Preliminary Hydrogeological Investigation

Proposed Residential Buildings 150 Steeles Avenue East Milton, ON

Prepared For:

Neatt Communities

Project #: 21-122-106 Date: April 7, 2025



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Attention: Evan Kernaghan Via email: Evan.Kernaghan@neattcommunities.com

RE: Preliminary Hydrogeological Investigation –150 Steeles Avenue East, Milton, Ontario

DS Consultants Limited (DS) was retained by Neatt Communities to complete a preliminary hydrogeological investigation for the proposed development located at 150 Steeles Avenue East in Milton, Ontario (Site). The Site has an approximate area of 203,500 m² (20.35 Ha) situated approximately 350 meters west of the intersection of Steeles Avenue East and Martin Street in the Town of Milton, Ontario and is currently vacant. It is DS's understanding that the subject property will be divided into several blocks for development purposes and the development in the future will be completed in multiple phases. This preliminary hydrogeological investigation report has been prepared for the entire site. Additional investigations may be required per block when design details become available. Based on the conceptual plan, the blocks will be developed with mid-rise to high rise residential buildings with up to four (4) levels of underground parking (P4). The hydrogeological findings within this report are based on boreholes, monitoring wells and pumping well drilled and installed by DS on the Site completed in May of 2023. This hydrogeological field program was completed concurrently with the geotechnical investigation.

The preliminary hydrogeological assessment report includes an overview of the existing geological and hydrogeological conditions at the Site and the surrounding area, provides an assessment of the hydrogeological constraints and impacts of the proposed development on the local groundwater. In the absence of detailed design, the report includes a preliminary estimation of construction dewatering (short-term dewatering) volumes and groundwater permanent drainage based on specific assumptions of below-grade construction (P2 to P4 level design) and can be used for preliminary design purposes. Based on the results of this investigation, the following conclusions and recommendations are presented:

- Based on the Ministry of Environment, Conservation and Parks (MECP) water well records search, there were seventy-four (74) water wells within a 500 m radius of the Site. all wells were noted as monitoring/test holes or not in use except for five (5) records for domestic, three (3) records for industrial and three (3) records for commercial purposes. The study area is fully serviced with municipal water and therefore, no groundwater users are expected in the area. Closer to construction, it is prudent to complete a door-to-door water well survey to confirm absence of any active water wells.
- 2. Between April 22 and 27, 2021, DS drilled six (6) boreholes as part of this preliminary hydrogeological investigation concurrently with the geotechnical investigation. Boreholes were advanced to depths

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ranging between 15.6 to 22.6 meters below ground surface (mbgs) (Elev. 187.9-189.9 masl). All drilled boreholes were converted into monitoring wells and screened at various depths ranging from 9.1 and 22.6 mbgs.

- 3. DS also advanced twenty-six (26) boreholes (BHs) between March 29 and May 1, 2023. Boreholes were drilled to depths ranging from 13.8 to 24.4 mbgs and equipped twelve (12) of the drilled boreholes with monitoring wells as part of the current geotechnical and hydrogeological investigations. Monitoring wells were installed in all the boreholes and screened between 6.1 to 18.7 mbgs.
- 4. The surficial geology of the Site and study area has been mapped as "clay to silt-textured till, derived from glaciolacustrine deposits or shale. The overburden geology at the Site generally consists of glacial deposits of clayey silt till, sandy silt till, cohesionless deposits of sandy silt, silty sand, silt and sand and Gravel. Bedrock was found in all boreholes except BH21-2 at approximate depths varying from 15.3 to 18.3m below the existing ground, corresponding to elevations varying from 188 to 190.2 masl.
- 5. DS measured groundwater levels in all available installed monitoring wells on May 9, 2023. Based on groundwater level measurements, the groundwater table at the site was found at a range between 5.81 to 11.91 mbgs (Elev. 197.57-200.49 masl). Based on groundwater elevations, the flow direction within the Site is inferred to be southwest towards the Sixteen Mile creek.
- 6. DS completed eighteen (18) Single Well Response Tests (SWRTs) in available monitoring wells to estimate hydraulic conductivity (k) for the representative geological units in which the wells were screened. The values of calculated hydraulic conductivity (k) range from 1.65×10^{-7} to 4.81×10^{-4} m/s. indicative for the presence of highly permeable deposits.
- 7. Two (2) unfiltered groundwater samples were collected from monitoring well BH23-20 on May 11 and from PW1 on May 18, 2023. The samples were analyzed and compared against the parameters listed under the Halton Region Storm and Sanitary Sewer Use By-law and Provincial Water Quality Objective (PWQO) for future surface water discharge. The reported analytical results indicated that no parameters were in exceedance of the Halton Region's Storm and Sanitary Sewer Discharge By-Law criteria and only iron was in exceedance of the PWQO. Therefore, groundwater at the Site is not suitable for a discharge without pre-treatment into the nearby surface water systems. Groundwater can be discharged into Halton Storm and Sanitary Sewer without any treatment. Additional testing will be required per block and closer to construction to confirm water quality and treatment requirements.
- 8. In May 2023, a pumping test was conducted on pumping well PW1. The static water level measured on May 18th, 2023, in PW1 to be 8.3 mbgs. At PW1, the pumping rate was held constant at 237 L/min (52 igpm) over the 3.5-hour drawdown period and then 16 hours of recovery was recorded. The Transmissivity of the aquifer was calculated to be 890 m²/day (59,700 igpd/ft., and the Storativity calculated to be 2.5 x 10⁻⁴ (dimensionless) based on the pumping test data.

- 9. Detailed designs were not available at the time of preparing this report, as a result, DS based dewatering calculations for a typical development block (180 m by 100 m or (18,000 m²) featuring underground levels reaching P4 Levels.
- 10. The aquifer coefficients (Transmissivity and Storativity) were applied to a groundwater model to estimate the dewatering rates for pre and post-construction for each of the development phases. Through an iterative process, groundwater models were determined featuring 13 theoretical wells, with the below estimated (Table 1) combined pumping rates for each phase will produce the required amount of drawdown to dewater the aquifer water level to below the target dewatering elevations. A 20% safety factor was applied to each underground level design (P2 to P4) to estimate the maximum daily discharge (groundwater and storm water) required during construction dewatering.

Proposed Underground Design	Storm water (liters/day)	Groundwater Discharge Rate(L/min)	Groundwater Discharge Volume (L/Day) with 20% safety factor	Total Construction Dewatering Volume (L/day)
P2 Level		1,300	2,250,000	2,340,000
P3 Level	90,000	3,660	6,320,000	6,410,000
P4 Level		6,020	10,410,000	10,500,000

Table 1: Summary of Construction Dewatering Volumes

- 11. Based on Sichardt equation, the Predicted zone of Influence (ZOI) for the construction phases was estimated to be approximately 187 m (P2 Level Design) and 936 m (P4 Level Design).
- 12. Post Construction, permanent groundwater discharge will be minimal for the P2 level design, consisting of minor stormwater seepage collected at the foundation drainage system. Deeper footings and sumps for the P3 and P4 level design would extend the permanent groundwater drainage system below the static groundwater level. The maximum estimated daily groundwater discharge volumes required for each design scenario (20% safety) factor are presented in Table 2 below:

Proposed Underground Design	Groundwater Discharge Rate(L/min)	Total Permanent Drainage Volume (L/Day) with 20% safety factor
P2 Level	Above Groundwater Table	20,000*
P3 Level	1,180	2,040,000
P4 Level	3,541	6,120,000

Table 2: Summary of Permanent Groundwater Discharge Volumes

13. DS recommends bath tubbing (water-tight underground) design for any building extending to P3 or deeper to mitigate groundwater-related challenges for permanent groundwater discharge. Based on the results of the pumping test, a significant aquifer is present on the western portion of the site. If bath tubbing is not a viable option, alternative strategies should be explored to minimize groundwater impact. This includes designing the structure to remain above the water table where feasible,

implementing robust waterproofing systems, and considering dewatering techniques to manage groundwater levels during construction and long-term operation.

- 14. A Permit to Take Water (PTTW) from the MECP will be required for temporary construction dewatering for each design scenario (P2 to P4 Level). A PTTW will be required from the MECP for permanent drainage for only the P3 and P4 level scenario (if the foundations are not bath tubbed).
- 15. Discharge permits and agreements will be required to be obtained from the Halton Region/Town of Milton if private water is discharged to the sewer system for construction dewatering.
- 16. Once a groundwater dewatering system is set up at the Site, daily and weekly monitoring should be implemented to assess the groundwater conditions such as water levels, measurement of discharge flow, discharge water quality and any adverse impacts as a result of dewatering.
- 17. There are structures and utilities within the maximum predicted zone of influence (ZOI) when considering an unsealed excavation. Since the proposed construction is anticipated to be constructed within the water-bearing permeable gravelly and sandy deposits, an effect of settlement due to dewatering is expected when the saturated soils become dewatered or depressurized by dewatering. DS recommends consulting geotechnical consultants for settlement monitoring requirements to assess potential settlement due to dewatering activities at the site during construction.
- 18. In conformance with Regulation 903 of the Ontario Water Resources Act, the decommissioning of any dewatering system and monitoring wells should be carried out by a licensed contractor under the supervision of a licensed water well technician.

Should you have any questions regarding these findings, please contact the undersigned.

DS Consultants Ltd.

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- Appendix ABorehole LogsAppendix BHydraulic Conductivity Analysis
- Appendix C PW1 Well Log, and Grain Size Curves
- Appendix D PW1 Pumping Test Analysis
- Appendix E Groundwater Control Model for Construction Dewatering
- Appendix F Groundwater Control Model for Permanent Drainage System
- Appendix G Groundwater Quality Certificate of Analysis
- Appendix H MECP Water Well Records

1.0 INTRODUCTION

DS Consultants Limited (DS) was retained by Neatt Communities to complete a preliminary hydrogeological investigation for the proposed development located at 150 Steeles Avenue East in Milton, Ontario (Site). The Site has an approximate area of 203,500 m² (20.35 Ha) situated approximately 350 meters west of the intersection of Steeles Avenue East and Martin Street in the Town of Milton, Ontario and is currently vacant. It is DS's understanding that the subject property is divided into several blocks for development purposes and the future development will be completed in multiple phases. Based on the conceptual plan, the block will be developed with mid-rise to high rise residential buildings with up to four (4) levels of underground parking (P4). **Figure 1** presents the site location map that highlights the location of the site and the surrounding area.

This preliminary investigation includes an overview of the existing geological and hydrogeological conditions at the Site and the surrounding area, provides an assessment of the hydrogeological constraints and impacts of the proposed development on the local groundwater and estimation of construction dewatering requirements. The hydrogeological investigation is based on boreholes and monitoring wells drilled and installed by DS on the Site completed August 2022 and additional work consisting of a drilling and pump testing investigation completed in May of 2023. This hydrogeological field program was competed concurrently with the geotechnical investigation.

1.1 Purpose

The purpose of this investigation was to review and determine the need for dewatering, estimate dewatering rates, assess groundwater quality and determine the need for a Permit to Take Water (PTTW) or an Environmental Activity Sector Registry (EASR) from the Ministry of Environment and Conservation and Parks (MECP). Potential impacts related to construction dewatering and associated monitoring/mitigation measures were also to be investigated.

1.2 Scope of Work

The scope of work for this investigation included:

- (i) Site visits;
- (ii) Collecting and interpreting available reports and data including the MECP Water Well Records (WWR), geotechnical, hydrogeological and environmental studies completed at the Site;
- (iii) Field work including a test well drilling program consisting of monitoring wells (MWs) and one (1 pumping well (PW1);
- (iv) In-situ hydraulic conductivity testing of existing monitoring wells;
- Pumping tests conducted to estimate aquifer hydraulic coefficients (Transmissivity and Storativity);
- (vi) Estimation of temporary groundwater flow rate during the construction phases;
- (vii) Estimation of permanent drainage volumes to the underfloor of the building following construction;

- (viii) Assessing groundwater quantity and quality to evaluate discharge options; and,
- (ix) Data analyses and report preparation.

2.0 FIELD INVESTIGATION

2.1 **Previous Investigations**

Phase II Environmental Site Assessment - 150 Steeles Avenue East, Milton, Ontario, prepared by AEL Environment in October 2014

As part of the Phase Two Investigation, fifty-eight (58) boreholes and eleven (11) borehole/monitoring well locations were advanced on the Site from October 15th to 25th, 2013. From August 11th to 19th, 2014, eight (8) groundwater wells and four (4) boreholes were advanced on the Site. Boreholes were drilled to depths ranging between 0.7 and 15.5 mbgs and installed monitoring wells with 3.05 m or 1.5 m length slotted intake screen to depths ranging from 8.4 to 15.0 mbgs.

Remedial Investigation - 150 Steeles Avenue East, Milton, Ontario, prepared by Pinchin in November 2020

The Remedial Investigation was completed at the Site by Pinchin between July 27, 2020, and August 31, 2020, and consisted of the advancement of 38 boreholes, 26 of which were completed as groundwater monitoring wells. The investigation included 11 boreholes to a maximum depth of 8 mbgs, 17 shallow monitoring wells (SW) to a maximum depth of 10 mbgs, 4 intermediate monitoring wells (IW) to a maximum depth of 14.5 mbgs and 6 deep monitoring wells (DW) to a maximum depth of 17.5 mbgs.

Preliminary Hydrogeological Investigation - 150 Steeles Avenue East, Milton, Ontario, prepared by DS Consultants in August 2022 (Revised)

A total of six (6) boreholes (BH21-1 through BH21-6) were drilled at the subject Site by DS as part of the hydrogeological investigation concurrently with the geotechnical investigation. All boreholes were advanced between April 22 and 27, 2021, to a depth ranged between 15.6 to 22.6 mbgs. All drilled boreholes were converted into monitoring wells and screened at depths between 9.1 and 22.6 mbgs. Monitoring wells were constructed using 50 mm diameter PVC riser pipes and screens, which were installed in each of the boreholes in accordance with O.Reg. 903. In order to help better understanding of geology and hydrogeological setting of the Site, DS also used nine (9) existing monitoring wells (MW101, MW304, MW305, MW411, MW412, IW3, IW4, SW13 and DW5) installed by Pinchin and AEL Environmetal as part of the previous environmental investigations.

Fifteen (15) single well response tests (SWRTs) were completed by performing a rising head test to estimate hydraulic conductivity values of the overburden at the Site. Two (2) unfiltered groundwater samples were collected and analyzed against the Halton Region Storm and Sanitary Sewers Discharge Bylaw and Provincial Water Quality Objectives for surface water to assess groundwater discharge options during construction.

Hydrogeological Investigation - In Support of a Temporary Permit to Take Water, 150 Steeles Avenue East, Milton, Ontario, prepared by DS Consultants in June 2022

In June 2022, a pumping test was conducted on the existing pumping well used in the pilot scale remediation program. The well field consisted of a total of three (3) pumping wells and three (3) recharge wells were

drilled at the subject site by Davis Drilling as part of the hydrogeological investigation and remediation pilot test. The pumping wells were drilled to a depth of 13.1 m bgs and the water level was measured to be 7.3 m bgs. An aquifer performance test was completed on an existing pumping well (PW1), the pumping rate was held constant at 12 L/min (2.6 igpm) over the 2.5-hour drawdown period and then 40 minutes of recovery was recorded. The Transmissivity of the aquifer was calculated to be 6.4 m²/day (429 igpd/ft.), and the Storativity calculated to be 4 x 10⁻³ (dimensionless) based on the pumping test data. It should be noted that the pumping wells installed as part of the remediation pilot test only partially penetrated the aquifer therefore the groundwater quantity could be greater in the area of the well field.

2.2 Current Investigation

Between March 29 and May 1, 2023, DS advanced twenty-six (26) boreholes (BHs) to depths ranging from 13.8 to 24.4 mbgs and equipped twelve (12) of the drilled boreholes with monitoring wells at the site as part of the current geotechnical and hydrogeological investigations. Monitoring wells were installed into all the boreholes and screened between 6 to 18.7 mbgs. Monitoring wells were constructed using 50 mm diameter PVC riser pipes and screens, which were installed into each of the boreholes in accordance with O.Reg.903. All monitoring well were developed prior to use to ensure the production of clear water.

In May 2023, DS conducted single well response tests (SWRTs) at twelve (12) monitoring wells by performing a rising head test to estimate the hydraulic conductivity values of formations/soils at the site. A total of two (3) groundwater samples were obtained and tested for the parameters listed under the Halton Region Sewer Use Bylaw and PWQO to assess groundwater quality before any discharge to the Region's/City's sewers system or to overland discharge points.

In May 2023, the test drilling for pumping wells (PW1) to a depth of 18.2 mbgs was carried out by a licensed water well contractor, and they utilized the air rotary drilling method. A monitoring well was installed and screened between 12.2 to 15.2 mbgs. As boreholes was being advanced, samples of soil were collected and logged. A representative from DS was onsite for all drilling activity. The pumping well was developed following installation to ensure the production of clean and clear groundwater. The location of the pumping and all monitoring well is shown on the **Figure 3.** The subsurface conditions have been interpreted and displayed as cross-sections A-A', B-B' and C-C' as shown in the attached **Figure 5** and the borehole logs are presented in **Appendix A**.

3.0 PHYSICAL SETTING

Available topographic maps, environmental, geotechnical, and hydrogeological reports were used to develop an understanding of the physical setting of the study area. The borehole logs from all investigations at the site as well as the MECP water well records (WWRs) were used to interpret the geological and hydrogeological conditions at the Site.

3.1 Physiography and Drainage

The Subject Site falls within the Sixteen Mile Creek watershed. The current topography at the Site is relatively undulating with a surface elevation ranged from 204 to 210 metres above sea level (masl). The

topography within the study area generally flat with a gentle slope towards the south. The nearest surface water body to the Site is Sixteen Mile Creek, located on the southwest side of the Site, which drains into Lake Ontario. The local site topography generally slopes gently downwards towards the south and east. There is a steep drop-off of approximately 5 metres, along the west and south boundary of the Site, where the land slopes down to the flood plain of Sixteen Mile Creek. Drainage is generally controlled by streams, artificial channels, topography and underground utilities.

3.2 Geology

The following presents a brief description of regional and site geology based on the review of available information and site-specific soil investigations.

3.2.1 Quaternary Geology

The study area (500 m radius) lies within the Peel Plain physiographic region (as per OGS Earth). The surficial geology of the Site and study area has been mapped as "clay to silt-textured till, derived from glaciolacustrine deposits or shale". The surficial geology map is shown in **Figure 2**.

3.2.2 Bedrock Geology

Available published mapping shows that bedrock in the area is predominantly shale, limestone, dolostone, siltstone as part of the Queenston Formation of the Phanerozoic, Paleozoic, Ordovician, Upper Ordovician eras; (MNDM Map 2544 Bedrock Geology of Ontario). Based on the review of existing boreholes logs and well record information, the depth to bedrock in the study area ranged between 13.8 to 22 meters below the existing ground and was encountered during drilling.

3.2.3 Site Geology

On-site subsurface soils were interpreted according to a preliminary geotechnical investigation report performed by DS (July 2021 and 2023) based on the boreholes/monitoring wells (BHs/MWs) drilled by DS. The locations of the BHs/MWs are shown in **Figure 3** and detailed subsurface conditions are presented on the borehole Logs in **Appendix A**. The subsurface conditions in the boreholes are summarized in the following paragraphs, and the geologic cross-sections (A-A', B-B' and C-C') are presented in **Figure 5**.

Topsoil/Fill Materials:

Boreholes were drilled on grass and encountered 130 to 230mm thick surficial topsoil layer. It should be noted that the thickness of the topsoil explored at the borehole locations may not be representative for the site and should not be relied on to calculate the amount of topsoil at the site.

Fill material was encountered in all boreholes, extending to depths ranging from 0.8 to 4.6 metres below ground surface. The fill was heterogeneous, consisting of silty clay to clayey silt and sand and gravel. Traces of rootlets, organics and topsoil were also observed in fill material.

Cohesive Deposits (Clayey Silt Till):

Underlying the fill material in all boreholes, clayey silt till deposits were encountered and extended to depths ranging from 2.3 to 7.6 mbgs. Other layers of clayey silt till and clayey silt deposits were encountered

below cohesionless deposits in Boreholes BH21-1, BH21-2, BH21-3 and BH21-5, extended to depths ranging from 7.6 to 15.2 mbgs. Occasional cobble and boulders were present within the hard till deposits.

Sandy Silt Till:

Below the clayey silt till and cohesionless deposits in Boreholes BH21-1, BH21-3, BH21-5 and BH21-6, sandy silt till was encountered.

