic material, debris present.
0.20 – 2.00 m	Silt and sand, trace clay and gravel, some boulders, compact and dry;

- Sample SS1 taken at 2.00 m
- Test pit open and dry at 2.00 m

TP19-7

0.00 – 0.30 m	Black topsoil, silty sand with organic material, loose and wet.
0.30 – 2.00 m	Grey silty sand, trace clay and gravel, some boulders, compact and dry.

- Sample SS1 taken at 2.00 m
- Test pit open and dry at 2.00 m

TP19-8

0.00 – 0.40 m	Black topsoil, silty sand with organic material, loose and wet.
0.40 – 2.00 m	Grey sand and silt, trace gravel and clay, some boulders, compact and dry.

- Sample SS1 taken at 2.00 m
- Test pit caving and wet at 2.00 m
- Groundwater seepage encountered at 0.40 m

TP19-9

0.00 – 0.30 m	Black topsoil, silty sand with organic material, loose, moist.
0.30 – 0.70 m	Brown sand with some silt, trace clay, loose and moist.
0.70 – 2.00 m	Grey gravelly silt, trace sand and clay, orange mottling, compact and wet.

- Sample SS1 taken at 0.70 m
- Sample SS2 taken at 2.00 m
- Test pit caving and wet at 2.00 m
- Groundwater seepage encountered at 0.70 m

TP19-10

0.00 – 0.30 m	Black topsoil, silty sand with organic material, loose and dry.
0.30– 2.00 m	Gravelly sand and silty, trace clay and gravel, some boulders, orange mottling, compact and wet.

- Sample SS1 taken at 2.00 m
- Test pit open and wet at 2.00 m

TABLE E-2 GROUNDWATER LEVELS

Project: Udora Estates Water Balance Evaluation (22012.00)

	MW17-1 (A -235172)*			MW17-2			MW17-3			MW1 (A-206394)			MW2			MW3		
Date	Water level (mbtoc)	Water level (mbgl)	Water level Elev. (masl)	Water level (mbtoc)	Water level (mbgl)	level Elev. (masl)	Water level (mbtoc)	Water level (mbgl)	level Elev. (masl)	Water level (mbtoc)	Water level (mbgl)	level Elev. (masl)	Water level (mbtoc)	Water level (mbgl)	level Elev. (masl)	Water level (mbtoc)	Water level (mbgl)	level Elev. (masl)
10-Dec-22	2.65	1.84	248.10	3.71	2.85	248.91	2.81	1.99	249.11	10.32	9.37	243.1	12.39	11.48	240.3	8.06	7.17	252.1
20-Mar-23	1.20	0.39	249.54	1.63	0.81	250.99	1.82	1.00	250.10	10.61	9.66	242.8	11.40	10.49	241.3	5.49	4.60	254.6
20-Apr-23	1.08	0.27	249.66	1.65	0.70	250.97	2.15	1.33	249.77	10.52	9.57	242.9	11.16	10.25	241.6	5.10	4.21	255.0
19-May-23	1.83	1.02	248.91	2.13	1.22	250.49	2.52	1.70	249.40	10.89	9.94	242.6	11.54	10.63	241.2	5.58	4.69	254.5
20-Jul-23	2.62	1.81	248.12	na	na	na	3.04	2.22	248.88	dry	na	na	na	na	na	6.89	6.00	253.2
4-Nov-23	4.13	3.32	246.61	5.27	4.51	247.35	4	3.18	247.92	12.42	11.47	241.0	12.75	11.84	240.0	8.50	7.61	251.6
16-Mar-24	1.05	0.24	249.69	1.72	0.72	250.90	1.67	0.85	250.25	11.09	10.14	242.4	11.52	10.61	241.2	6.14	5.25	254.0
9-Apr-24	1.06	0.25	249.69	1.66	1.66	250.96	1.8	0.98	250.12	10.94	9.99	242.5	11.26	10.35	241.5	5.39	4.50	254.7
6-May-24	1.10	0.29	249.64	0.69	0.69	251.93	2	1.18	249.92	11.73	10.78	241.7	11.02	10.11	241.7	5.05	4.16	255.1
27-Jul-24	2.09	1.28	248.65	2.39	2.39	250.23	2.63	1.81	249.29	11.25	10.30	242.2	11.44	10.53	241.3	6.70	5.81	253.4
30-Sep-24	3.32	2.51	247.42	4.03	4.03	248.59	3.36	2.54	248.56	12.14	11.19	241.3	12.28	11.37	240.4	7.54	6.65	252.6
9-Nov-24	3.72	2.91	247.02	4.77	4.77	247.85	3.71	2.89	248.21	7.23	6.28	246.2	12.56	11.65	240.2	8.13	7.24	252.0

TABLE E-2 GROUNDWATER LEVELS

Project: Udora Estates Water Balance Evaluation (22012.00)

	MW1-22 (A-351957)			MW2-22			MW24-1			OW5-1		
Date	Water level (mbtoc)	Water level (mbgl)	level Elev. (masl)	Water level (mbtoc)	Water level (mbgl)	Water level Elev. (masl)	Water level (mbtoc)	Water level (mbgl)	Water level Elev. (masl)	Water level (mbtoc)	Water level (mbgl)	Water level Elev. (masl)
10-Dec-22	6.51	5.75	248.88	9.56	8.56	249.31						
20-Mar-23	4.74	3.98	250.65	6.93	5.93	251.94						
20-Apr-23	4.57	3.81	250.82	6.08	5.08	252.80						
19-May-23	4.80	4.04	250.59	6.54	5.54	252.33						
20-Jul-23	5.84	5.08	249.55	9.04	8.04	249.83						
4-Nov-23	7.05	6.29	248.34	9.57	8.57	249.30						
16-Mar-24	5.67	4.91	249.72	7.43	6.43	251.44	6.11	5.22	251.91	1.33	0.63	257.91
9-Apr-24	5.44	4.68	249.95	6.78	5.78	252.09	5.37	4.48	252.65	1.40	0.70	257.84
6-May-24	5.03	4.27	250.36	6.05	5.05	252.82	4.71	3.82	253.31	1.50	0.80	257.74
27-Jul-24	5.87	5.11	249.52	7.06	6.06	251.81	5.90	5.01	252.12	1.96	1.26	257.28
30-Sep-24	7.88	7.12	247.51	8.56	7.56	250.31	7.42	6.53	250.60	2.85	2.15	256.39
9-Nov-24	7.23	6.47	248.16	9.35	8.35	249.52	8.10	7.21	249.92	3.30	2.60	255.94

Table E-3 Monitor Well Details

Project: Udora Estates Water Balance Evaluation (22012.00)

Monitor Details				
Monitor	**Well Depth (mbgl)**	**Casing Stickup (magl)**	**PVC Casing Elev.**	**Ground Elev.**
MW17-1 (A-235172)	6.10	0.81	250.74	249.93
MW17-2	6.10	0.86	252.62	251.76
MW17-3	4.60	0.82	251.92	251.10
MW1	15.30	0.95	253.45	252.50
MW2	16.90	0.91	252.71	251.80
MW3	15.90	0.89	260.12	259.23
MW1-22 (A-351957)	12.19	0.76	255.39	254.63
MW2-22	12.19	1.17	258.87	257.70
OW05-1	8.62	0.7	259.24	258.54
MW24-1	10.67	0.89	257.13	256.24

GPS Survey 2024 (Envision Consultants)