Cohesionless Deposits (Sandy Silt, Silty Sand, Silt and Sand and Gravel):

Below cohesive deposits and sandy silt till, water bearing cohesionless deposits of sandy silt, silty sand, silt and sand and gravel were encountered. Cohesionless deposits were found wet below the depths ranging from 4.6 to 12.2 mgbs.

Clayey Silt Till/Shale Complex:

The clayey silt till/shale complex consists of clayey silt till mix with highly weathered shale and contains properties of hard till and shale bedrock. This deposit was encountered in Boreholes BH21-4 to BH21-6. Occasional cobble and boulders should be expected in the till deposit.

Shale Bedrock:

Shale bedrock belonging to Queenston Formation was found in all boreholes except BH21-2 at approximate depths varying from 13.8 to 22 m below the existing ground, corresponding to elevations varying from 188.4 to 192.2 masl.

3.3 Hydrogeology

The hydrogeology at the Site was evaluated using the on-site monitoring wells installed by DS, existing monitoring wells installed by other consultants, local domestic wells and existing environmental reports for the area.

3.3.1 Local Groundwater Use

As part of the hydrogeological study, DS completed a search of the Ministry of the Environment, Conservation and Parks (MECP) Water Well Record (WWR) database. Based on the MECP water well records search, there were seventy-four (74) water wells within a 500 m radius of the Site. all wells were noted as monitoring/test holes or not in use except for five (5) records for domestic, three (3) records for industrial and three (3) records for commercial purposes. **Figure 1** shows the MECP water well location plan. The study area is fully serviced with municipal water.

3.3.2 Groundwater Conditions

DS measured groundwater levels in all available installed monitoring wells on May 9, 2023. **Table 1** presents the groundwater levels in all monitoring wells. Based on groundwater level measurements, the groundwater table at the site was found at a range between 5.81 to 11.91 mbgs (Elev. 197.57-200.49 masl). The interpreted groundwater contour map for the water level measurements is shown in **Figure 4**. It should be noted that an environmental soil excavation was carried out on-site in 2023. The ground surface elevations from the May 9, 2023, groundwater level readings represent pre-remediation grades. Based on groundwater elevations, the

flow direction within the Site is inferred to be southwest toward the Sixteen Mile creek. The groundwater levels at the Site can be subject to seasonal fluctuations.

	Cround Flourtien	Wall Donth	Scrooned Interval	May 9, 2023		
Well ID	(mast)	(mbgs)	(mbgs)	Depth to	Groundwater	
	(masi)	(iiibgs)	(iiibgs)	Water (mbgs)	Elevation (masl)	
BH21-1	208.31	18.1	15.1-18.1	9.96	198.35	
BH21-2	207.64	12.1	9.1-12.1	7.15	200.49	
BH21-3	206.57	13.4	10.4-13.4	7.16	199.41	
BH21-5	205.47	12.3	9.3-12.3	5.81	199.66	
IW4	205.81	14.65	11.65-14.65	8.19	197.62	
SW13	206.04	10.1	7.1-10.1	8.02	198.02	
BH23-4	206.65	18.4	13.6-18.4	8.65	198.00	
BH23-6	207.98	15.1	12.1-15.1	9.48	198.50	
BH23-9	206.21	16.8	12.2-16.8	8.55	197.66	
BH23-10	206.21	10.2	7.2-10.2	8.43	197.78	
BH23-11	206.41	15.3	9.1-15.3	8.26	198.15	
BH23-13	206.25	9.0	6.0-9.0	8.43	197.82	
BH23-15	206.23	10.9	7.9-10.9	8.01	198.22	
BH23-16	206.63	10.1	7.1-10.1	8.94	197.69	
BH23-19	209.52	13.7	10.7-13.7	11.91	197.61	
BH23-20	204.59	15.3	9.0-15.3	7.02	197.57	
BH23-24	206.36	18.7	15.7-18.7	7.17	199.19	
BH23-26	204.33	10.6	7.6-10.6	6.69	197.64	
PW1	206.20	15.2	12.2-15.2	8.32	197.88	

Table 1: Groundwater Levels in Monitoring Wells

3.3.3 Hydraulic Conductivity

A total of fifteen (15) Single Well Response Tests (SWRTs) were completed by DS in monitoring wells between May 5 and 7, 2021 to estimate hydraulic conductivity (k) for the representative geological units in which the wells were completed. SWRTs were completed by performing a rising head test (slug test) with the use of Waterra[®] tubing to 'instantaneously' remove water from the well. A data logger was placed at the bottom of the wells to monitor recovery. Hydraulic conductivity (k) values were calculated using the Hvorslev method. **Table 2** presents a summary of the hydraulic conductivity (k) results for the representative geological units. The values of calculated hydraulic conductivity (k) range from 9.56×10^{-7} to 1.12×10^{-4} m/s. The hydraulic testing results are provided in **Appendix B**.

Well ID	Screen Interval	Screened Formation	K- Value(m/s)	Geomean (m/s)
BH21-1	15.1-18.1	Sand and gravel/Shale bedrock	2.05 x 10 ⁻⁷	
BH21-2	9.1-12.1	Clayey silt till	1.65 x 10 ⁻⁷	
BH21-3	10.4-13.4	Clayey silt/Sandy Silt	1.25 x 10⁻ ⁶	
BH21-5	9.3-12.3	Silty sand/Silt	1.10 x 10 ⁻⁵	
IW4	11.65-14.65	Silty sand	4.81 x 10 ⁻⁴	
SW13	7.1-10.1	Clayey silt/Silty sand	3.22 x 10 ⁻⁷	
BH23-4	13.6-18.4	Silty sand/Silt	5.28 x 10 ⁻⁶	
BH23-6	12.1-15.1	Sandy silt/Sand and gravel	6.02 x 10 ⁻⁶	
BH23-9	12.2-16.8	Sand and gravel/Silty sand	4.02 x 10 ⁻⁴	€ 27 × 10 ⁻⁶ `
BH23-10	7.2-10.2	Sandy silt/Silt	3.28 x 10⁻ ⁶	6.27 × 10 °
BH23-11	9.1-15.3	Silt/Sandy silt/Clayey silt/Gravelly sand 2.59 x 10 ⁻⁴		
BH23-13	6.0-9.0	Sandy silt/Silty sand	1.05 x 10⁻ ⁶	
BH23-15	7.9-10.9	Clayey silt/Silt	7.98 x 10 ⁻⁷	
BH23-16	7.1-10.1	Sandy silt/Silt	3.42 x 10 ⁻⁷	
BH23-19	10.7-13.7	Silty sand	4.28 x 10 ⁻⁴	
BH23-20	9.0-15.3	Silt/Clayey silt/Gravelly sand	2.92 x 10⁻⁵	
BH23-24	15.7-18.7	Shale bedrock	7.55 x 10⁻ ⁶]
BH23-26	7.6-10.6	Sand and Gravel/Silty sand	1.05 x 10 ⁻⁵	

able 2: Summa	y of Hydraulic	Conductivity	(k) Test Results
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3.3.4 Groundwater Quality

Two (2) unfiltered groundwater samples were collected from monitoring well BH23-20 on May 11 and PW1 on May 18, 2023. The groundwater samples were submitted to Bureau Veritas (BV) Laboratory in Mississauga, Ontario for analysis. BV Laboratory is certified by the Canadian Association of Laboratory Accreditation Inc. (CALA) and the Canadian Standard Association (CSA). The samples were analyzed and compared against the parameters listed under the Halton Region Storm and Sanitary Sewer Use By-law and Provincial Water Quality Objective (PWQO) for surface water. The reported analytical results indicated that no parameters were in exceedance of the Halton Region's Storm and Sanitary Sewer Discharge By-Law criteria. Comparing the results against PWQO Criteria, Iron was in exceedance of the PWQO criteria. Therefore, groundwater at the Site is not suitable for a discharge without pre-treatment into the nearby surface water systems. Groundwater can be discharged into Halton Storm and Sanitary Sewer without any treatment. The exceedances are summarized in **Table 3**, and the certificate of analysis is provided in **Appendix C**.

Table 3: Parameters in Groundwater Exceeding the PWQO

Parameter	Unit	PWQO Criteria	BH23-20 Concentration	PW1 Concentration
Iron	mg/L	0.3	1.2	2.7

4.0 DRILLING and INSTALLATION of PW1

In May 2023, the hydrogeological test drilling was carried out by a licensed water well contractor utilizing the mud rotary drilling method. As the test hole was being advanced, samples of soil were collected and logged. A representative from DS was onsite for all drilling activity. The location of the pumping and monitoring wells are shown on the attached **Figure 3**. The subsurface conditions have been interpreted and displayed as cross-sections' A-A', B-B' and C-C' as shown in the attached **Figure 5A to 5C**, respectively.

4.1 Construction Details of Pumping Well PW1

Test hole PW1 was advanced on May 8, 2023, to a total depth of 18.2 mbgs (60 ft.). **Appendix C** shows the Driller's description of the test hole and the well construction features of PW1. The overburden material consisted of mainly of a sandy clay unit overlying a permeable sand and gravel layer above the shale/bedrock. The Drillers' log and field observations were used in the design for a 150 mm (6 inch) diameter well. The well screen assembly consisted of 20 slot stainless steel well screen installed from 12.2 to 15.2 mbgs (40 to 50 ft.). The static water level measured on May 13, 2023, was 8.3 mbgs at an approximate elevation of 197.9 masl. **Appendix C** features the test hole log and well design of the Pumping Well (**Fig. C-1**) and grain size curves (**Fig. C2-C6**).

5.0 PUMPING TEST RESULTS

In May 2023, an aquifer test was conducted on the pumping well (PW1) to provide indications of the quantity of water available from each single well and to calculate the aquifer hydraulic coefficients (Transmissivity and Storativity). During the drawdown pumping test, a single data logger was installed in the pumping well (PW1), and two (2) observation wells (BH23-9, and BH23-15). Water level measurements were also taken by manual means and recorded in a field book.

5.1 PW1 – Step Test (Mogg Type)

A 2 step, Mogg Type step-drawdown test was conducted on PW1 at controlled flow rates of 90, and 237 L/min (20, and 52 imperial gpm). The semi-logarithmic plot of drawdown vs. time for the test is shown on **Figure D-1**, in **Appendix D**. The attached **Figure D-2** is an arithmetic plot of drawdown versus pumping rate for the same data set. The specific capacity at each step was also calculated and shown in **Figure D-2** in **Appendix D**. This figure shows the separation from the "theoretical line of zero well and formation loss" at the pumping rates tested. The formation loss is minimal at the tested pumping rates indicating the well is efficient in production of groundwater.

5.2 PW1 – Drawdown and Recovery Test

An aquifer test was performed on PW1 at a rate of 237 L/min (52 igpm). A data logger was programmed and installed in PW1 to record the water level inside the pumped well on a 60 second interval. The flow rate was controlled using a standard ball valve and measured using a digital flow meter. At the conclusion of the 3.5-hour drawdown time, the pump was shut-down, and a 16-hour recovery period was recorded in the pumping well and observation wells.

The attached **Figure D-3** is a semi-logarithmic plot of the drawdown vs. time response to pumping inside the well, PW1. **Figure D-4 to D-5** shows the response in the monitoring wells BH23-9, and BH23-15, respectively, during the pumping at PW1. At BH23-9, and BH23-15 the drawdown due to the interference/pumping of PW1 at 3.5 hours was measured to be 0.37 and 0.23, respectively. The drawdown response observed at the observation wells after 3.5 hours of drawdown is also displayed graphically in **Figure D-6** as a function of radial distance from the center of the pumped well.

5.3 Pumping Test Interpretation

The aquifer pumping test was designed to determine the performance characteristics of the pumping well, PW1. The specific aquifer parameters of interest are Transmissivity (T) and Storativity (S). Using the Jacob-Cooper straight line method, the test data was analyzed in order to produce the target parameters.

From the data gathered and analyzed at PW1, we calculated a Transmissivity value of **890** m^2/day (**59,700 igpd/ft.**). The Storativity was calculated to be 2.5 X 10⁻⁴ (dimensionless) based on the pumping test data.

6.0 CONCEPTUAL CONSTRUCTION GROUNDWATER CONTROL

6.1 Conceptual Groundwater Control Requirements

Preliminary details for the proposed development were provided during discussions with the Owner's Team. All subgrade elevations were estimated from the conceptual architectural drawings and are not to be assumed as final. If the design details change, the groundwater control model will need to be recalculated to ensure they represent the final design. It is interpreted from architectural drawings that the Finished Floor Elevation (FFE) is to fall at about 207.4 masl.

For the purposes of evaluating a dewatering plan, a groundwater model was developed using first principles. The purpose of the model is to produce an optimal layout and to help predict the dewatering rates that will be necessary in order to achieve the target water levels.

According to the most recent discussion with the building design team, it is understood that plans for the condominium tower(s) could feature up to four (4) underground levels of parking. In our calculations, we have assumed a typical development block is 180 m by 100 m (18,000 m²). A summary of the estimated target depths for the P2 to P4 underground are presented in **Table 4**.

Proposed Underground Design	FFE Elev. (masl)	Est. SOG Elev. (masl)	Est. Deepest Elevator Pit Elev. (masl)	Target Dewatering Elev. (masl)
P2 Level		199.9	197.4	196.4
P3 Level	207.4	196.9	194.4	193.4
P4 Level		193.9	191.4	190.4

Table 4: Summary of Groundwater Control Target Elevations

6.2 Conceptual Groundwater Control Model

The aquifer performance data from the testing program, was analyzed to produce a conceptual geological and hydrogeological model. The groundwater control model was constructed using the aquifer coefficients (Transmissivity and Storativity) calculated through field data. The dewatering target elevation for this model was selected based on the geology that was encountered during our drilling program. During construction, dewatering will be required to control groundwater from the sand aquifer.

Based on the step test and aquifer pumping test data obtained, the permeability was identified in the confined sand aquifer. The calculated Transmissivity, **890** $m^2 day^{-1}$ (**59,700** igpd/ft) and the calculated Storativity, 2.5 x 10⁻⁴ (dimensionless), were used in an iterative process which allowed the number of theoretical wells, the spacing of the wells and the quantities of water pumped to be altered and modified. The results of each outcome were analyzed after each trial until the optimum configuration was determined. Figure E-1 (Attached in Appendix E) is a Site Sketch that shows the proposed layout of the thirteen (13) theoretical pumping wells (identified in blue) and two (2) theoretical observation wells (identified in green).

After numerous trial runs, the final runs (for P2 to P4 designs) were created using the Transmissivity value of 890 m² day⁻¹ (59,700 igpd/ft). Based on the water levels measured in May 2023, it was determined through the iterative process that a conceptual groundwater control system featuring 13 theoretical wells would determine the pumping volumes required for the various underground designs. **Figure E-2 to E-4** (Attached in Appendix E) shows the predicted response to the groundwater level in a 13 theoretical well system for the P2 to P4 level scenario, respectively.

6.3 Total Conceptual Construction Dewatering Requirements

The total volumetric pumping rate to control groundwater from the aquifer during construction will also include the management of storm water collected within the open excavation. Based on the estimated area of the open excavation, after a significant storm event (10 mm) the estimated daily discharge volume for storm water is **90,000 L/day** (pumped over a 48-hour period). The following **Table 5** presents the total conceptual construction dewatering volumes for the P2 to P4 level designs.

Proposed Underground Design	Storm water (liters/day)	Groundwater Discharge Rate(L/min)	Groundwater Discharge Volume (L/Day) with 20% safety factor	Total Construction Dewatering Volume (L/day)
P2 Level		1,300	2,250,000	2,340,000
P3 Level	90,000	3,660	6,320,000	6,410,000
P4 Level		6,020	10,410,000	10,500,000

Table 5: Summary of Construction Dewatering Volumes

The estimated water discharge volume is above 400,000 L/day, therefore a Permit To Take Water (PTTW) will be required for construction dewatering.

6.4 Temporary Conceptual Groundwater Control Model

During construction and excavation, groundwater in the sand aquifer will have to be controlled. The conceptual groundwater modelling results applied 13 theoretical pumping wells to control groundwater within the water bearing zone. The dewatering contractor should confer on the most suitable method for groundwater control (for example staged well points, eductor system or deep wells).

6.5 Zone of Influence

The radius of influence (Ro) for the construction dewatering was calculated based on the Sichardt equation. Ro is the distance at which the drawdown resulting from pumping is negligible. The equation is empirical and was developed to provide representative flow rates using the steady-state flow dewatering equations as indicated above. Under steady-state conditions, Ro of pumping will extend until boundary flow conditions are reached, and sufficient water inputs are equal to the discharge rate due to pumping. Therefore, the Sichardt equation is used to provide a representative flow rate but is not precise in determining the actual radius of influence by pumping. Based on Sichardt equation and the hydraulic conductivity (derived from the transmissivity obtained from the pumping test at PW1) the zone of influence for the proposed development at the site (from the centre of excavation) is approximately 187 m (P2 Level Design) and 936 m (P4 Level Design).

7.0 CONCEPTUAL PERMANENT GROUNDWATER CONTROL

The current building design options range from two to four underground parking levels (P2 to P4 Levels). Current groundwater level measurements completed in May 2023 indicate that permanent groundwater drainage system for the P2 level design will be above the groundwater level. Deeper footings and sumps for P3 and P4 level would extend the permanent groundwater drainage system below the static groundwater level.

DS recommends bath tubbing (water-tight underground) design for any building extending to P3 or deeper to mitigate groundwater-related challenges for permanent discharge. Based on the results of the pumping test, a significant aquifer is present on the western portion of the site. If bath tubbing is not a viable option, alternative strategies should be explored to minimize groundwater impact. This includes designing the structure to remain above the water table where feasible, implementing robust waterproofing systems, and considering dewatering techniques to manage groundwater levels during long-term operation.

Should the building be designed with a permanent drainage system, seasonal groundwater fluctuations in will convey groundwater into the subfloor and perimeter drainage system.

7.1 Permanent Groundwater Control Discharge Volumes

Groundwater from the permeable overburden at the Site will have to be controlled post construction for the P3 and P4 level design if the foundations are not bath tubbed. While only minor storm water seepage from the perimeter weepers will be encountered for the P2 level design.

The permanent discharge volume was estimated using data obtained during the aquifer test. A drainage rate to control the groundwater was estimated using similar conceptual layout of thirteen (13) theoretical drainage wells. Figure E-1 (Attached in Appendix E) shows the conceptual layout of the theoretical drainage

wells for modelling purposes. Again, the layout in **Figure E-1** was used for conceptual drainage estimates, during permanent discharge the groundwater will be collected via the building's perimeter and underdrainage system (not actual wells). The following Table 6 presents the total conceptual construction dewatering volumes for the P2 to P4 level designs.

Proposed Underground Design	Groundwater Discharge Rate(L/min)	Total Permanent Drainage Volume (L/Day) with 20% safety factor
P2 Level	Above Groundwater Table	20,000*
P3 Level	1,180	2,040,000
P4 Level	3,541	6,120,000

Table 6: Summary of Construction Dewatering Volumes

*P2 Level only intermittent storm water collected from the perimeter foundation drainage system

Figure F-1 and F-2 (Attached in Appendix F) shows the permanent groundwater model output and predicted response to the groundwater level based on the estimated drainage volume for the P3 and P4 Level design, respectively.

For permit application purposes a safety factor of 20% applied to the estimated discharge. This volume is above the threshold of 50,000 L/day and therefore a Permanent PTTW application will have to be submitted to the MECP for review and approval.

8.0 PERMIT REQUIREMENTS

8.1 Environmental Activity and Sector Registry (EASR) /Permit to Take Water (PTTW) Application

An Environmental Activity Sector Registration (EASR) is required to be submitted to the Ministry of the Environment, Conservation and Parks (MECP) if the taking of groundwater and stormwater for a temporary construction project is between 50,000 L/day and 400,000 L/ day. The EASR application is an online registry and should be submitted to the MECP before any construction dewatering. A PTTW is required to be submitted to the MECP if the taking of groundwater and stormwater for a temporary construction project is between 50,000 L/day.

During construction dewatering for all design scenarios (P2 to P4 levels), a PTTW from the MECP will be required as the groundwater discharge volumes exceed 400,000 L/day.

Post construction for the P3 and P4 level design scenario, a PTTW will be required from the MECP for groundwater taking from the permanent drainage system, if the foundations are not bath tubbed (as water taking volumes exceed 50,000 L/day). The estimated groundwater taking for the P2 level scenario is below 50,000 L/day, therefore no approvals are required from the MECP.

8.2 Discharge Permits (Construction Dewatering)

A discharge permit will be required from the Halton Region/Town of Milton if private water is to be sent to the sewer system. Unless the future development is designed as a water-tight structure, all groundwater (temporary or permanent) will be sent to the sewer system and therefore will require a discharge permit from the Halton Region/Town of Milton.

9.0 POTENTIAL IMPACTS

The following are the predicted potential impacts as a result of construction dewatering:

9.1 Local Groundwater Use

The area is fully serviced by municipal water supply. Since it is not expected to have any use of groundwater as a source of drinking water within a 500 meters radius from the Site, it is not anticipated that there will be short-term or long-term impacts on private water wells occurring from the proposed dewatering activities.

9.2 Current PTTW Search

The MECP PTTW Open Data Catalogue (last update May 28, 2022) was searched within a 1 km radius of the Site. The search indicated that there no active PTTW located approximately 1 km from the site.

9.3 Source Protection Area

The site is located within the Hamilton/Halton Source Protection Area (SPA). Source Protection Plans contain policies aimed at protecting drinking water sources by reducing or eliminating significant threats to the source of municipal drinking water. The study area is serviced by municipal water supply; therefore, no impacts are anticipated to drinking water supply within the zone of influence.

9.4 Highly Vulnerable Aquifer

The site and the study area are not located within a Highly Vulnerable Aquifer (HVA).

9.5 Wellhead Protection Area

The site and the study area are not located within a municipal Wellhead Protection Area (WHPA). No WHPA impacts are anticipated due to the proposed temporary dewatering.

9.6 Intake Protection Zone

The site and the study area are not located within an Intake Protection Zone (IPZ). No IPZ impacts are anticipated due to the proposed temporary dewatering.

9.7 Surface Water

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Sixteen Mile Creek falls within the zone of influence of the site considering P2-P4 conceptual plan. Therefore, surface water impacts are anticipated from construction dewatering activities. Depending on the

final design, additional surface water investigation might be needed to complete the satisfy MECP permitting requirements.

9.8 Point of Discharge and Groundwater Quality

Groundwater quality analysis indicated that no parameters were in exceedance of the Halton Region's Storm and Sanitary Sewer Discharge By-Law criteria. Comparing the results against PWQO Criteria, Iron was in exceedance of the PWQO criteria. Therefore, groundwater at the Site is suitable for discharge into the Region's storm and sanitary sewers subject to the Region's consultation but not suitable for direct discharge without treatment into nearby watercourse (Sixteen Mile Creek). Treatment is needed to comply with the water quality limits set in for PWQO before any discharge. Treatment options include but are not limited to settlement and filtration of sediments. Discharge permits and agreements are required from the Halton Region/Town of Milton for short-term and long-term discharge.

9.9 Well Decommissioning

Following the completion of construction activities, all dewatering wells, well points, eductors and monitoring wells installed at various stages of this project must be decommissioned. The installation and eventual decommissioning of the wells and the dewatering system must be carried out by a licenced water well contractor in accordance with Regulation 903 of the Ontario Water Resources Act.

10.0 MONITORING AND MITIGATION

Based on the preliminary hydrogeological investigation, the following monitoring and mitigation program is recommended:

- Baseline groundwater quality has been assessed and established prior to construction. However, groundwater quality can change based on several factors (land-use change, spills, etc.) and should be monitored during construction dewatering and after construction to ensure that water quality meets the guideline or regulations associated with any permits from the MECP and the Halton Region/Town of Milton.
- Based on dewatering assessment, a PTTW application is required. Additional monitoring may be required by the MECP to be implemented during the design stage.
- A discharge permit is required to be submitted to the Town for short-term dewatering if private water is sent to the any sewer and if any dewatering is proposed to go to the surface water system (nearby Sixteen Mile Creek).
- Due to the proximity of the Sixteen Mile Creek, surface water impacts are anticipated from construction dewatering activities. Depending on the final design, additional surface water investigation might ne needed to complete the satisfy MECP permitting requirements.
- Once a groundwater dewatering system is set up at the Site, a daily and weekly monitoring program should be implemented to assess the groundwater conditions such as water levels, measurement of discharge flow, discharge water quality and any adverse impacts as a result of dewatering.

11.0 LIMITATIONS

This report was prepared for the sole use of the addressee to provide an assessment of the hydrogeological conditions on the property. The information presented in this report is based on information collected during the completion of the hydrogeological investigation. DS Consultants Limited was required to use and rely upon various information sources produced by other parties. The information provides in this report reflects DS' judgment in light of the information available at the time of report preparation. This report may not be relied upon by any other person or entity without the written authorization of DS Consultants Ltd. The scope of services performed in the execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or reuse of this documents or findings, conclusions, and recommendations represented herein, is at the sole risk of said users. The conclusions drawn from the Hydrogeological report were based on information at selected observation and sampling locations. Different conditions between and beyond these locations may become apparent during future investigations or on-site work, which could not be detected or anticipated at the time of this investigation. DS Consultants Ltd. cannot be held responsible for hydrogeological conditions at the site that was not apparent from the available information.

Should you have any questions regarding these findings, please contact the undersigned.

DS Consultants Ltd.

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Reviewed By:

Month Cedien

Martin Gedeon, M.Sc., P.Geo. Vice President - Senior Hydrogeologist

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12.0 CONSULTANTS QUALIFICATIONS

Martin Gedeon, M.Sc., P.Geo., is a Professional Geoscientist (P.Geo.) with over 28 years of experience as an environmental/hydrogeological consultant in the areas of groundwater and soil monitoring, environmental Site assessments, environmental due diligence, and remediation. Martin has significant experience in physical and contaminant hydrogeology across Canada and overseas and has provided hydrogeological/environmental technical support on various projects. Martin has prepared hundreds of hydrogeological reports in support of permit applications for a private sector development application, municipal dewatering operations and provincial infrastructure projects across the province.

Don Hsu, P.Eng., Don has over 18 years of experience in environmental sciences with a special focus on hydrogeology. He has extensive experience in hydrogeological investigation and construction groundwater control projects. He has a strong technical background in all aspects of groundwater control and management including groundwater modelling and groundwater monitoring. He has managed a number of large-scale construction dewatering projects including several projects in the Greater Toronto Area

Meysam Jafari, M.Sc., P.Geo., is a Professional Geoscientist (P.Geo.) with DS Consultants Ltd. Meysam holds two master degrees in Engineering Geology and Geology (Soil & Groundwater) and has several years of experience working in the geoscience industry. Meysam has experience with conducting Phase One and Phase Two Environmental Site Assessments, hydrogeological and geotechnical investigations in the Greater Toronto Area (GTA), and has been involved with project coordination, field assessments, data interpretation and reporting.

13.0 REFERENCES

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Figures

C:\0Sharon\21-122-100 Enviro Geo Investigations 150 Steeles Ave E\1-QGIS\HydroG\Figure 1 - Site Location and MECP Well Records.qgs May-20 16:03



C:\0Sharon\21-122-100 Enviro Geo Investigations 150 Steeles Ave E\1-QGIS\HydroG\Figure 2 - Surficial Geology Map.qgs May-20 16:27





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Appendices

Appendix A: Borehole Logs

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	reduisii brown, wei, very dense					1		Ē							1						
188.7	─inferred boulder at 19.5m	<u> ···</u>				{		F							1						
2ª188.1	SHALE BEDROCK: Queenston		R1	RC			100	Ē													
20.2	Formation, reddish brown,						100	Ĩ													
1	TCR=83%, SCR=62%, RQD=25%		R2	RC				ŧ													
186.6	Hard layers=8%, Maximum hard							F							1						
22 21.7	VCR=98%, SCR=86%. RQD=75%						100	ŧ													
	Hard layers=13%, Maximum hard		R3	RC				F													
185.1	ayer thickness=50mm							t													
23.2	Hard layers=12%, Maximum hard								T												
	layer thickness=50mm														1						
	Notes:														1						
	Continued Next Page		L			L	I					l	<u> </u>		1		1	1	<u> </u>	I	L

 $\frac{\text{GROUNDWATER ELEVATIONS}}{\text{Measurement}} \stackrel{1\text{st}}{\underline{\checkmark}} \stackrel{2\text{nd}}{\underline{\checkmark}} \stackrel{3\text{rd}}{\underline{\checkmark}} \stackrel{4\text{th}}{\underline{\checkmark}}$



 $+3, \times 3$: to Sensitivity NOTES

⁶ Strain at Failure 0


PROJECT: Geotechnical Investigation

CLIENT: Neatt Communities

PROJECT LOCATION: 150 Steeles Ave. East, Milton, ON

DATUM: Geodetic

BH LOCATION: See Drawing 1 N 4818975.16 E 589155.56

DRILLING DATA

Method: Hollow Stem Auger/Mud Rotary

Diameter: 200 mm Date: Apr-26-2023 REF. NO.: 21-122-106 ENCL NO.: 2

DYNAMIC CONE PENETRATION RESISTANCE PLOT SOIL PROFILE SAMPLES PLASTIC NATURAL MOISTURE CONTENT REMARKS GROUND WATER CONDITIONS LIQUID LIMIT POCKET PEN. (Cu) (kPa) NATURAL UNIT W (kN/m³) AND 40 20 60 80 100 (m) STRATA PLOT GRAIN SIZE BLOWS 0.3 m w WL SHEAR STRENGTH (kPa) O UNCONFINED + FIELD VANE & Sensitivity WP ELEVATION ELEV DEPTH DISTRIBUTION -0--1 NUMBER н DESCRIPTION (%) WATER CONTENT (%) TYPE QUICK TRIAXIAL × LAB VANE z 20 40 60 80 100 10 20 30 GR SA SI CL 1) Water at depth of 10.7m during drilling.

\checkmark	Geotechnical 👽 Environmental 🗢 Materials 🔷 Hyd	urogeo	ogy		LU	GUF	DUR	EHC		оп2.	5- 2								1 UF 1
PROJ	ECT: Geotechnical Investigation							DRILL	LING [DATA									
CLIEN	T: Neatt Communities							Metho	od: Ho	llow St	em Au	uger/Mud F	lotary						
PROJ	ECT LOCATION: 150 Steeles Ave. Eas	st, Mi	lton, (NC				Diam	eter: 2	:00 mm	ı				RE	EF. NC).: 2 ⁻	1-122	2-106
DATU	M: Geodetic							Date:	Mar-2	29-202	3				EN	ICL N	0.: 3		
BH LC	CATION: See Drawing 1 N 4819000.7	74 E \$	58919	99.81							NETD		_						
	SOIL PROFILE		s	SAMPL	.ES	2		RESIS	TANCE	E PLOT		ATION	PLAST	IC NAT	URAL	LIQUID		ź	REMARKS
(m)		10			(0)	'ATE S	_	2	0 4	40 6	8 0	100		CON	ITENT	LIMIT	PEN.	UNIT (AND GRAIN SIZE
ELEV	DESCRIPTION	A PL	Ř		3 m		NOIT	SHEA			TH (kF	Pa) FIELD VANE	W _P		~	W _L	CKET CU) (kf	(kN/m	DISTRIBUTION
JEPIH	2200.000	RAT,	MBE	Ц			EVA ⁻	0 UI	UICK T	-INED RIAXIAI	L X	& Sensitivity LAB VANE	WA	TER CO	ONTEN	T (%)	8 S	NATL	(%)
207.2		ST	Z	∠	Ż	В С В С	EL	2	0 4	10 6	8 0	0 100		10 2	20 3	30			GR SA SI CL
0.0	FILL: silty clay, trace rootlets, trace gravel, trace sand, brown, moist,	\otimes	1	SS	6			Ē							0				
	firm	\otimes	2	SS	7		206	-							0				
		\bigotimes	╞	66	6		200	E											
² 205.0		K	> 	- 33	0			Ē								1			
2.2	TILL: some sand to sandy, trace		4	SS	33			Ē						0					
	gravel, occasional cobble, brown, moist, verv stiff to hard		5	SS	36		204	-						0					
			\vdash					Ē											
		[]						Ē											
	grey below 4.5m	H	6	SS	16		202	-						0					
			1				202	Ē											
6		Ĥ	-		00			Ē.											
		ľ.		55	30			Ē						o					
199.7							200	-											
7.5	SANDY SILT TILL: trace clay,		8	SS	43			Ē						o					Switched to
	trace gravel, brown, moist, dense		1					Ē											mud rotary
198.2	SIL T: trace to come eleve trace						100	-											
9.0	sand, trace gravel, brown, moist to		9	SS	78		198	-						0					
2	wet, dense to very dense							Ē											
	grev to brown at 10.6m							Ē											
	sandy silt layer at 10.9m		10	SS	64		196	<u> </u>						0			-		
								Ē											
	reddish brown, wet at 12.0m		11	SS	30			F							0				0 1 95 4
			<u> </u>				404	Ē							Ē				0 1 00 1
193.6							194	-									1		
13.6	SANDY SILT TILL: trace clay, some gravel, reddish brown, moist	.• .	12	SS	52			Ē						þ					
	to very moist, very dense	+i+i						Ē											
192.0	CRAVELLY SAND: trace clay	<u>i</u>		22	4 50/		192	<u>-</u>						0			-		34 50 13 3
6	some silt, reddish brown, wet, very	0.0	<u>,</u> /		150			F											
-	dense				\ <u>mm</u>			F											
	no recovery at 16.8 m	0. F	14/	SS /	50/			Ē											
					25		190	Ē											
188.9		ė.0						Ē									1		
188.8	SHALE BEDROCK: Queenston	1	15	SS	50/												\vdash	+	
18.4	weathered				25 mm														
	END OF BOREHOLE:				<u> </u>														
	1) Water at the depth of 9.0m																		
	auring arilling.																1		
																	1		
																	1		
																	1		
				L	1			L		L					1	1	1	L	L

B	Geotechnical & Environmental & Materials & Hyd	rogeol	D.		LO	g of	BOR	EHC	DLE I	BH2	3-3									1 OF	1
PROJ CLIEN PROJ DATU	ECT: Geotechnical Investigation T: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas M: Geodetic	t, Mill	ton, (ON -				DRILL Metho Diame Date:	LING E od: Hol eter: 2 Apr-1	0ATA low St 00 mn 3-202	em Au າ 3	uger/M	ud Ro	tary		RE	EF. NC	0.: 2′ 0.: 4	1-122	-106	
BH LC	CATION: See Drawing 1 N 4819114.9	8 E 5	8927	1.5	50			DYNA		NE PE	NETRA	ATION						1			_
(m) <u>ELEV</u> DEPTH 207.3	DESCRIPTION	STRATA PLOT	NUMBER	3MPL 3d/L	"N" <u>BLOWS</u> 0.3 m	GROUND WATER CONDITIONS	ELEVATION	RESIS 2 SHEA 0 UN • QI 2	TANCE	PLOT 0 6 RENG INED RIAXIA 0 6		Pa) FIELD V & Sensiti LAB V 30 10	ANE vity ANE 00	PLASTI LIMIT W _P I WAT		URAL TURE TENT N DONTEN	LIQUID LIMIT WL T (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m ³)	REMARKS AND GRAIN SIZ DISTRIBUTIO (%) GR SA SI	S E ON CL
0.0	FILL: silty clay to clayey silt, trace rootlets, trace gravel, trace sand, brown, moist, stiff	\bigotimes	1	SS SS	12 12		206	-								0					
1.5 2 203.9	CLAYEY SILT TO SILTY CLAY TILL: sandy, trace to some gravel, occasional cobble, brown, moist, very stiff to hard		3	SS SS	26 27		204	-							0						
3.4 4 202.4	SILTY SAND: trace clay, trace gravel, brown, moist, dense		6	SS	34			-							0						
4.9	trace clay, brown, wet, compact to dense		7	SS	25		202	-								0				1 77 17	5
200.3 7.0 	SILT: trace clay, trace sand, grey, wet, loose		8	SS	9		200	-								0		-			
<u>198.3</u> 9.0	SANDY SILT TILL: trace clay, some gravel, grey, wet, compact	· • · · · · · · · · · · · · · · · · · ·	9	SS	19		198								0						
190.0 10.7 12195.2	SILT: trace sand, trace clay, grey to brown, wet, very dense		10	SS	62		196	-							0						
12.1	SANDY SILT TILL: trace clay, trace to some gravel, reddish brown, moist, very dense		_11_	SS	50/ \30mn	h	194	-							•						
¹⁴ 192.0	trace shale fragments at 13.7m		12	SS	50/ (00mŋ	n	102								o						
199.9	SHALE BEDROCK: Queension Formation, reddish brown, weathered END OF BOREHOLE: Notes: 1) Water encountered at 5.5m during drilling.		9	<u></u>	50mm																

	Geotechnical & Environmental & Materials & Hyd	rogeo	D. logy		LO	g of	= во	RE	HOL	.E E	3H23	-4										1 OF 1
PROJI CLIEN PROJI DATU	ECT: Geotechnical Investigation T: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas M: Geodetic	t, Mi	ton, i	ON					DRILLIN Nethod: Diamete Date: A	NG D Holl er: 20	ATA ow Ste 00 mm 2-2023	em Au	ıger/N	lud Ro	tary		RI	EF. NO	D.: 2 [.] O.: 5	1-122	2-106	
BH LC	CATION: See Drawing 1 N 4818905.7	7 E \$	58923	38.19		-	_		YNAMI	<u>c co</u>		JETRA							-			
(m)	SOIL PROFILE	Ц	5	SAMPL	ES	ATER		Ř	ESISTA 20	ANCE	PLOT 0 60	\geq	0 1	00	PLASTI LIMIT	C NAT MOIS CON	URAL TURE TENT	LIQUID LIMIT	a) () NIT WT	REI	MARKS AND
ELEV DEPTH	DESCRIPTION	STRATA PLO	JUMBER	ЧРЕ	N" BLOWS 0.3 m	SCOUND W	ELEVATION	S U		STR ONFI CK TR		H (kF	Pa) FIELD V & Sensiti LAB V	ANE ivity ANE 00				w _∟ —I T (%) 30	POCKET (Cu) (kP	NATURAL U (kN/m ³	DIST	AIN SIZE RIBUTION (%)
206.7 20 9 .9 20 9 .4	FILL: silty sand, some gravel, some clay, cobbles, black staining, /	×	1	SS	± 12		20	06							0		0				GR 3	A 51 CI
0.9	some organics, black, moist, compact		2	SS	19 27			-								0						
2	sand, brown, moist, stiff CLAYEY SILT TO SILTY CLAY TILL: sandy, trace gravel,		4	SS	45		20	04								, ,						
	occasional cobble, brown, moist, very stiff to hard		5	SS	33			-							0							
4 202.2 4.5	SILT: trace clay, brown, wet,			22	21		20	02														
200.7	compact			33	21																	
6.0	CLAYEY SILT TILL: sandy, trace gravel, brown, moist, hard		7	SS	38		20									0						
199.2 7.5	SILT: trace sand, trace clay,	iø,	8	SS	69			-								0						
	brown, wel, compact to very dense					⊻	10 W. I	L. 19	98.0 m													
<u>10</u>			9	SS	44		May	, 09, E	2023								0					
			10	SS	27		19	96									0					
<u>12</u> 194.6								-														
12.1	SILTY SAND: trace clay, some gravel, brown, wet, dense		11	SS	34		- 19	94								с						
<u>193.1</u> ₁₄ 13.6	SANDY SILT TILL: trace clay,	·	12	SS	39			-								o						
191.6	reddish brown, moist to wet, dense	· · · ·•					·.: 19	92														
10.1	reddish brown, wet, very dense		13	SS	75			-									o				09	9 88 3
190.1 16.6	SANDY SILT TILL: trace clay, occasional cobbles, reddish brown,		. 14	SS	50/		19	90-								0						
¹⁸ 188.5	SHALE BEDBOCK: Ouespeter	; ;0						-														
189.4	Formation, reddish brown, weathered END OF BOREHOLE: Notes: 1) 50mm. dia. monitoring well installed upon completion. 2) Water Level Readings: Date: Water Level(mbgl): May 9, 2023 8.65		15	55	7 <u>50</u> 7 76mm																	

 $\begin{array}{c} \underline{\text{GROUNDWATER ELEVATIONS}} \\ \text{Measurement} \quad \stackrel{\text{1st}}{\underline{\nabla}} \quad \stackrel{\text{2nd}}{\underline{\Psi}} \quad \stackrel{\text{3rd}}{\underline{\Psi}} \quad \stackrel{\text{4th}}{\underline{\Psi}} \end{array}$

B	DS CONSULTANTS		D.				BOR	ЕНС) E	BH3.	3_5									1 OF 1
		Togeo	10 BY			501	BOR				5-5									I UF I
PROJ	ECT: Geotechnical Investigation							DRIL	LING											
			4					Meth	od: Ho	llow Si	tem Ai	uger/IV	lud Ro	tary					4 4 0 0	100
PROJ	ECT LOCATION: 150 Steeles Ave. Eas	t, ivili	iton, i	JN				Diam	eter: 2	00 mn	n					RE	=F. NC).: 2'	1-122	2-106
DATU			-000	1 00				Date:	Mar-	29-202	23					E٢	ICL N	0.:6		
BHLC		TE:	58920		F 0			DYNA	MIC CO	ONE PE	ENETR/	ATION		1				1		
	SOIL PROFILE				E3	Ë		RESIS	STANC	E PLOT	\geq	-		PLAST	IC NAT	URAL STURE		2	TW -	REMARKS
(m)		LoT			SI C	NS	z					B0 1	00	WP	CON	NTENT W	WL	ET PEI (kPa)	- UNI	GRAIN SIZE
ELEV DEPTH	DESCRIPTION	TAΡ	КЩ		LOW		ATIO	O U	AR ST NCONF	RENG INED	тн (кі +	Pa) FIELD V & Sensiti	ANE	-		o		(Cu)	(kN/	
		TRA.	UMB	ΥPE		ROU OND	LEV	• Q	UICK T	RIAXIA	L X	LAB V	ANE	WA	TER C		T (%)	Ē	LAN	(70)
207.1	FILL silty sand mixed with asphalt	io XX	z	í-	£	00	Ξ	-	20 2	ю е	50 8	80 1	00	1		20 3	30			GR SA SI CL
208.9	trace gravel, black, moist, compact	\bigotimes		SS	16	-		-						°	0					
0.9	FILL: silty clay, trace sand, trace	ĬġĬ	2	SS	24	1	206								-			-		
	CLAYEY SILT TO SILTY CLAY		3	SS	24			F												
2	TILL: sandy, trace gravel, brown, moist very stiff to hard		Ľ		2.			-							-					
			4	SS	30			-							0					
		15	5	SS	44	1	204	-							0					Switched to
4								-												Mud Rotary
202.6			1					-												
4.5	gravel, brown, moist, dense		6	SS	46		202	-								0				
		ŀ					202	-												
⁶ 200.8	clayov silt soom at 6.1m		i			-		-												
6.3	SILT: trace to some clay, trace		7	SS	75			-							0					
	sand, brown to grey, wet, dense to						200											-		
	brown below 7.6m			66	52	-		-												
8			P -	- 33	52	-		-												
								-												
			9	SS	65	1	198	-								0				
10			-			1		F												
								-												
			10	SS	42	1	106	-								0				
						1	190	-												
12								-												
			11	SS	36			-								\$				
]	194	-										-		
						-		Ē												
14			12	SS	81			-								0				
102.0								-												
15.1	GRAVELLY SAND: trace clay,	٩.U	12	22	63	-	192					+								
16	reddish brown, wet, very dense	•.[) -	<u>, 13</u>	- 55	03	-		-												
190.4								-												
190.3	SHALE BEDROCK: Queenston /		14	SS /	50/			-										\vdash		
16.8	rormation, reddish brown,		[\30mr	ĥ														
	END OF BOREHOLE:		1																	
	1) Water at depth of 6.3m during																			
	drilling.																			
			1																	
			1																	
			1																	
			1																	
			1																	
			1																	
			1																	
		1	1	L	I					1	<u> </u>	1	<u> </u>	I		1	1			

יי הם	CT: Contechnical Investigation							ייסס		1ATA										
	C T: Geotechnical Investigation							Meth	od: Ho	JATA	-m Aur	ner/Mu	d Rot:	arv						
RO.IF	CT LOCATION: 150 Steeles Ave. Fas	st Mi	lton (ON				Diam	eter 2	00 mm		Jei/Max		u y		RF	F NC) · 21	1-122	2-106
ATUN	A Geodetic	, 111	itori, t					Date	Apr-()3-2023	3					FN		0 · 7	1-122	-100
H LO	CATION: See Drawing 1 N 4819056.3	32 E 5	58931	15.49														•		
-	SOIL PROFILE		s	SAMPL	ES			DYNA			NETRAT	ΓION			NAT	IDAI				DEMAD
,						Ë			20 4	- 1 LOT	2 80	100		PLASTIC LIMIT	MOIS	JRAL TURE TENT	LIQUID LIMIT	Z	IT WT	AND
n)		LO.			SN	AW		SHE	AR ST	RENGT	TH (kPa	a)		WP	W	v	WL	KET P (kPa	AL UN N/m ³)	
PTH	DESCRIPTION	ATA	IBER	ш	<u>BLO</u> 0.3		L L A	0 0			+ F &	Sensitivity	E /	WAT	ER CO		T (%)	DOC Cu	ATUR (k	(%)
10.81		STR	NUN	TΥΡΙ	ż	GRO	ELE		20 4	RIAXIAL 10 60	. × L) 80	AB VAN 100	NE	10) 2	0 3	BO		z	GR SA S
0.0	FILL: silty clay, trace sand, trace	\boxtimes	1	SS	9			-							0					-
	gravel, brown, moist, firm to stiff	\otimes			-			Ē								_				
		\otimes		55	5			Ē								0				
57		\otimes	3	SS	4		20	6							¢	>				
2.3	CLAYEY SILT TO SILTY CLAY TILL: sandy, trace gravel, brown,		4	SS	28										ο					
	moist, very stiff to hard		5	SS	39			Ē						c	o l					
							20	14 												
			6	SS	49			-							0					
2.0								, F												
6.0	SILT: some clay, trace sand, brown, wet, compact		7	SS	29		20	-								0				
								-												
			8	SS	28		20	10								0				
9.0								Ē												
9.0	SILTY SAND: some gravel to		9	SS	27	Ω		F							0					
	compact to very dense						W.L May	198.5 09, 202	m 3											
								È												
			10	SS	66			-							0					
								Ē												
2.1	SANDY SILT TILL: some clay,	6	11	SS	50/	╏╞	19	16 E							0					8 33 49
	trace gravel, reddish brown, moist, verv dense		·		100	lΞ		Ē												
4.3	,					同		-												
3.0	GRAVELLY SAND: trace clay,	a. 0.	12	SS	50/ 50mm] :目	19	4												
4.1	CLAYEY SILT TILL/SHALE				ווווטק	1:目		Ē												
2.6	COMPLEX: sandy, trace gravel, trace shale fragments reddish		12	66	50/	LΕ	···	Ē												
5.4	brown, moist, hard		<u> '</u>	<u> </u>	50/ 50mm			J.												
1.5	SHALE BEDROCK: Queenston Formation, reddish brown,						19	iz F										1		
6.5	Weathered		R1	RC				Ē												
7.3	Hard layers=10%, Maximum hard /	E						Ē												
	layer thickness=25mm		R2	RC			19	10 <u>-</u>												
9.2	Hard layers=25%, Maximum hard							Ē												
8.8	TCR=96%, SCR=90%, RQD=83%							Ē												
	Hard layers=18%, Maximum hard		R3	RC			40													
0.2	END OF BOREHOLE:		-				18	ið										-		
	Notes: 1) 50mm dia monitoing well																			
	installed upon completion.																			
	2) Water Level Readings:																			
	Date: Water Level (mbgl): May 9, 2023 9.48																			
	, -, 0.10		1			l I														

 $\frac{\text{GROUNDWATER ELEVATIONS}}{\text{Measurement}} \stackrel{\text{1st}}{\underline{\bigvee}} \stackrel{\text{2nd}}{\underline{\bigvee}} \stackrel{\text{3rd}}{\underline{\bigvee}} \stackrel{\text{4th}}{\underline{\bigvee}}$

	Geotechnical & Environmental & Materials & Hyd	Irogeo	D.		LO	g of	BOF	EHC	DLE	BH2	3-7									1 OF 1
PROJ CLIEN PROJ DATU	ECT: Geotechnical Investigation IT: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas IM: Geodetic	t, Mil	lton, (ON				DRIL Methe Diam Date:	LING I od: Ho eter: 2 : Mar-3	DATA Ilow S 00 mn 31-202	tem Au n 23	uger/N	lud Ro	tary		RI	EF. NC	D.: 2′ O.: 8	1-122	2-106
BHLC	CATION: See Drawing 1 N 4818951.0	6 E 5	58928	36.17	<u> </u>		<u> </u>	DYNA	MIC CO	ONE PE	ENETR/	ATION						<u> </u>		
(m) ELEV DEPTH	DESCRIPTION	STRATA PLOT	NUMBER		N" BLOWS 0.3 m	BROUND WATER	ELEVATION	RÉSIS SHEA O U • Q	AR ST NCONF	E PLOT	50 E TH (kl + L × 50 E	30 1 Pa) FIELD V & Sensiti LAB V 30 1	00 ANE wity ANE 00	PLASTIC LIMIT W _P I WAT	NATU MOIS CON V ER CC	JRAL TURE TENT V ONTEN		POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m ³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
0.0	FILL: silty sand with asphalt, trace	X	1	SS	38		-	-						¢						
206.2 0.8 205.5 1.5 2	FILL: silty clay, trace gravel, brown, moist, very stiff CLAYEY SILT TO SILTY CLAY		2	SS SS	24 26		206	-							0			-		
	nict: sandy, trace gravel, brown, moist, very stiff to hard		4	SS SS	41 45		204								0					
4 202.5 4.5	SILTY SAND: trace clay, silt		6	SS	29		202								5					Switched to
<u>201.0</u> 6.0	CLAYEY SILT TILL: sandy, trace gravel, brown, moist, hard		7	SS	70		202								o					muu rotary
199.5							200											-		
7.5 _8	SIL I: trace clay, trace sand, brown, moist to wet, dense to very dense		8	SS	91		100									o				
<u>10</u>	wet below 9.0m		9	SS	50/ (<u>30m</u> ŋ	n N	190	-							c	Þ				
12			10	SS	52	-	196											-		
102.0	reddish brown below 12.2m		11	SS	39	-	194	-								0		-		
<u>193.3</u> <u>14</u> 13.7	SANDY SILT TILL: some clay to clayey, trace to some gravel, reddish brown, wet to very moist, very dense	. 0 	12	SS	50		192	- - - - - -							0					
<u>16</u> 190.2		•••	<u>13</u> /	<u>ss</u>	50/ 150mr	h	-								D					
190.8 16.9	SHALE BEDROCK: Queenston Formation, reddish brown, weathered END OF BOREHOLE: Notes: 1) Water encountered at depth of 9.0m during drilling.				50/ 100mr															

	BS CONSULTANTS	L T [D. logy		LO	g of	BOR	EHC	DLE I	3H2:	3-8									1 OF 1
PRO	ECT: Geotechnical Investigation							DRIII		ΔΤΔ										
CLIEN	T: Neatt Communities							Metho	d. Hol	low St	em Ai	iaer/M	ud Ro	tarv						
PROI	ECT LOCATION: 150 Steeles Ave Eas	Mil	ton (Diam	oter 2	00 mm	ייים. ז	Jgci/W	uu i to	tai y		RE		1.2	1-122	2-106
	M: Geodetic	.,						Date:	Δnr_1	3-202	3							∕ ∠ ∩ · a	1-122	-100
BHIC	CATION: See Drawing 1 N 4819026 3	7 5 5	803/	10 02				Date.	Api-i	0-202	0							0 9		
		/ E 3	6934		ES			DYNA		NE PE	NETRA	ATION						1		
<u> </u>						r.		RESIS	TANCE	PLOT	\geq			PLASTI	C NATI	URAL	LIQUID		TW.	REMARKS
(m)		10			<u>ဖ</u> ု_	VATI VS	7	2	0 4	06	0 8	80 10	00		CON	TENT N	W	T PEN (Pa)	UNIT ")	GRAIN SIZE
ELEV	DESCRIPTION	APL	Ř		0 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	2 d L	0E				TH (kF	Pa) FIELD V.	ANE	ļ í	(— ⁻	Cu) (I	URAL (kN/r	DISTRIBUTION
		RAT	IMBE	Ц			EVA	• Q	JICK TI		L X	LAB V	vity ANE	WA	FER CC	ONTEN	T (%)	<u>م</u>	NAT	(%)
207.5		ST ST	ž	È	2 2	50	Ш	2	0 4	06	0 8	80 10	00	1	0 2	20 3	30 			GR SA SI CL
208.9	GRANULAR FILL: 180mm	ĚŽ	1	SS	18			-							0					
206.6	gravel, brown, moist, very stiff		2	SS	22			-												
0.0	CLAYEY SILT TO SILTY CLAY	11	É	00	22		206													
2	occasional cobble, brown, moist,		3	SS	24			-							0					
	very stiff to hard		4	SS	37	1		-							• -					11 27 43 19
			⊨					E												
		19.	5	SS	36		204	-							0					
4		H.						-												
4.5	SILT: trace clay, trace sand,	r 🖌	6	<u> </u>	22			-												
	brown, wet, dense		0	- 33	32		000	-								0				
201 5							202	-												
6.0	SILTY SAND: trace clay, brown,		7	55	29			-												
	moist to wet, compact		Ľ	00	23			Ē												
							200	-												
8	wet below 7.6m	hhi	8	SS	19		200	-								0				
								-												
198.5								-												
9.0	SAND AND GRAVEL: silty, brown, wet. dense	0	9	SS	42		198								0					
10		0.						-												
196.9								-												
10.6	SILT: trace sand, trace clay, brown wet very dense		10	SS	75	1		F								0				
	2.0,,,,						196													
12195.4	SILTY SANDI trace clay reddich							E												
12.1	brown, wet, very dense	[i:]:	11	SS	77			-							0					
								-												
193.9	GRAVELLY SAND: trace silt	Ľ.			E0/		194	-												
14 1010	brown, wet, very dense	0 D	12	SS	150m	a l		-							P					
102.4			1					-												
15.1	CLAYEY SILT TILL: sandy, trace to	ĥ	12	92	50/	1	100	-												
16	some gravel, reddish brown, moist, hard	ΗĤ		00	(30mŋ	h	192	-							Ŭ					
100 0	M							E.												
100.0	SHALE BEDROCK: Queensten		147	ss ,	50/			-												
16.9	Formation, reddish brown,		[25mm															
	END OF BOREHOLE:																			
	Notes: 1) Water at depth of 7 6m during																			
	drilling.																			

(B)	BCONSULTANTS	LTI	D. logy		LO	G O	F B(OR	EHC	DLE	BH23	-9									1 OF 2
PROJI	ECT: Geotechnical Investigation								DRIL		DATA										
CLIEN	T: Neatt Communities								Metho	od: Ho	llow Ste	m Au	ıger/Mu	d Ro	ary						
PROJI	ECT LOCATION: 150 Steeles Ave. Eas	st, Mil	ton, (ON					Diam	eter: 2	00 mm						RE	EF. NO	D.: 2	1-122	2-106
DATU	M: Geodetic								Date:	Apr-0	3-2023						E١	ICL N	0.: 1	0	
BH LO	CATION: See Drawing 1 N 4818843.6	68 E 5	58929	93.67																	
	SOIL PROFILE		S	SAMPL	ES	~			DYNA RESIS	MIC CO	DNE PEN		TION		DIACT	NAT	URAL			F	REMARKS
(m)		Ц				ATEF "	0		2	20 4	0 60	8	0 10	D	LIMIT	MOIS CON	STURE	LIQUIL	, BEN.	M LN	
ELEV	DESCRIPTION	A PLO	~		3 m			N C	SHEA	R ST	RENGT	H (kF	Pa)		W _P		∾ ⊙———	WL	(kP	RAL U	DISTRIBUTION
DEPTH		ZAT/	MBE	Щ	<u>B</u> .			- A		NCONF UICK T	·INED RIAXIAL	+ ×	& Sensitivit	y NE	WA	TER CO	ONTEN	T (%)	8 S	NATU	(%)
206.2		STI	R	Ł	ż	50	3 1		2	20 4	0 60	8	0 10	D	1	0 2	20 3	30			GR SA SI CL
209.9	− FILL: sand and gravel, trace ¬ cobble, brown, moist, compact	-	1	SS	18		2	206								0					
205:3	FILL: clayey silt, brown, moist, very	- K	2	SS	23				-							0					
0.0			É	00	20				-							ľ					
2	TILL: sandy, trace gravel, brown,		3	SS	41			204	_							0					
	silt layers below 2.3m		4	SS	26			_0.								0					
			5	22	26				È.												
4			Ľ	00	20				-												
			1				2	202	-										1		
		Xł	6	SS	9				-								0				Switched to
	brown below 5.1m								-												muu rotary
6	wet silt laver at 6 0m		<u> </u>					200	-												
			7	SS	12		-	200	-								0				
198 7									_												
7.5	SAND AND GRAVEL: trace silt,			22	50																
<u> </u>	brown, wet, very dense		ŀ	- 33	50			198	-										-		
197.2						<u>×</u>	W.	L. *	197.7	m											
9.0	SILTY SAND: some gravel to gravelly trace clay brown wet		9	SS	58		Ma	iy 09	9, 202: F	3						0					
10	dense to very dense								-												
								196	-												
			10	SS	38				-							0	>				
.194.2																					
12.0	GRAVELLY SAND: trace silt,	6.0		00	64	┟┊╞╡		194	-										-		
	brown to reddish brown, wet, very dense	þ. (.)	11	55	64	₽₿									C						
192 5									-												
<u>14</u> 13.7	SILTY SAND TILL: trace clay,	161	12	SS	38	门目			-							0					5 65 27 3
	brown, wet, compact to very dense					じ目		192	-										1		
		ι¢.	·			に目			-												
	gravelly sand seams, reddish brown at 15.2m		13	SS	29	「目			-							0					
¹⁶ 190.0	CLAYEY SILT TILL/SHALE		11	00	50/	Į:⊟	i.	190								<u> </u>			-		
189.2	COMPLEX: sandy, trace gravel,		14	33	75mm)ËE			-												
189.0	SHALE BEDROCK: Queenston			DO					-												
188:4 18 17.8	-Aormation, reddish brown,		RI	RC																	
	TCR=83%, SCR=0%, RQD=0%		R2	RC				188	-										1		
186.9	Hard layer=12%, Maximum hard								_												
19.3	Fragmented zone		R3	RC					-												
²⁰ 185.9	TCR=40%, SCR=23%, RQD=15% / →Hard laver=6%. Maximum hard							186											-		
20.3	ayer thickness=50mm								-												
	Hard layer=21%, Maximum hard			RC					E.												
184.4	Idver thickness=75mm	F							-		$\left \right $					-			+	-	
	Hard layer=28%, Maximum hard					1															
	layer thickness=75mm					1															
	Notes:					1															
	 50mm dia. monitoring well installed upon completion. 					1															
	2) Water Level Readings:					1															
· · · · ·	Continued Next Page		•																		



 $\frac{\text{GRAPH}}{\text{NOTES}} + {}^3, \times {}^3: \underset{\text{to Sensitivity}}{\text{Numbers refe}}$

Strain at Failure 0



LOG OF BOREHOLE BH23-9

DRILLING DATA

Method: Hollow Stem Auger/Mud Rotary

Diameter: 200 mm Date: Apr-03-2023 REF. NO.: 21-122-106 ENCL NO.: 10

PROJECT LOCATION: 150 Steeles Ave. East, Milton, ON DATUM: Geodetic

PROJECT: Geotechnical Investigation

CLIENT: Neatt Communities

	SOIL PROFILE		S	SAMPL	ES	۲.		DYNA RESIS	MIC CC	DNE PE E PLOT		ATION			C NAT	URAL			Ļ	REMARKS
(m) <u>ELEV</u> DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	ТҮРЕ	"N" <u>BLOWS</u>	GROUND WATEF CONDITIONS	ELEVATION	2 SHEA 0 UI • QI 2	AR STF NCONF UICK TF 20 4	0 6 RENG INED RIAXIAI 0 6	0 8 TH (kF + L × 0 8	30 10 FIELD V. & Sensiti LAB V/ 80 10	00 ANE vity ANE 00	UMIT WP WA	TER CC	STURE ITENT W O ONTEN 20 3	LIMIT WL T (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT V. (kN/m ³)	AND GRAIN SIZE DISTRIBUTION (%) GR SA SI C
	Date: Water Level(mbgl): May 9, 2023 8.55																			<u>GR SA SI C</u>



	BS CONSULTANTS Geotechnical & Environmental & Materials & Hype	LT	D.		LOC) of	BOR	EHO	LE I	BH23	8-10									1 OF ⁻
	ECT: Geotechnical Investigation							יופח												
	IT: Neatt Communities							Meth	nd: He		tom Δ	uger/M	lud Ro	tary						
PROI	ECT LOCATION: 150 Steeles Ave Eas	+ Mi	lton i					Diam	otor (200 mn		ugerni		nai y		D		י. ר	1 1 2 2	2 106
	ECT LOCATION. 150 Steeles Ave. Eas	st, ivii	itori, i	UN				Data	Apr	200 111) Z	1-122	2-100
	N. Geodelic	1 E I	2002	10 07				Dale.	Api-	00-202	.5					E		0 1	1	
BHLC	CATION: See Drawing 1 N 4818904.2	TE:	58934		 0		1	DYNA	MIC C	ONE PE	NETR	ATION		<u> </u>					1	
	SUIL PROFILE	-	2		.ES	н		RESI	STANC	E PLOT	\geq			PLAST		URAL	LIQUIE	2	Μ	REMARKS
(m)		10			<u>က</u>	VATE	7		20	40 6	50 8	B0 1	00		CON	NTENT	LIMII W.	T PEN (Pa)	UNIT (°	GRAIN SIZE
	DESCRIPTION	APL	н		0 <u>W</u>		10 E	SHE	AR ST	RENG	TH (k	Pa)	ANE	-		o	— - L	Cu) (F	(kN/r	DISTRIBUTION
		RAT	MBE	Ц			EVA	• Q	UICK 1	RIAXIA	L ×	& Sensit LAB V	ivity ANE	WA	TER CO	ONTEN	IT (%)	E C	NAT	(%)
206.2		ST	ž	È	Ż	50	Ш		20	40 6	50 8	B0 1	00	1	0 2	20	30			GR SA SI C
0.0	FILL: sandy silt, trace gravel, brown, moist, compact	\mathbb{K}	1	SS	12		206	E							0					
205.3	CLAYEY SILT TO SILTY CLAY	- Hai	2	SS	21			Ę							0					
0.0	TILL: sandy, trace gravel,		É	00	21			-							Ĩ					
⁻² 204.0	occasional cobble, brown, moist, very stiff to hard		3	SS	33			F							0					
2.2	SILT TO SANDY SILT: trace clay,		4	SS	38		204	Ē							0					
	brown, moist, dense to very dense		Ė		50/			-												
			5	SS	150/ 150mr	r		Ē							0					0 30 64 6
4							202	E												
201.3					50/		202	-												
4.9	CLAYEY SILT TILL: sandy, trace	10	6	SS	100mr			Ē						0		0				
	gravel, brown, moist, hard	KK	1					F												
<u>\$200.1</u> 6.1	SANDY SILT: trace clay, brown	[Ĥ	-				200	Ē	<u> </u>											Switched to
	moist, very dense		7	SS	77	• •	200	Ē						'	•					Mud Rotary
							:	-												
	wet below 7.5m		<u> </u>		70	目	·	Ē												
8			· *	55	70	▐∶闢∶	198									0				
197.2			·			首.	W. L.	197.8	m											
9.0	SILT: trace clay, brown, wet, dense		┝	<u> </u>	47		May 0	9, 202 ┢	3											
			9	- 33	47	k≣:	:	Ē								0				
10						目	196	È												
					07	-		Ē												
			10	SS	37			Ē								o				
12194.2								-												
12.0	GRAVELLY SAND: trace silt,	0.0	11	00	21		194								0					
	greyish brown, wet, dense	þ.	<u> </u>	33	51	-		-							Ĭ					
102.5		.0						F												
<u>192.5</u> 14 13.7	SANDY SILT: trace clay, brown,	tin	12	SS	55			Ē								0				
	wet, very dense					-	192	-								-				
191.0								Ē												
15.2	SANDY SILT TILL: some clay,		13	SS	_ 50/			Ē							•					
16	some gravel, reddish brown, wet to moist, verv dense				(5mm)		F												
	······, ···, ····						190	-												
			14	SS	50/			F							0					
188.7		1.1	15	55	75mm		—	F				-		┨───				-	-	
à 17.6	Formation, reddish brown,				25mm	(1					1	
			1											1					1	
	Notes:		1											1					1	
	1) 50mm dia. monitoring well																			
D.	2) Water Level Readings:		1											1					1	
	Date: Water level(mbdl)		1											1					1	
	May 9, 2023 8.43		1											1					1	
' 			1											1					1	
3			1											1					1	
2			1											1					1	
			1											1					1	
			1											1					1	
3			1											1					1	
			1											1					1	
		1	-		1	-			1	-	I	1	1			1	1	-		I

 $\begin{array}{c} \underline{\text{GROUNDWATER ELEVATIONS}} \\ \text{Measurement} \quad \stackrel{\text{1st}}{\underline{\nabla}} \quad \stackrel{\text{2nd}}{\underline{\Psi}} \quad \stackrel{\text{3rd}}{\underline{\Psi}} \quad \stackrel{\text{4th}}{\underline{\Psi}} \end{array}$

	BS CONSULTANTS	rogeo	D. logy		LOG	6 of	BOR	eho	LE E	3H23	-11									1 OF 1
PROJI	ECT: Geotechnical Investigation							DRIL		ATA										
CLIEN	T: Neatt Communities							Metho	od: Hol	low St	em Aı	uger/N	lud Ro	otary						
PROJI	ECT LOCATION: 150 Steeles Ave. Eas	t, Mil	ton, (NC				Diam	eter: 2	00 mm	ı	0		,		R	EF. NO).: 2 [′]	1-122	-106
DATU	M: Geodetic	.,	,					Date:	Apr-2	8-202	3					FN		0 · 1:	2	
BHLO	CATION: See Drawing 1 N 4819000.8	4 E 5	58938	30.1														-	_	
	SOIL PROFILE		5	SAMPL	.ES			DYNA			NETRA	ATION						Γ		
						ШШ				0 6	\geq	20 1	00	PLAST LIMIT	IC MOIS		LIQUID LIMIT	z	T WT	AND
(m)		101			SIE	WA ⁻	z	SHE				2a)	1	WP	CON N	N	$W_{\rm L}$	ET PE (kPa)	L UN	GRAIN SIZE
DEPTH	DESCRIPTION	TAF	3ER		3LOV	IN E	ATIC		NCONF	INED	+	FIELD V & Sensit	ANE			0		CCK	TURA (KN	DISTRIBUTION
		TRA	IUME	ΥPE	5	SROU	LEV	• Q			_ ×	LAB V	ANE	WA	TER CO		T (%)	–	¥	
206.4	FILL: silty clay mixed with crusher	s XX	Z	⊢ 	F 40	00	ш		4								50	-		GR SA SI CL
205.6	run limestone, trace sand, brown,	\bigotimes		55	13		206								0					
0.8	CLAYEY SILT TO SILTY CLAY		2	SS	23			-							0					
	TILL: trace sand, trace gravel,		3	SS	25			E							0					
2	brown to reddish brown, moist, very stiff		Ĕ	00	20		004	-												
202.2	silt pockets at 2.3m		4	SS	28		204	-							0					
3.1	SILT: trace to some sand, trace	fifi	5	SS	49			È.							0					Switched to
4	clay, trace gravel, brown, moist,			00	43			E												Mud Rotary
201.8	dense						202	-												
4.6	SANDY SILT: trace clay, trace to		6	SS	36		202	F							0					
	some gravel, brown, moist, dense		<u> </u>					-												
<i>2</i> 00.4								E												
6.0	CLAYEY SILT TILL: sandy, some		7	SS	44		200								-0			-		
	sand and silty sand pockets/seams,	r I I						Ē												
	trace clay, brown, moist, hard	jø,						-												
8	50mm wet gravelly sand at 7.6m	H.[8	SS	58		·	Ē							0					
	wet graveny sand layer at 7.5m					∶ ≚ ∶	W. L.	⊾ 198.2 i	m									-		
197.3		[<u> </u>	50/		May 09	9, 202: E	3											
9.1	SILI: trace sand, trace gravel, trace clay, brown, wet, very dense		9	_ 55	50/ 150mn	▋▋		F								0				
<u>10</u>							1	Ē												
195.5					50/	に目に	196	-										1		
10.9	SANDY SILT TILL: some clay,		10	SS	50/ 75mm			Ē							0					
	trace to some gravel, reddish brown, wet, verv dense							-												
<u>12</u>	achhla/hauldar at 12 2m	0	11	22	50/	目:	104	F							o					
			\square	00	75mm		194	-										1		
								Ē												
14			12/	SS /	50/	「目う		-							0					
			Ē	<u> </u>	50mr		192													
101.2						:=:		E												
195.2	SHALE BEDROCK: Queenston /		13/	<u>ss</u>	50/	г [.] Ц." Г		-										-		
15.3	Formation, reddish brown,		_		\$0mm															
	END OF BOREHOLE:																1			
	Notes: 1) 50mm dia monitoring well																1			
	installed upon completion.																			
	2) Water Level Readings:																1			
	Date: Water Level(mbgl):																			
	May 9, 2023 8.26																			
																	1			
																	1			
																	1			
																	1			
																	1			
																	1			
																	1			
																	1			

B	BS CONSULTANTS Geotechnical & Environmental & Materials & Hyc	LT[drogeo	D.		LOG	GOF	BOR	ЕНО	LE E	3H23	6-12									1	OF 1
PROJ CLIEN PROJ DATU	ECT: Geotechnical Investigation IT: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas M: Geodetic	st, Mil	ton, (ON				DRILI Metho Diamo Date:	LING I od: Ho eter: 2 Apr-1	DATA Ilow Si 200 mn 18-202	tem Au n 3	uger/M	lud Ro	tary		RE	EF. NC	0.: 2 [.] 0.: 1	1-122 3	-106	
	SOIL PROFILE	4 E C	0947		ES			DYNA	MIC CO	ONE PE	NETR/	ATION						1			
(m) ELEV DEPTH 206.0	DESCRIPTION	STRATA PLOT	NUMBER	ЭЧИРЕ	"N" BLOWS	GROUND WATER CONDITIONS	ELEVATION	2 SHEA 0 UI • QI 2	AR ST NCONF UICK T	E PLOT 40 6 RENG FINED RIAXIA 40 6	50 E TH (kl + L × 50 E	Pa) FIELD V. & Sensiti LAB V/	00 ANE vity ANE 00	PLASTI LIMIT W _P I WA ⁻ 1	C NATI MOIS CON V TER CC 0 2	URAL TURE TENT N DONTEN	LIQUID LIMIT w _L T (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m ³)	REM. Al GRAII DISTRI (9 GR SA	ARKS ND N SIZE BUTION 6) SI CL
0.0	FILL: silty clay, trace gravel, brown,	\boxtimes	1	SS	5			-							0						
205.0 1.0 _2	crushed stones at 0.8m SANDY SILT: trace clay, trace gravel, brown, moist, loose to very dense		2 3 4	SS SS SS	7 47 42		204	-							0						
<u>₄</u> 201.5	SAND AND GRAVEL - some silt		5	SS	65	-	202	-							0			_			
<u>\$200.0</u> 6.0	CLAYEY SILT TILL: sandy, trace gravel, brown, moist, hard	0	6	SS	50/ 1 <u>30mr</u> 37		200	-							0			-			
8		10.	8	SS	50/ 1 <u>30m</u> ŋ	- m	198	-							0			-		8 25	50 17
<u>197.0</u> 9.0	SANDY SILT TILL: trace clay, trace to some gravel, silt layers, brown to reddish brown, wet, very dense		9	SS	50/ 1 <u>50m</u> r	A	196	-								0					
<u>12</u>			<u>10</u> /	SS SS	50/ 25mm 50/		194	-							0						
192.3	SHALE BEDROCK: Queension		12/	<u></u>	<u>r5mm</u>			-													
13.8	verification, reduish brown, weathered END OF BOREHOLE: Notes: 1) Water at depth of 9.0m during drilling.				ρυmn																

B	Geotechnical & Environmental & Materials & Hyd	rogeo	D. logy		LOC) of	BOR	EHC	DLE	BH23	3-13								1	OF 1
PROJ	ECT: Geotechnical Investigation							DRII	LING	DATA										
CLIEN	T: Neatt Communities							Meth	iod: He	ollow S	item A	Auger/N	/Jud Ro	otary						
PROJI	ECT LOCATION: 150 Steeles Ave. Eas	t, Mil	ton, (NC				Dian	neter:	200 mr	n	-		-		REF. N	D.: 2	1-122	2-106	
DATU	M: Geodetic							Date	: Apr-	04-202	23					ENCL N	IO.: 1	4		
BH LO	CATION: See Drawing 1 N 4818805.2	9 E 5	58932	28.75																
	SOIL PROFILE		5	SAMPL	ES			DYN/ RESI	AMIC C STANC	ONE PI		ration >			NATUR			τ	REN	/ARKS
(m)		F				TER 0			20	40	60	80	100	LIMIT	MOISTU CONTEI	RE LIQUII NT LIMI	T N EN C	NIT W	A	ND
ELEV		PLO	~		2 MS		NO	SHE	AR ST	RENG	GTH (F	(Pa)		W _P	W	WL	L (KP, FT	AL U V/m ³	GRA DISTR	IN SIZE
DEPTH	DESCRIPTION	MATA	ABEF	ш	BLO		VAT			IFINED	+	& Sensi	VANE itivity /ANE	WATE	RCON	TENT (%)	δŌ			(%)
206.3		STF	Ŋ	ΤΥΡ	ż	GR	ELE	– (20	40 (60 60	80	100	10	20	30		2	GR SA	A SI CL
0.0	FILL: granular material mixed with	\bigotimes	1	SS	19		206	; <u> </u>				-	_		,		-			
205.4	brown, moist, very stiff	K		22	26			È												
0.5	CLAYEY SILT TO SILTY CLAY TILL: sandy trace to some gravel	11	É	33	20			F												
2	brown, moist, stiff to hard	1.	3	SS	26		204	F						•						
			4	SS	29		204	Ē)					
			-	00				Ē												
		Иİ	⁵	55	33			Ē							0					
4							202	<u>:</u> [_					_			
	wet silt layer at 4.5 m	Ĥ	6	SS	12			F							0					
		ΗĽ	1					F												
<u>200.3</u>	SANDY SILT TO SILTY SAND		1					F												
0.0	trace clay, trace gravel, brown,	[:[:	7	SS	33		. 200) _						0)					
	moist, dense to very dense							-												
	gravelly at 7.5m	.	8	SS	50/	目		Ē							0					
<u>°</u>		. .	\square		\50mr	ݱ┟	. 198	s <u> </u>				_					_			
197.3		ŀŀ					·W.L. ·May 0	197.8	m 23											
9.0	SILT: trace clay, trace sand, brown wet dense		9	SS	41		Iviay 0	j, 202							0					
<u>10</u>								Ē												
195.7							196	Ē												
10.6	trace clay, brown to reddish brown,	.:]·	10	SS	34			E							0					
	wet, dense	ŀ						E												
12		.	 		0.5		194	<u>ا</u>					_							
			. 11	55	35			Ē							0					
192.7								Ē												
₁₄ 13.6	SANDY SILT TILL: some clay,		12	SS	39			Ē						0						
	brown, wet, dense						192	2												
191.1		•						Ē												
15.2	SILT: some sand, trace clay, reddish brown, wet, very dense		13	SS	52			Ē							o				0 17	7 80 3
<u>16</u>							190)				_								
189.5	- SANDY SILT THE LISHALE		1		50/			Ē												
188.0	COMPLEX: some clay, trace		114	55	(50mr	2		Ē.												
17.5	gravel, reddish brown, moist, very		15/	<u>ss</u>	50/ 51mm	A	1													
	SHALE BEDROCK: Queenston						1													
	weathered						1													
	END OF BOREHOLE: Notes:																			
	 1) 50mm dia. monitoring well installed upon completion. 2) Water Level Readings: 																			
	Date: Water level(mbdl)						1													
	May 9, 2023 8.43																			
							1													
							1													
							1													
							1													
							1													
· · · · ·			•				•	•	-					•			-	•		

DS CONSULTANTS LTD. Geotechnical ♦ Environmental ♦ Materials ♦ Hydrogeology LOG OF BOREHOLE BH23-14 1 OF 1 DRILLING DATA PROJECT: Geotechnical Investigation **CLIENT: Neatt Communities** Method: Hollow Stem Auger/Mud Rotary PROJECT LOCATION: 150 Steeles Ave. East, Milton, ON Diameter: 200 mm REF. NO.: 21-122-106 Date: Apr-06-2023 DATUM: Geodetic ENCL NO.: 15 BH LOCATION: See Drawing 1 N 4818877.08 E 589373.37 DYNAMIC CONE PENETRATION RESISTANCE PLOT SOIL PROFILE SAMPLES PLASTIC NATURAL MOISTURE LIMIT CONTENT REMARKS GROUND WATER CONDITIONS LIQUID POCKET PEN. (Cu) (kPa) AND 40 60 NATURAL UNIT ((kN/m³) 20 80 100 (m) STRATA PLOT GRAIN SIZE BLOWS 0.3 m Wp w W ELEVATION SHEAR STRENGTH (kPa) ELEV DEPTH + FIELD VANE & Sensition DISTRIBUTION -0 -DESCRIPTION NUMBER O UNCONFINED (%) WATER CONTENT (%) TYPE QUICK TRIAXIAL × LAB VANE ż 40 60 80 10 20 30 20 100 206.4 GR SA SI CL 0.0 FILL: granular material with clayey 1 11 SS 206 silt, some sand, brown, moist, stiff 205.6 0.8 FILL: clayey silt, some sand, trace 2 SS 10 cobbles, brown, moist, stiff 204.8 CLAYEY SILT TO SILTY CLAY 1.6 3 SS 33 о 2 TILL: sandy, trace gravel, brown, 204 moist, hard 4 SS 40 ο silty sand layer at 2.6m 5 SS 35 0 201.9 202 4.5 SANDY SILT: trace clay, brown, 6 SS 36 moist to wet, dense to very dense Switched to trace boulders at 6.0m 7 SS 58 200 Mud Rotary trace gravel, wet at 7.5m 50/ 8 SS 50mr 198 197.4 sandy silt to silt, wet at 9.0m 90 9 SS 62 195.8 196 SILT: trace clay, trace sand, 10.6 10 SS 47 brown, wet, dense <u>£194.3</u> GRAVELLY SAND: some silt, 12.1 194 11 SS 50 29 51 17 3 trace clay, greyish brown, wet, very dense 192.8 13.6 SANDY SILT TO SILTY SAND: 12 SS 32 trace clay, brown to reddish brown, 192 wet, dense 191.2 SANDY SILT TILL: trace to some 13 SS 50/ 15.2 clay, some gravel, reddish brown, 50m moist, very dense 190 14 SS 50/ trace shale fragments at 16.7m \50mr 23-7-7 ₈188.4 SHALE BEDROCK: Queenston 189.0 Formation, reddish brown, 15 SS / 50/ DS.GDT 18.4 weathered 25mm END OF BOREHOLE: Notes SOIL LOG-2021-DRAFT 21-122-106.GPJ 1) Water at the depth of 7.6m during drilling. S

B	Beotechnical & Environmental & Materials & Hyd	drogeo	D. logy		LOG	G OF	BOR	EHO	LE E	8H23	-15									1 OF 1
PROJ CLIEN PROJ DATU	ECT: Geotechnical Investigation IT: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas M: Geodetic	st, Mil	ton, (ON				DRILI Metho Diam Date:	L ING E od: Hol eter: 2 Apr-1	0ATA low St 00 mm 8-2023	em Au າ 3	ıger/M	ud Ro	tary		RE	EF. NC	0.: 2 [,] 0.: 1	1-122 6	2-106
BH LC	OCATION: See Drawing 1 N 4818944.2	21 E 5	58944	45.23																
(m) <u>ELEV</u> DEPTH	SOIL PROFILE	TRATA PLOT	UMBER	SAMPL	u" <u>BLOWS</u> S	ROUND WATER ONDITIONS	LEVATION	SHEA Q Q Q Q Q Q Q Q Q Q Q Q Q	AR STI NCONF			0 10 Pa) FIELD V/ & Sensitir		PLASTI LIMIT WP WAT		URAL STURE ITENT W O		POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m ³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
206.2 0.0	FILL: granular material mixed with silty sand, trace clay, brown, moist, loose to compact	s S	2 1	⊢ SS SS	<u>۲</u> 18 ۹	00	ш 206	-		0 0	0 0			(,			-		GR SA SI CL
204.7 1.5 203.9	FILL: silty clay, greyish brown,	X	3	SS	7		204	- - - -							o					
2.3 203.1 3.1	FILL: silty sand, gravelly, brown, wet CLAYEY SILT TO SILTY CLAY		4	SS SS	10 26										0					
4	TILL: sandy, trace gravel, brown, moist, very stiff to hard		6	SS	41		202	-							0			-		
<u>\$200.2</u> 6.0	SILTY SAND: trace clay, brown, moist, compact to very dense		7	SS	28		200	- - - - - -								0		-		
198.4 [®] 7.8 197.2	gravelly wet zone at 7.5m CLAYEY SILT TILL: sandy, trace gravel, brown, moist, hard		8	SS	_51_		W.L. May 0	 - 198.2 9, 2023 -	 m 3 						0			-		
9.0	gravel, brown, wet, dense to very dense		9	SS	51		196	- - - - - -								0				1 1 95 3
<u>12194.1</u> 12.1	SANDY SILT TILL: trace clay, trace gravel, brown to reddish		10	SS	40 75		194	-							0	0		-		
<u>14</u>	dense wet at 13.7m	••	12	ss /	50/ 50mr		192	- - - - -							o			-		
191.1 1 99.9	SHALE BEDROCK: Queensten			. SS /	50/			-												
10.3	END OF BOREHOLE: Notes: 1) 50mm dia. monitoring well installed upon completion. 2) Water Level Readings: Date: Water Level(mbgl): May 9, 2023 8.01				<u>\$Umm</u>															

(B)	Geotechnical & Environmental & Materials & Hy	LT	D.		LOC	g of	= B(OR	EH	OLE	BH23	8-16									1 OF 1
PROJ	ECT: Geotechnical Investigation								DR	LLING	DATA										
CLIEN	T: Neatt Communities								Met	hod: H	ollow S	tem A	uger/N	lud Ro	otary						
PROJ	ECT LOCATION: 150 Steeles Ave. Eas	st, Mi	lton,	ON					Dia	meter:	200 mr	n					R	REF. NO	D.: 2	1-122	2-106
DATU	M: Geodetic								Dat	e: Apr	-12-202	3					E	NCL N	IO.: 1	7	
BH LC	OCATION: See Drawing 1 N 4818780.9) E 58	39393	3.09		_													_	_	
	SOIL PROFILE		5	SAMPL	ES	~			RES	SISTAN	CE PLOT		ATION -		PLAST	IC NA	TURAL	LIQUIE	5	Ę	REMARKS
(m)		10			(0)	ATE	0	_		20	40 6	50 8	30 1	00		CC	NTENT	LIMI	DEN.	LINN (AND GRAIN SIZE
ELEV	DESCRIPTION	APL	к		3 m			IION	SH			TH (k	Pa) FIELD V	ANE					CKET CU) (K	(kN/m	DISTRIBUTION
DEPTH		RAT,	MBE	Щ				EVA.	•	QUICK	TRIAXIA	L X	& Sensiti LAB V	ivity ANE	WA	TER C	CONTE	NT (%)	0°E	NATI	(%)
206.6		ST	Z	≥	Ż	U U U	5	Ц	_	20	40 0	50 8	30 1	00		10	20	30			GR SA SI CL
0.0	FILL: clayey silt, trace rootlets, trace to some organics, trace	\otimes	1	SS	5			206	E									0			
	cobbles, dark brown to brown,	\otimes	2	SS	5			200	Ϊ.								0				
204.9	moist to wet at 0.8m	\boxtimes	F		-				Ē												
<u> </u>			3	55	16				Ē								2				
	moist, very stiff to hard	ŗ.	4	SS	21			204	ιĒ—							•			-		
			F	22	27				F												
4				33	37				F												
202.1		19.							Ē												
4.5	SILT: trace clay, trace sand,		6	SS	31			202	<u>2</u>								0		1		
	brown, wet, dense								F												
200.6									Ē												
6.0	gravel, brown, moist, dense to very	[:]·]	7	SS	54			200	È							0					Switched to Mud Rotary
	dense clavev silt till laver at 6.1m					1:1		200	Έ												mad riotary
			 			łΕ			È.												
8			. 8	SS	49	ĿΕ			Ē							¢					
197.6			•					198	3È							-			-		
9.0	SILT: trace clay, trace sand,		<u>م</u>	SS	49		W	V. L.	197.	7 m							6				
10	brown, wet, dense		9	- 33	45	łΪΕ	. M	lay 0	19, 20 F	123							ľ				
196.0									Ē												
10.6	SANDY SILT: trace clay, brown,		10	SS	40			196	š <u>–</u>								0				
	moist, dense		ŀ						F												
<u>12</u> 194.5		ļ.							F												
12.1	GRAVELLY SAND TO SAND AND GRAVEL: trace clay. trace silt.	0	11	SS	42			194	Ē	_						•					
	brown to reddish brown, wet, dense	0							Ē												
	to very delise	0							F												
14			12	SS	40				E							0					
								192	2										-		
		0	13	A SS	50/				Ē												
16		0			25mm	Ŕ			Ē												
189.9								100	ţ.												
16.7	CLAYEY SILT TILL/SHALE	14	14	SS	50/			190	Ĕ							0					
	reddish brown, moist, hard				1 <u>00mr</u>	7			Ē												
188.6	SHALE BEDROCK: Queenston	11							E												
18.4	Formation, reddish brown,		15	<u>ss</u>	50/ 50mm										1						
	END OF BOREHOLE:				yonn	1														1	
	Notes: 1) 50mm dia monitoring well																			1	
	installed upon completion.																			1	
	2) Water Level Readings:					1									1					1	
	Date: Water level(mbgl):					1									1					1	
	IVIAY 9, 2023 8.94					1									1					1	
						1									1					1	
4						1									1					1	
						1									1					1	
						1									1					1	
															1					1	
									<u> </u>					1	1	1			-		ļ

 $\frac{\text{GROUNDWATER ELEVATIONS}}{\text{Measurement}} \stackrel{\text{1st}}{\underline{\bigvee}} \stackrel{\text{2nd}}{\underline{\bigvee}} \stackrel{\text{3rd}}{\underline{\bigvee}} \stackrel{\text{4th}}{\underline{\bigvee}}$

B	BS CONSULTANTS Geotechnical & Environmental & Materials & Hyc	Irogeo	D. logy		LOG	G OF I	BOR	Eŀ	IOLE	BH	23-	-17									1 OF	- 1
PROI	ECT: Geotechnical Investigation							יח			ΓΔ											
												m Ai	Igor									
				~ N					elnoa. F	0000	V SLE	in Au	iger									
PROJ	ECT LOCATION: 150 Steeles Ave. Eas	t, Mil	ton,	ON				Di	ameter:	200	mm						RE	=⊢. NC).: 2	1-122	-106	
DATU	M: Geodetic							Da	ate: Apr	-10-2	2023						EN	NCL N	0.: 1	8		
BH LC	OCATION: See Drawing 1 N 4818836.8	5 E 5	5894´	13.41									TION						_	-		
	SOIL PROFILE		5	SAMPL	ES	~		RE	ESISTAN	CE PL			ATION				URAL			F	REMARK	s
(m)		F				١Ë			20	40	60) 8	30 10	00	LIMIT	MOIS CON	TURE	LIQUID	Ľ.	≤	AND	
		PLO			NS R	NO NG	ZO	SI	HEAR S	TRE	NGT	H (kF	Pa)		W _P	V	N	WL	(KP [®]	NW [®]		ZE
DEPTH	DESCRIPTION	VTA	BER		BLO 0.3	NË	ΠA,	0	UNCO	VFINE	D	÷	FIÉLD V. & Sensiti	ANE vity	10/07			T (0()	DOCI DOCI	RUT ×	(%)	
		TR/	MU	ΥPE	ż	ON NO	E	•	QUICK	TRIA	XIAL 60	X N R	LAB V	ANE				1 (%) 30		≥		~
205.9	FILL: silty clay trace asphalt	XX		-	-	00	ш	╞		+0	\dashv				'			1	-		GR SA SI	CL
205.0	prices, some sand, trace gravel,	\bigotimes		55	5			Ē								0						
0.9	brown, moist, firm	1747	2	SS	20	1		F								0						
	TILL: sandy, trace gravel, trace	ΗĤ	Þ					Ē														
2	cobbles, brown, moist, very stiff to		3	SS	32		204	╠								0						
	nard		4	SS	24	1		Ē								0						
202.9	SANDY SILT TO SILTY SAND	<u> </u> ;+	-					F														
0.0	trace clay, trace gravel, brown,		5	SS	46			Ē								0						
4	moist, dense to very dense	ł i i i					202	2														
			Ŀ					Ē														
			6		50/ 30mn			F								°						
					(<u></u>)	ľ		F														
6							200	╞														
			7	SS	50			F								0						
						1		F														
								ŧ														
8			8	SS	41		198	3⊢	_							0			-		2 73 20	5
			1					È														
196.9								Ē														
9.0	SAND AND GRAVEL: trace clay,	0	9	SS	54	1		E								0						
10	ground and a start, well, very dense	0.				1	196	\$ F														
195.3								F														
10.6	SILT: trace clay, trace sand,	ПΠ	10	SS	33			F									0					
	brown, wet, dense		<u> </u>			-		Ē									-					
12193.8							194	ļ-														
12.1	GRAVELLY SAND: trace silt,	0.0	11	SS	56	1		E							₀							
	brownish grey, wet, very dense	₽. C	<u> </u>		00	-		F														
192.3		.0						Ē														
₁₄ 13.6	SILT: trace sand, trace clay,	ÎП	12	SS	51		192	<u>_</u>									0					
	brown, wet, very dense			00	01	-		Ē									Ŭ					
190.8								F														
15.1	SANDY SILT TILL: trace to some		13	SS	50/			Ē								0						
16	clay, trace gravel, reddish brown, wet to moist very dense		i		25mm	(190	Ŀ														
	wer to moist, very dense							Ē														
			14	66	50/			Ł								0						
					25mm			F														
			1				188	sÉ.			$ \downarrow$		<u> </u>		<u> </u>		<u> </u>		1			
	SHALE BEDROCK: Queensten	μ11		. ~~	507			ŧ.														
·	Formation, reddish brown,				25mm	(
DS	weathered		1																			
E I	Notes:		1																			
00.0	1) Water at depth of 7.6m during																					
52-1	uniing.		1																			
			1																			
E I			1																			
RAF			1																			
1			1																			
-202			1																			
00																			1			
			1																			
s S			1																			
		1	L			L					[1	L	I		

 $\frac{\text{GROUNDWATER ELEVATIONS}}{\text{Measurement}} \stackrel{\text{1st}}{\underbrace{\checkmark}} \stackrel{\text{2nd}}{\underbrace{\checkmark}} \stackrel{\text{3rd}}{\underbrace{\checkmark}} \stackrel{\text{4th}}{\underbrace{\checkmark}}$

	DS CONSULTANTS	LTI	D. logy		LOG) of	BOR	E⊦	HOL	.E B	8H23	6-18									1 OF 1
PRO	ECT: Geotechnical Investigation							יח	RILLI	NG	ΔΤΔ										
CLIEN	T: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas	t, Mil	ton, (NC				Me Di	ethoo	ter: 2	low S 00 mn	tem A n	uger				R	EF. NC).: 2′	1-122	-106
DATU	M: Geodetic							Da	ate:	May-()1-202	23					El	NCL N	0.: 19	9	
BH LO	CATION: See Drawing 1 N 4818795.9	E 58	39440		EQ	<u> </u>	I –	DY	YNAM	IC CC	NE PE	NETR	ATION						1		
						Ë		RE	ESIST	ANCE	E PLOT	\geq	-	100	PLASTI	C NAT	URAL		z	T WT	REMARKS AND
(m) <u>ELEV</u> DEPTH	DESCRIPTION	RATA PLOT	MBER	Ш	BLOWS 0.3 m	OUND WAT	EVATION	SH O		R STF CONF		TH (k + L X	Pa) FIELD & Sensi LAB \	VANE itivity	₩ _P ₩ ₩A		o DNTEN	w _L	POCKET PE (Cu) (kPa)	NATURAL UNI (kN/m ³)	GRAIN SIZE DISTRIBUTION (%)
208.5		ST	R	Ł	"Z	R OO			20	4	06	0	80 ·	100	1	0 2	20	30			GR SA SI CL
0.0	FILL: clayey silt, some sand, trace asphalt pieces, trace to some	\bigotimes	1	SS	5		208	3 -										0			
	to stiff	\bigotimes	2	SS	7			Ē									0				
2		\bigotimes	3	SS	6			Ē								0					
		\bigotimes	4	SS	8	-	206	; -								-	•				
	trace rootlets at 3.1m	\bigotimes	5	SS	8			Ē									0				
4 203.9		\bigotimes					204														
4.6	CLAYEY SILT TO SILTY CLAY TILL: trace sand, trace gravel, brown to reddish brown, very stiff to hard		6	SS	25		204									0					
	gravelly sand seams at 6.0m		7	SS	46		202	<u>_</u>								0					
					50/	-		Ē													
<u>8</u>				<u> </u>	50/ 50mm		200	 											-		
9.0	SANDY SILT: trace clay, brown, wet, dense to very dense		9	SS	50/ (50mr)	- m										0					
			10	SS	52		198										0				
<u>12</u>			. 11	SS	53		196	- - - -									o				
<u>14</u>			12	SS	34	-	194										•				
<u>193.4</u> 15.1 ¹⁶	GRAVELLY SAND: trace silt, brown, wet, very dense		13	SS	64	-									c						
<u>191.8</u> 16.7	SANDY SILT TILL: some clay to clayey, trace gravel, weathered shale fragments, reddish brown,	0 0 0	14	SS	50/ (30mr)	- p	192									0					
190.0	moist, very dense	•• . •	15	SS	50/		100	Ē													
18.6	bedrock at 18.5m END OF BOREHOLE: Notes:				1 <u>00m</u> ŋ	ĥ															
	1) Water encountered at depth of 9.1m during drilling.																				

 $\frac{\text{GROUNDWATER ELEVATIONS}}{\text{Measurement}} \stackrel{\text{1st}}{\underline{\bigvee}} \stackrel{\text{2nd}}{\underline{\bigvee}} \stackrel{\text{3rd}}{\underline{\bigvee}} \stackrel{\text{4th}}{\underline{\bigvee}}$

OJ IEN OJ TU	ECT: Geotechnical Investigation IT: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas M: Geodetic	t, Mil	ton, (NC				DRILI Metho Diamo Date:	LING I od: Ho eter: 2 Apr-2	DATA Ilow Ste 200 mm 21-2023	em Au 3	uger/N	lud Ro	otary		RE	EF. NC).: 2 0.: 2	1-122 0	2-106
LC	SOIL PROFILE	5894	468.2 S	23 Sampl	ES		1	DYNA			NETR	ATION		1						
) ∨ ⊓⊓	DESCRIPTION	TRATA PLOT	UMBER	ΥΡΕ	I" BLOWS 0.3 m	ROUND WATER ONDITIONS	EVATION	2 SHEA O UI	NR ST	RENGT) { (KI + . ×	30 1 Pa) FIELD V & Sensit LAB V					LIQUID LIMIT W _L T (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m ³)	REMAF AND GRAIN S DISTRIBL (%)
.5 .0	FILL: silty sand, trace rootlets,	s.	z 1	⊊ SS	<i>⊊</i> 14	υÖ	Ξ	2 E	0 2	10 60) 8	30 1	00	0	0 2	20 3	30			GR SA S
	brown to brown, moist, compact	\bigotimes					209	 -												
.0		×	2	SS	14		208	Ē						0						
.5	FILL. Gayey Sit, brown, moist, inm	\bigotimes	3	SS	7										0					
.3	FILL: sandy silt, trace to some organics, brown to grey, moist,	Ř	4	SS	5		207	<u> </u>							0					
	loose	\bigotimes	5	SS	5		000								0					
		\bigotimes					200									0				
.8		\bigotimes					205	<u> </u>												
.7	CLAYEY SILT TO SILTY CLAY TILL: sandy, trace to some gravel, brown moist very stiff to hard		6	SS	26										0					
							204	- 												
	300mm silt layer at 6.0m		7	SS	38		203								(>				
			8	SS	50/		202	E						-	0					
					1 <u>30m</u> ŋ															
.5							201	-												
.0	to some gravel, brown, moist to wet, compact to very dense		9	SS	50/ 1 <u>30m</u> 7		200	-							0					
							•													
	silt pockets, wet at 10.7m		10	<u> </u>	64		. 199 :													
				33	04		: - - 198								0					
							: : W. L.	E 197.6 r	m											
	gravelly below 12.2m		11	SS	14		May 0	9, 2023 E	3							o				
							:													
			12	SS	34	::. H :	: 196	E							0					0 81 10
			-				195	<u> </u>												
.3								-												
.2	trace clay, brown, wet, dense to very dense		13	SS	48		194	<u> </u>						├ °						
		0					103	-												
		0.0	14	SS	37		193							0						30 57 1
		6.0	<u> </u>				192	<u> </u>						Ļ						55 07 W

 $\begin{array}{c} \begin{array}{c} 1 \\ \text{Measurement} \end{array} \xrightarrow{1 \\ \text{Measurement}} \begin{array}{c} 2 \\ \underline{\Psi} \end{array} \xrightarrow{2 \\ \text{Measurement}} \begin{array}{c} 3 \\ \underline{\Psi} \end{array} \xrightarrow{4 \\ \underline{\Psi} \end{array} \xrightarrow{4 \\ \underline{\Psi} \end{array}$

	BCONSULTANTS	rogeol	D.		LOG	i of I	BOR	EHO	LE E	8H23	-19									2 OF 2
PROJ CLIEN PROJ	ECT: Geotechnical Investigation T: Neatt Communities ECT LOCATION: 150 Steeles Ave. East	t, Mill	ton, (ON				DRIL Metho Diam	LING I od: Ho eter: 2	DATA low St 00 mm	em Au I	ıger/Mı	ıd Ro	tary		RE	EF. NC).: 2 [.]	1-122	2-106
BHIC	M. Geodelic CATION: See Drawing 1 N 4818758 F	5894	168 2	23				Date.	Apr-2	1-202	5					Er		J.: Z	0	
	SOIL PROFILE		S	SAMPL	ES	ER		DYNA RESIS		DNE PE E PLOT			0	PLASTI		URAL		ż	T WT	REMARKS AND
(m) <u>ELEV</u> DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	ТҮРЕ	"N" <u>BLOWS</u> 0.3 m	GROUND WAT CONDITIONS	ELEVATION	SHE/ 0 U • Q	AR STI NCONF UICK T 20 4	RENG RENG INED RIAXIAI 0 6	0 8 TH (kF - × 0 8	Pa) FIELD VA & Sensitivi LAB VA	NE ity INE 0	W _P WAT	TER CC	0 0 0 0 0 0 1 0 3	w _L → T (%) 30	POCKET PE (Cu) (kPa)	NATURAL UNI (kN/m ³)	GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
-190.9 18.6	SILTY SAND: trace clay, trace gravel, brown, wet, very dense		15	SS	84		191								0					
	SANDY SILT TILL: trace clay, trace gravel, reddish brown, moist / to wet, very dense		16	SS	50/ \30mŋ		190	-							o					
188.6 189:9 21.2	SHALE BEDROCK: Queenston Formation, reddish brown, weathered TCR=100%, SCR=33%, RQD=33%/ Word lowro=22% Maximum bard		R1 R2	RC RC			188	-												
2187.6 22 21.9	Idver thickness=100mm CR=96%, SCR=96%, RQD=75% Hard layers=21%, Maximum hard Idver thickness=50mm TCR=96%, CRD=20%		R3	RC			187													
- 186.1 - 23.4 - 24	Hard layer=17%, Maximum hard layer thickness=50mm TCR=74%, SCR=74%, RQD=74% Hard layer=13%, Maximum hard		R4	RC			186	-												
185.1	laver thickness=75mm END OF BOREHOLE: Notes: 1) 50mm dia. monitoring well installed upon completion. 2) Water Level Readings: Date: Water Level(mbgl): May 9, 2023 11.91 May 9, 2023 11.91																			

	BCONSULTANTS	LTI	D. logy		LOG	6 of	BOR	EH	OLE I	3H23	6-20									1 OF 1
PROJI CLIEN PROJI DATU	ECT: Geotechnical Investigation IT: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas M: Geodetic	st, Mil	ton, (ON				DR Met Dia Dat	i LLING thod: Ho meter: 2 e: Apr-2	DATA Ilow Si 200 mn 28-202	tem Au n 3	uger/M	ud Ro	tary		RE	EF. NC	0.: 21 O.: 2′	1-122 1	2-106
BH LC	CATION: See Drawing 1 N 4818819.3	88 E 5	5895	51.08							NETRA			-				_	_	
	SOIL PROFILE	1	5	SAMPL	ES	ШШ		RES	SISTANC	E PLOT	\geq			PLASTI	C NAT	URAL		ź	r wt	
(m) ELEV DEPTH	DESCRIPTION	STRATA PLOT	JUMBER	-YPE	N" <u>BLOWS</u> 0.3 m	SROUND WAT	ELEVATION	SH ○ ●	EAR ST UNCONI QUICK T	RENG	TH (ki + L ×	Pa) FIELD V/ & Sensitiv LAB V/	ANE vity ANE	WA1			 ₩_ T (%)	POCKET PE (Cu) (kPa)	NATURAL UNI (kN/m ³)	GRAIN SIZE DISTRIBUTION (%)
0.0 203.7	FILL: silty clay, trace sand, trace gravel, brown, moist, firm	X	1	SS	7		204									0				
0.9 2	CLAYEY SILT TO SILTY CLAY TILL: trace sand, trace gravel, trace weathered shale fragements, brown to raddish brown moist stiff		2	SS SS	11 30										0 0					
	to hard		4	SS	30		202								0					
4			5	SS	32										0					
	grey at 4.6m		6	SS	16		200								0					Switched to Mud Rotary
<u>6198.6</u> 6.0	SILT: with gravel/cobble fragments, sand seams, brown, wet, compact to dense		7	SS	31		198 W. L.	 	6 m							0		-		
_8	gravelly sand layer at 7.6m		8	SS	22		May 0	9, 20)23							0				
195.6 9.0	SILTY SAND: trace clay, some gravel, brown, wet, compact coarse sand layer at 9.3m		9	SS	_26			-								o				
193.8 10.8	CLAYEY SILT TILL: sandy, trace gravel, reddish brown, moist, hard		10	SS	39		194							0						
¹² 192.4 12.2	SILT: trace sand, trace gravel, brown, wet, very dense	-iø	11	SS	85		192									•		-		
<u>191.0</u> ₁₄ 13.6	GRAVELLY SAND: trace silt, trace cobbles, brown, wet, very dense		12	SS	62		100								o					
189.4							190	-												
15.3	Formation, reddish brown, weathered END OF BOREHOLE: Notes: 1) 50mm dia. monitoring well installed upon completion. 2) Water Level Readings: Date: Water Level(mbgl): May 9, 2023 7.02				25mm															

B	DS CONSULTANTS	LT	D.		LOG	OF	BOR	ЕНО	LEE	3H23	-21									1 OF 1
		5					Dora													
	T: Neatt Communities							Moth			tom A	ugor/M		tony						
PRO.I	FCT LOCATION: 150 Steeles Ave. Fas	t Mil	ton (ON				Diam	eter 2	00 mn	n n	uger/iv	uu ito	tai y		RF	F NC) · 2·	1-122	2-106
DATU	M [.] Geodetic	, iviii	.011, 1					Date:	Apr-1	9-202	3					FN		0 · 2	2	-100
BHLC	CATION: See Drawing 1 N 4818876.2	8 E 5	8956	62.87				D ato.		0 202	•						10211	0 <i>L</i>	-	
	SOIL PROFILE	0 _ 0	5	SAMPL	.ES			DYNA			NETR	ATION						<u> </u>		
						ШЧ				0 FLOI	\geq	30 1	າດ	PLASTIC LIMIT	MOIS		LIQUID LIMIT	z	IT WT	AND
(m)		20			SN N N	WA-	z	SHFA	R STI		TH (k	Pa)	1	WP	V	N	W_{L}	(KPa)	VL UN	GRAIN SIZE
DEPTH	DESCRIPTION	ITA F	BER		BLOV 0.3		ATIC	O U	NCONF	INED	+	FIELD V & Sensiti	ANE vity				T (0()	Cu) POCK	\TUR∕ (Kh	DISTRIBUTION (%)
205 7		STR/	MUN	ΓΥΡΕ	ż	0 NOC	ELEV	• Q 2	UICK TI 10 4	RIAXIA 0 6	L X 50 8	LAB V. 30 1	ANE DO	10	ER CC) 2	20 3	1 (%) 30		ž	GR SA SI CI
0.0	FILL: clayey silt, trace rootlets,	X	1	SS	14		-	-				1			0					
	brown, moist, stiff to very stiff	\mathbb{X}						-												
204.1		\mathbb{X}	2	SS	24			-												
2 1.6	CLAYEY SILT TO SILTY CLAY	۲ŧ.ľ	3	SS	25		204								0					
	moist, very stiff to hard		1	22	30			-							0					
			-	00	00			Ē												
202.1		μµ	5	SS	46		202	-						•	0					
4 3.0	trace clay, trace to some gravel,	타						-												
	brown to reddish brown, moist to wet, dense to very dense		6	00	52			-												
				- 33	55			-												
6							200	-										1		
	wet below 6.0m		7	SS	50/	1		-								0				Switched to
						n I		-												Mud Rotary
							100	-												
8	moist to wet at 7.6m	말말	8	SS	50/ 130mn	ล	190	-							0					
			1					-												
			L		50			-												
			9	SS	58		196	-							(P				
10								-												
			10	00	10			-												
			10	33	40			-												
12		11					194	-										1		
	some gravel to gravelly below		11	SS	68			-							0					
	12.1111	타						-												
					50/		192	-				ļ								
14			12/		50/ 50mr	n		-							Ŭ					
								-												
190.5	CLAYEY SILT TILL/SHALE		13	SS	50/			-							o					
16	COMPLEX: sandy, trace gravel,				50mŋ	h	190	-												
189.0	reddish brown, moist, hard							-												
16.7	SHALE BEDROCK: Queenston		14	SS	50/			-												
17.3	weathered				50mm															
	END OF BOREHOLE:																			
	1) Water at the depth of 9.1m																			
	during drilling.																			
																		1		
																		1		
																		1		
																		1		
																		1		
																		1		

	BS CONSULTANTS	Irogeo	D.		LOG	G OF I	BOR	ЕНС	DLE	BH2	23-2	2									1 OF 1
PROJI CLIEN PROJI DATU	ECT: Geotechnical Investigation T: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas M: Geodetic	t, Mil	lton,	ON 8 71				DRI Meti Diar Date	LLING nod: H neter: e: Apr	DAT ollow 200 r -24-20	A Sterr nm 023	n Aug	jer/Mu	id Rot	ary		R	EF. NC).: 2 [,] 0.: 2	1-122 3	2-106
DITEO	SOIL PROFILE	2.00	500-1	SAMPL	.ES			DYN				TRAT	ION								DEM DIKO
(m) ELEV DEPTH	DESCRIPTION	TRATA PLOT	IUMBER	ЧРЕ	V" BLOWS	ROUND WATER CONDITIONS	LEVATION	SHE	20 EAR S UNCON QUICK			80 (kPa + ^{FI} × L/	10 10 10 10 10 10 10 10				URAL STURE ITENT W O ONTEN		POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m ³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
210.4	FILL: clayey silt, trace rootlets,	\bigotimes	2	⊢ SS	₽ 23	00	ш 210	-	20					0	•			50	_		GR SA SI CL
	trace organics, trace cobbles, brown, moist, firm to very stiff	\bigotimes		22	7			-													
	mixed with asphalt above 0.8m	\bigotimes		00	7																
2	black staining silty agend rock nings	\bigotimes		55	/		208	-									0				
	at 2.3m	\bigotimes	4	SS	6			-								0					
		\bigotimes	5	SS	9			-								0					
4		\bigotimes					206	-	-		_	_						-			
	trace organics, grey at 4.6m	\bigotimes	6	SS	6			-								0					
6		\bigotimes																			
<u>204.1</u> 6.3	CLAYEY SILT TO SILTY CLAY TILL: sandy, trace gravel, brown, moist to very moist very stiff to hard		7	SS	32	-	204	-								0			-		Switched to Mud rotary
	moist to very moist, very still to hard				22	-		-													
8				33	33		202	-								0			-		
			9	SS	39			-								∘⊢	-1				7 24 49 20
<u>10</u>							200	-													
	greyish brown at 10.7m		10	SS	28											c	>				
								-													
¹² 198.2 12.2	SILT: trace sand, trace clay,	16	11	22	11	-	198	-	_												
	greyish brown, wet, compact			33				-													
<u>14</u>	some sand to sandy at 13.7m		12	SS	15		196	-									0				
195.2	GRAVELLY SAND: some silt		12	66	50/	-		-													
<u>16</u>	trace clay, brown, wet, very dense	o ()	, 13 \$	33	1 <u>00mr</u>	n		-													
							194	-	-		-										
		<u>م</u> ہ	14	SS	50/ 50mr] M		-								0					
2-2-2		a.O.																			
SDT 3	silty at 18.3m		15	SS	70		192	-								0					25 38 32 5
DS.D		0. 0				1		-													
<u>190.6</u> ບ:≌ 19.8	-silty sand pockets at 19.6m	0. C	16	SS	50/			-								0					
22-106	brown, wet, very dense				1 <u>50m</u> r	ĥ	190	-													
¹ 21.3 21.3 21.8 21.8	SANDY SILT TILL: trace clay, trace gravel, reddish brown, very	: •	17,	ss ,	50/ 30mr	- m		-								0					
₹ 1<u>88.0</u> - 22.1	SHALE BEDROCK: Queenston		18,	ss ,	50/				+										┢		
06-2021	Aormation, reddish brown, weathered END OF BOREHOLE:				young																
DIS SOIL L	Notes: 1) Water at depth of 12.2m during drilling.																				





	BS CONSULTANTS Geotechnical & Environmental & Materials & Hyd	Irogeo	D.		LOG	G OF I	BOR	EH	OLE	BH2	23-23	3								1 OF 1
PROJ CLIEN PROJ DATU	ECT: Geotechnical Investigation IT: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas IM: Geodetic	t, Mil	lton, (ON				DRI Met Dia	LLING hod: H meter: e: Api	DAT Iollow 200 m	A Stem / nm 023	Auger/I	Mud Rc	otary		RE	EF. NC).: 2 [,]).: 2 [,]	1-122 4	2-106
BH LC	OCATION: See Drawing 1 N 4818808.8	9 E 5	5896	13.71				-										-	-	
(m) ELEV DEPTH	SOIL PROFILE	RATA PLOT	JMBER	SAMPL	" BLOWS 0.3 m	ROUND WATER DNDITIONS	EVATION	DYN RES SHI O	20 EAR S QUICK	CONE F CE PLC 40 TREN TREN TRIAX	60 GTH (AL >	RATION 80 (kPa) FIELD Sens CLAB	100 VANE itivity VANE	PLASTI LIMIT W _P I		URAL STURE ITENT W O	LIQUID LIMIT WL T (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m ³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
204.7		Lo v	ž	F.	Z.	ΰŭ	Ш		20	40	60	80	100	1	0 2	20 3	30			GR SA SI CL
20 0.9 203.2 1.5 2	GRANULAR FILL: 50mm FILL: silty clay, trace rootlets, trace gravel, brown, moist, firm to stiff black organic matter at 0.8m CLAYEY SILT TO SILTY CLAY TILL: trace sand, trace gravel, brown to reddish brown, moist, very stiff ot hard		1 2 3 4	SS SS SS SS	6 9 15 30		204								0	0		-		
4	silt pockets, grey at 4.9m		5	SS SS	33 31		200	- - - - - - - - - - - - - - -							0					Switched to Mud Rotary
<u>6</u> <u>197.1</u> 0 7.6	gravelly sand layer at 6.1m		7	SS	64		198											-		10 74 12 4
<u>195.3</u> 9.4	trace clay, reddish brown, wet, dense to very dense gravelly sand pocket at 9.1m SANDY SILT TILL: some clay,	10	9	SS	63		196							c				-		10 74 12 4
194.0 10.7	trace gravel, reddish brown, very moist, very dense CLAYEY SILT TILL: some sand to sandy, trace gravel, reddish brown, moist, hard		10	SS	50/ (30mŋ	1	194								>			-		
<u>192.5</u> 12.2	SILT: trace sand, trace clay, trace gravel, brown, wet, dense to very dense	<u>_</u> ,		SS	50/ \00mr	ı	192									0		-		
14 189.5	CLAVEY SILT TILL: sandy trace		12	SS	45		190								0	0		-		
16.2 <u>16</u> 188.7 186.0 16.1 <u>187.4</u> 17.3	gravel, trace shale fragments, reddish brown, moist, hard SHALE BEDROCK: reddish brown, weathered T CR=79%, SCR=69%, RQD=51% Hard lavere=6% Maximum bard		14 14	SS RC	75mm 50/ 150mm	1	188								o			-		
185.9 185.3 185.3	TCR=93%, SCR=93%, RQD=75% Hard layers=16%, Maximum hard layer thickness=50mm TCR=100%, SCR=91%, RQD=60%		R2 R3	RC RC			186											-		
74.4	Hard layers=25%, Maximum hard layer thickness=50mm END OF BOREHOLE: Notes: 1) Water at depth of 7.6m during drilling.																			

	Geotechnical & Environmental & Materials & Hy	drogeo	D.		LOG	6 of	BOR	EHC)LE I	BH23	-24									1 OF 1
PROJE CLIEN PROJE DATUI	ECT: Geotechnical Investigation T: Neatt Communities ECT LOCATION: 150 Steeles Ave. Ea: M: Geodetic	st, Mil	lton, (ON				DRIL Meth Dian Date	LING I od: Ho neter: 2 : Apr-	DATA bilow Si 200 mn 14-202	tem A n 3	uger/N	lud Ro	otary		R	EF. NO	D.: 2 ⁻ 0.: 2	1-122 5	2-106
BH LO	CATION: See Drawing 1 N 4819063.	77 E 5	58950	01.56	FS	<u> </u>	1	DYN		ONE PE	NETR	ATION		1					<u> </u>	
(m) <u>ELEV</u> DEPTH	DESCRIPTION	FRATA PLOT	JMBER		m BLOWS	ROUND WATER DNDITIONS	EVATION		STANC 20 AR ST INCONI 201CK 1	E PLOT 40 6 FINED FINED	50 8 TH (kl + L ×	B0 1 Pa) FIELD V & Sensit LAB V	00 /ANE ivity /ANE	PLAST LIMIT W _P I WA		TURAL STURE NTENT W -0 ONTEN		POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m ³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
206.4 0.0	FILL: clayey silt mixed with sand	°.	2 1	⊢ SS	<i>⊊</i> 16	υÕ	□ 206	; 	20 4	40 E	50 8	80 1	00	•	10 :	20	30	_		GR SA SI C
205.6 0.8	and gravel, brown, moist, very stiff CLAYEY SILT TO SILTY CLAY TILL: sandy, trace gravel, brown, moist, very stiff to bard		2	SS	18		200	-							0					
² 204.1			3	SS	30/ 1 <u>30m</u>		204	-							0					
2.5	trace clay, trace gravel, brown, moist, dense to very dense		4	SS SS	50 43			-							0	0				
4 201.9 4.5	SILT: trace clay, trace sand,			66	22		202	- - - -												
<i>2</i> 00.4	brown, wet, dense			33	32			-												
6.0	CLAYEY SILT TILL: sandy, trace gravel, brown, moist, hard		7	SS	65	- 	200								•					
<u>8</u>	wet gravelly silty sand at 7.6m boulder at 7.8m		8	SS	50/ 1 <u>30m</u> ŋ	f	W. L. May 0 198	199.2 9, 202	m :3									_		
9.0	SANDY SILT TILL: some clay, trace gravel, brown to reddish brown, wet, very dense		. 9	SS	64		100								0					
195.8	CLAYEY SILT TILL: some sand to sandy, some gravel, trace weathered shale fragments, greyish brown moist bard		10	SS	85		190	-							0					
12	gravelly at 12.2m		. 11	SS	52		194	-							<u></u> न	-1				20 19 45 1
<u>14</u>	reddish brown below 13.7m		12	SS	56		192	- - - - -							0					
191.2 1 95.2 1 96.6 ¹⁶ 15.8	SHALE BEDROCK: Queenston		, 13 R1	SS RC	50/ 25mm			-												
189.1	TCR=62%, SCR=28%, RQD=23% Hard layer=28%, Maximum hard layer thickness=150mm		R2	RC			190													
17.3 18 187 7	TCR=90%, SCR=65%, RQD=40% Hard layer=18%, Maximum hard layer thickness=75mm TCR=73% SCR=70% POD=47%		R3	RC			. 188													
18.7	Hard layer=11%, Maximum hard layer thickness=50mm END OF BOREHOLE:																			
	Notes: 1) 50mm dia. monitoring well installed upon completion. 2) Water Level Readings:																			
	Date: Water Level(mbgl): May 9, 2023 7.17																			

	Geotechnical ♦ Environmental ♦ Materials ♦ Hyd	lrogeo	logy		LOG	GOF	BOR	EHO	LE E	BH23	-25									1 OF 1	
	ECT: Geotechnical Investigation							DRILI	LING E	DATA	om Ai	iger/M	ud Ro	tarv							
PROJ	FCT LOCATION: 150 Steeles Ave. Fas	t Mil	ton (ON				Nietriod: Hollow Stem Auger/Mud Rotary								REF NO : 21-122-106					
DATU	IM: Geodetic	.,	,					Date: Apr-19-2023							EP. NO.: 21-122-100						
BHLC	DCATION: See Drawing 1 N 4818966.9	9 E 5	58957	74.67																	
	SOIL PROFILE		5	SAMPL	ES	~		DYNA RESIS	MIC CO TANCE	DNE PE E PLOT		ATION			NAT	URAL			F	REMARKS	
(m)		F				ATER		2	0 4	0 6	0 8	30 10	00	LIMIT	C MOIS	TURE	LIQUID	a) BEN.	NTN (AND	
ELEV	DESCRIPTION	A PLO	~		3 m	NOI	NOL	SHEA	R STI	RENG	TH (ki	Pa)		W _P	\	N 0	WL	CKET Su) (kP	RAL U (kN/m ³	DISTRIBUTION	
DEPTH		RAT/	IMBE	ЪЕ			EVA ⁻	0 UI • QI	UICK T	RIAXIAI	+ - ×	& Sensiti LAB V	vity ANE	WA	TER CO	ONTEN	Г (%)	8 S	NATU	(%)	
206.1		ST	Z	È	ŗ	9 N	Ш	2	0 4	0 6	s 0	30 10	00	1	0 2	20 3	0			GR SA SI CL	
0.0	stiff	\bigotimes	1	SS	15			-								0					
204 5		\bigotimes	2	SS	17]		-							0						
204.5 2 1.6	CLAYEY SILT TILL: sandy, some		3	SS	25			-							0						
	gravel, brown, moist, very stiff			99	20		204	-													
203.1	SANDY SILT: trace clay trace	iø,	Ē	00	2.5			-													
0.0	gravel, brown, moist, dense to very		5	SS	38			-							0						
4	uense						202	-													
			6	SS	50/	1		-							0						
					<u>30m</u>																
<u>200.1</u> 6.0	CLAYEY SILT TILL: sandy, trace		-	<u> </u>	50/		200								_					Switched to	
	gravel, brownish grey, moist, very dense	H	⊢	55	100mŋ	n		-							0					mud rotary	
								-													
8	brown at 7.6m	PH.	8	SS	50/	1	108	-							o						
					<u>(30111</u>)		190	-													
<u>197.1</u> 9.0	SILT: trace clay, brown, wet, very	- Filler	9	SS	50/			-								•					
10	dense		Ľ		30mr	h		-													
195.5							196	-													
10.6	SANDY SILT TILL: some clay, trace to some gravel, brown, wet.		10	SS	50/			-							0						
	very dense				Sound			-													
12			. 11		50/	-	194	-							0			-			
			<u> </u>		30mŋ	h		-													
			1					-													
14	reddish brown below 13.6m	. .	12	ss /	50/ 75mm		192	-							0						
			1					-													
190.8	SHALF BEDROCK: Oneension	<u> </u> .	13	SS /	50/			-													
15.4	Formation, reddish brown,				75mm																
	END OF BOREHOLE:																				
	Notes: 1) Water at depth of 9.1m during																				
	drilling.																				
		1	1							1		1	1	1			1	Í.	I I		

PROJECT Cadedonical Investigation CLENT Noat Community DERLING ALL DERLING ALL <thderling all<="" th=""> DERLING A</thderling>	B	Geotechnical & Environmental & Materials & Hyperbolic	LT[drogeo	D. logy		LOG) of	BOR	eho	LE BH	23-	26									1 OF 1	
LEHE: Inst comunities Metric Hold Stam Auge/MultiPlane IRE NO. 2:12:22:03 PROJECT LOCATION - BROWN 1: 44) IRRE OF EXPECT IN IRE NO. 2:12:22:03 IRE NO. 2:12:22:03 INTERCENT NO. BROWN 1: 44) IRRE OF EXPECT IN IRE NO. 2:12:22:03 IRE NO. 2:12:22:03 INTERCENT NO. BROWN 1: 44) IRRE OF EXPECT IN IRE NO. 2:12:22:03 IRE NO. 2:12:22:03 INTERCENT NO. BROWN 1: 44) IRRE OF EXPECT IN IRE NO. 2:12:22:03 IRE NO. 2:12:22:03 INTERCENT NO. BROWN 1: 44) IRRE OF EXPECT IN IRE NO. 2:12:22:03 IRE NO. 2:12:22:03 INTERCENT NO. IRRE OF INTERCENT INCOMENT INFORMATION INFORM	PROJI	ECT: Geotechnical Investigation							DRIL	LING DA	ГА											
PROJECT LOCATION: 150 Seleck Are. East, Miton, ON Darweler: 200 mm BH LOCATION: 500 Brander: 2142-168 Darweler: 200 mm BH LOCATION: 500 Drawing 1: M 4918980.04 E 590942 14 SOLI, PROFILE SOLI, PROFILE SOLITING SOL	CLIEN	T: Neatt Communities							Metho	od: Hollov	v Ste	m Auge	er/Mud	Rota	ary							
DATUM Geodelic Date: Arr-2-2023 ENCL NO. 27 BULCATOR: See Driving 1-1468806.04 E 800-04 E OLIPECTIE SOLI PROFILE	PROJI	ECT LOCATION: 150 Steeles Ave. Eas	st, Mil	ton, (ON				Diam	eter: 200	mm						R	REF. NO.: 21-122-106				
BH LOCKTON: See Drawing 1 M 481880.4E 50842.14 TELAN (m) OESCRIPTION 3 Solid PROFILE Solid Profile Total Profile Total Solid Profile Total Solid Profile Total Sol	DATU	M: Geodetic							Date:	Apr-20-	2023						E	NCL N	0.: 2	7		
SUL PROPILE SAMPLES Provide Propile	BH LO	CATION: See Drawing 1 N 4818868.0	04 E 5	58964	42.14		-	-			PEN		ON						-	<u> </u>		
(m) DESCRIPTION (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m)		SOIL PROFILE	1	5	Sampl	.ES	۲. ۲.		RESIS	TANCE P	LOT	\geq	_	F	PLASTI		URAL	LIQUID		¥	REMARKS	
EECM 2013 DESCRIPTION Image: Big	(m)		LOT			S L	NS	z				80 1	100		W _P	CON	TENT N	WL	ET PEN (kPa)	(m ³)	GRAIN SIZE	
20.0 Fille 2 3 2 3 2 5 2 0 000000000000000000000000000000000000	ELEV DEPTH	DESCRIPTION	TAP	ËR		3LOV		ATIO			ED	п (кра, + ^{FIE} & S) LD VANE ensitivity				o—		DOCKE	TURAI (KN	DISTRIBUTION	
20.0 PLL: all price day. Taxe arrows brown, molet, staff 1	004.0		STRA	NUME	LYPE	ž	SROL	ELEV	QUICK TRIAXIAL X LAB VANE 20 40 60 80 100					E	10 20 30					¥		
203.4 model, stiff 2 3	204.3	FILL: silty clay, trace gravel, brown,	X	1	SS	10		204	-												GR SA SI UL	
U1 Tull is sold: I U sell I V tell 2 2 3	203.4	moist, stiff	X					201	-													
1 1 <th1< th=""> 1 1 1 1<td>0.9</td><td>TILL: sandy, trace gravel, trace</td><td></td><td></td><td>SS</td><td>34</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td></td><td></td><td></td><td></td><td></td></th1<>	0.9	TILL: sandy, trace gravel, trace			SS	34			-							0						
1908 1008	2	rock fragment, brown, moist, hard		3	SS	38			-							0						
4 9.8 SILTY SAND: some gravel to gravelly, trace day, krown, moist, compact to dense 6 SS 46 4 sit pockets at 6.1m 7 SS 22 0 0 105.8 SANDY Sixt Tuble: brace day, known, moist, at 8 85 46 105.8 SANDY Sixt Tuble: brace day, known, moist, at 8 85 40 105.8 SANDY Sixt Tuble: brace day, known, moist, served gravelly, red ense 8 85 40 105.8 SULTY SAND: frace day, kaca gravelly, red sixt any brace day, kaca gravelly, red sixt any brace day, kaca max 10 SS 49 102.7 CLAYEY SILT TULE: brace day, kaca gravelly, red sixt any brace day, kaca max 11 SS 50// 1134 11 103.7 SLLY SAND: frace day, kaca max 11 SS 50// 1134 11 SS 50// 1134 104.7 11 SS 50// 1134 11 SS 50// 1134 11 105.8 Law max 11 SS 50// 1134 11 SS 50// 1134 105.7 May max 11 SS 50// 1134 11 SS 50// 1134 105.7 May max 11 SS 50// 1134 11 11 105.7 May max				4	SS	45		202	-							0			1			
4 0.03 SULTY SAND: some gravel to compact to dense 6 58 45 4. gravely to colay, twom, molet, compact to dense 7 SS 220 0 0 198.3 - - - - - - - 198.3 - - - - - - - 198.4 - - - - - - - - 198.5 - <td></td> <td></td> <td></td> <td>5</td> <td>SS</td> <td>33</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ο</td> <td></td> <td></td> <td></td> <td></td> <td></td>				5	SS	33			-							ο						
199.8 SulTY SAND: some gravel to gravel, toor, moist, compact to dense 2 3	4			<u> </u>					-													
Image: series of the dense Image: series of the dense <th< td=""><td>199.8</td><td>SILTY SAND: some gravel to</td><td><u> </u></td><td></td><td></td><td></td><td></td><td>200</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td></th<>	199.8	SILTY SAND: some gravel to	<u> </u>					200											1			
a. compare to dense a. sit pockets at 6.1m 106.8 ADD: trace sitt, some gravel, brown, wet, dense a. a. 190. SADD: trace sitt, some gravel, brown, wet, dense 90. SADD: trace clay, trace gravel, greyish brown, wet, dense 191. 192. 192. 10. 193.7 TLY SAND: trace clay, trace gravel, greyish brown, wet, dense 192.1 10. 193.7 11. 193.8 10. 193.7 11. 193.8 10. 194.1 11. 195.8 10. 194.1 11. 195.8 10. 194.1 11. 195.8 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10. 195.9 10.		gravelly, trace clay, brown, moist,		6	SS	45			-						0							
ill pockets at 6.1m 7 7 198 0 0 198 0 0 0 198 0	6	compact to dense]					-													
196.8 197.6 SAND: trace sitt, some gravel, # 1 <th1< th=""> 1 <th1< th=""> <th1< th=""></th1<></th1<></th1<>		silt pockets at 6.1m		7	SS	22	-	198							0				-			
196.8 SAND: trace silt, some gravel, some gravel, some gravel, some, wet, dense 8 SS 40 186 195.3 SANDY SILT TILL: trace clay, some gravel, dense 9 SS 7.5 186 0 0 190.3 SANDY SILT TILL: trace clay, some gravel, dense 10 9 SS 7.5 0 0 0 193.7 THY SAND: trace clay, trace gravel, dense 10 85 49 194 0 0 0 193.7 COMPLEX: sandy, trace gravel, trace gravel, dense 10 85 49 194 0 0 0 192.7 12.1 CLAYEY SILT TILL/SHALE 10 SS 49 192 193 193 193 193 193 193 193 193 193 193 <							<u>⊻</u> 	W. L.	197.6	m												
Image: state in the second state in the sec	196.8 7.5	SAND: trace silt, some gravel,						. Iviay 0	9, 202. F	3												
195.3 SANDY SILT TILL: trace clay, trace day, trace d	8	brown, wet, dense		8	SS	40		196	_							0						
9.0 SANDY SILT TILL: trace clay, trace gravel, brown, moist to wet, very dense 0 9 SS 75 193.7 10.6 SILTY SAND: trace clay, trace gravel, greyish brown, wet, dense 10 SS 49 110.6 SILTY SAND: trace clay, trace gravel, greyish brown, wet, dense 10 SS 49 121.7 CLAYEY SILT TILL/SHALE COMPLEX: sendy, trace gravel, redish brown, moist, hard 11 SS 50/ 138.8 FUD OF BOREHOLE: Notes: 11 SS 50/ 192 0 10.5 upger refusal at possible bedrock at y (f5mn) 12 SS 50/ 192 13.8 FDO OF BOREHOLE: Notes: 10 SS 50/ 10 10 13.8 PAD OF BOREHOLE: Notes: 13 10 10 10 10 10 10. Date: Wate Level (mbg1): May 9, 2023 6.69 10 <t< td=""><td>195.3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	195.3								-													
193.7 10.6 SLTY SAND: trace clay, trace gravel, greyish brown, wet, dense gravel, greyish brown, wet, dense clay, trace gravel, greyish brown, moist, hard 10 SS 49 110.6 SLTY SAND: trace clay, trace gravel, greyish brown, wet, dense clay, trace gravel, greyish brown, moist, hard 11 SS 50/ 12.1 CLAYEY SILT TILL/SHALE COMPLEX: sandy, trace gravel, redish brown, moist, hard 11 SS 50/ 190.5 Till SS 30mn 192 192 192 190.5 Till SS 50/ 192 192 192 190.5 Till SS 50/ 192 192 192 10.5 Till SS 50/ 192 192 192 10.5 Till SS 50/ 192 192 192 11.8 Till SS 50/ 100 192 192 13.8 Till SS 50/ 100 192 192 192 13.8 Till SS 50/ 100 100 100 100 100 13.8 Till SS 50/ Till SS 100 100 100 100	9.0	SANDY SILT TILL: trace clay, some gravel, brown, moist to wet.		9	SS	75	間		-							o						
193.7 ITTY SAND: trace clay, trace gravel, grave	<u>10</u>	very dense							Ē													
gravel, greyish brown, wet, dense gravel, greyish brown, wet, dense 11 0 SS 49 12.1 CLAYEY SILT TILL/SHALE COMPLEX: sandy, trace gravel, reddish brown, moist, hard 19.2	193.7 10.6	SILTY SAND: trace clay trace						. 194	-													
129.2 11 SS 507 12.1 CLAYEY SILT TILL/SHALE COMPLEX: sandy, trace gravel, reddish brown, moist, hard 11 SS 507 190.5 ugger refusal at possible betricok at V3.8m 12 SS 507 13.8 transmitter for the formation of the possible betricok at V3.8m 12 SS 507 13.8 transmitter for the possible betricok at V3.8m 12 SS 507 13.8 transmitter for the possible betricok at V3.8m 12 SS 507 13.8 transmitter for the possible betricok at V3.8m 12 SS 507 13.8 transmitter for the possible betricok at V3.8m 12 SS 507 13.8 transmitter for the possible betricok at V3.8m 12 SS 507 13.8 transmitter for the possible betricok at V3.8m 12 SS 107 13.8 transmitter for the possible betricok at V3.8m 12 SS 107 14 transmitter for the possible betricok at V3.8m 12 SS 107 14 transmitter for the possible betricok at V3.8m 13 14 14 14 <t< td=""><td></td><td>gravel, greyish brown, wet, dense</td><td></td><td>10</td><td>SS</td><td>49</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td>(</td><td>þ</td><td></td><td></td><td></td><td></td></t<>		gravel, greyish brown, wet, dense		10	SS	49			-							(þ					
12.1 CLAYEY SILT TIL/SHALE comPLEX: sandy, frace gravel, reddish brown, moist, hard 11 SS 50/ 30mp 192 190.5 auger refusar at possible bedrock av 3.8m 12 SS 30/ 50mp 102 13.8 auger refusar at possible bedrock av 3.8m 12 SS 50/ 50mp 10 100.5 1.5 50mp 12 SS 50/ 50mp 13.8 auger refusar at possible bedrock av 3.8m 12 SS 50/ 50mp 10.5 1.5 50/ 50mp 12 SS 50/ 50mp 13.8 auger refusar at possible bedrock av 3.8m 12 SS 50/ 50mp 14.8 SS 50/ 50mp 12 SS 50/ 50mp 15.0 Date: Water Level (mbgl): May 9, 2023 6.69 1 <	12192.2								Ē													
reddish brown, molst, hard	12.1	CLAYEY SILT TILL/SHALE COMPLEX: sandy, trace gravel.		11	SS	50/	_	192	-					_		0						
190.5		reddish brown, moist, hard					,		E													
13.3 m EDD OF BOREHOLE: Notes: 1) 50mm dia. monitoring well installed upon completion. 2) Water Level Readings: Date: Water Level(mbgl): May 9, 2023 6.69	190.5	vauger refusal at possible bedrock at/		1	<u> 33 </u>	<u> </u>			-							<u>^</u>						
Notes: 1) 50mm dia. monitoring well installed upon completion. 2) Water Level Readings: Date: Water Level(mbgl): May 9, 2023 6.69	13.0	13.8m				75mm	A															
1) Summ dia montoring well installed upon completion. 2) Water Level Readings: Date: Water Level(mbgl): May 9, 2023 6.69		Notes:																				
2) Water Level (mbgl): May 9, 2023 6.69		1) 50mm dia. monitoring well installed upon completion.																				
Date: Water Level(mbgl): May 9, 2023 6.69		2) Water Level Readings:																				
		Date: Water Level(mbgl): May 9, 2023 6.69																				

Appendix B: Hydraulic Conductivity Analysis









				Slug Test	Analys	is Report						
				Project: Hydrogeological Investigation								
				Number: 21-122-106								
				Client: Neatt Communities								
Location: 150 Steeles Aver	nue East	Slug Test: B	H23-11			Test Well: B	H23-11					
Test Conducted by: AQ						Test Date: 5	/9/2023					
Analysis Performed by: MJ		Hvorslev				Analysis Dat	e: 5/18/2023					
Aquifer Thickness: 5.00 m												
			Ti	me [s]								
0	2	4	1	(6 		8	10				
	*											
		*										
0.10		*										
				*								
O Y /					*							
						*						
0.01												
						;	*					
0.00												
Calculation using Hvorslev	1											
Observation Well	Hydraulic Cond	uctivity										
	[m/s]											
BH23-11	2.59 × 10 ⁻⁴											



			Slug Test Analysis Report								
			Project: Hydrogeological Investigation								
			Number: 21-122-106								
			Client: Neatt Communities								
Location: 150 Steeles Aver	nue East	Slug Test:	BH23-15			Test Well: B	H23-15				
Test Conducted by: AQ						Test Date: 5	/9/2023				
Analysis Performed by: MJ		Hvorslev				Analysis Dat	e: 5/18/2023				
Aquifer Thickness:											
			т	ime [s]							
0	480	9	960		1440	19	20	2400			
10.00											
			_								
1.00											
Q 0.10											
0.01											
								•			
			_								
0.00-											
Calculation using Hvorslev											
Observation Well	Hydraulic Cond	uctivity									
D1100.45	[m/s]										
BH23-15	7.98 × 10										
					Slug T	est An	nalysi	s Report			
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					Project	Hydro	ogeolo	ogical Investig	ation		
					Numbe	r: 21-12	22-106	3			
					Client:	Neatt	t Com	munities			
Location: 15	50 Steeles Aven	ue East	Slug T	est: BH23	-16			Test Well: Bl	H23-16		
Test Condu	cted by: AQ							Test Date: 5/	/9/2023		
Analysis Pe	rformed by: MJ		Hvorsl	ev				Analysis Dat	e: 5/18/20	23	
Aquifer Thio	kness:										
					Time [s]						
C)	1400		2800		4200)	56	00	7000)
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1.00											
											
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0.10											
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								Y			
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0.00											
Calculation us	sing Hvorslev										
Observation V	Vell	Hydraulic Cond	uctivity								
		[m/s]									
BH23-16		3.42 × 10 ⁻⁷									



					Slug Test	Analys	is Report		
					Project: Hy	/drogeol	ogical Investig	ation	
					Number: 21	-122-10	6		
					Client: Ne	eatt Com	munities		
Location: 15	0 Steeles Aver	nue East	Slug T	est: BH23-2	0		Test Well: B	H23-20	
Test Conduc	cted by: AQ						Test Date: 5	/9/2023	
Analysis Per	rformed by: MJ		Hvorsl	ev			Analysis Dat	e: 5/18/2023	
Aquifer Thic	kness:								
					Time [s]				
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Calculation us	sing Hvorslev	Lhudneydia Car							
Observation w	ven								
BH33 20		2.02×10^{-5}							
<u>БП23-20</u>		2.92 × 10							





Appendix C: PW1 Well Log, and Grain Size Curves

																			• •
CT: 150 Steeles Ave. East								DAT.	A							FIG	U	۲E	C-1
	•						Diamata	· 150m	m naiy						סכו	- NO		1 100	106
CT LOCATION: 150 Steeles Ave. Eas	ι						Dameter	- 150m	103 111							NU).: ∠' ⊃ . 4	1-122	-106
							Dale. Ol	JV 10/20	123						ENG		J.: 1		
		6		EQ			Sc		d Sn		anor		1						
SOIL PROFILE		3		E3	н.				u Spa	ace v		>	PLAS	FIC NAT	URAL STURE		-	۲Ŵ-	REMARKS
	LOT			<u></u>	NATI NS	z	г (р	pm)		((ppm)		Wp	CON	NTENT W	WL	ET PEI kPa)	LINU ش	GRAIN SIZE
DESCRIPTION	TA PI	ËR		LOW 0.3 n	ND /	VTI0		>			>0				o		NOOK NOOK	IURAI (KN/	DISTRIBUTIO
	TRA.	UMB	ΥPE	ш 5	ROL	LE (10 00	20 4		10	20 20		WA	TER CO		T (%)	Ľ	¥	(70)
SANDY CLAY dark brown	S N P	z	F	4	00	ш 206	10 20	30 4	.0		20 30	40			20 3				GR SA SI
	XX					200	-												
						204	-					_		-					
							-												
SANDY CLAY some gravel, light																			
brown							E												
						202													
						-Bonto	hite												
						200	-												
brown						200	-												
					¥	198						_	-	-					
						W. L. May 18	97.9 mas 3, 2023	sl -											
GRAVEL few sand, few	βų V					,	É I I												
silt,brown-grey,wet.	5C																		
	0					196													
GRAVEL few sand, few	00																		
silt, grey, wet. coarse gravels increase towards bottom.	5°C					04 6						10.60							
	0					-3 π. n 194		Fig. K	-rubbe	er pack		-40 π)							
	0				目		-												
	0																		
	00					-10 ft c	F f 20-SLO	F 6inch	-teles	 coping	Stain	less S	l teel V	 Vire V	 Vouno	l I-SSV	NW :	I I scree	en (40-50 ft)
	Po					192				\rightarrow	+								
	٥Ô																		
QUEENSTON SHALE	0																		
						190	-												
						199													
END OF BOREHOLE									T										
Notes :																			
1 Soil descriptions based on drillers																			
field observation.																			
2. vvater level : 8.3 mbgs- May 18,2023													1						
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																			1
	ECT: 150 Steeles Ave. East T: Neatt Communities ECT LOCATION: 150 Steeles Ave. Eas M: Geodetic ICATION: N 4818858 E 589307 SOIL PROFILE DESCRIPTION SANDY CLAY dark brown SANDY CLAY some gravel, light brown SANDY CLAY some gravel, dark brown GRAVEL few sand, few silt,brown-grey,wet. GRAVEL few sand, few silt,brown-grey,wet. GRAVEL few sand, few silt,brown-grey,wet. QUEENSTON SHALE END OF BOREHOLE Notes : 1. Soil descriptions based on drillers field observation. 2. Water level : 8.3 mbgs- May 18,2023	ECT: 150 Steeles Ave. East T: Neatt Communities ECT LOCATION: 150 Steeles Ave. East M: Geodetic CATION: N 4818858 E 589307 SOIL PROFILE DESCRIPTION SANDY CLAY dark brown SANDY CLAY some gravel, light brown SANDY CLAY some gravel, dark brown GRAVEL few sand, few silt, brown-grey, wet. GRAVEL few sand, few silt, grey, wet.coarse gravels increase towards bottom. QUEENSTON SHALE END OF BOREHOLE Notes : 1. Soil descriptions based on drillers field observation. 2. Water level : 8.3 mbgs- May 18,2023	ELT: 150 Steeles Ave. East T: Neatt Communities ECT LOCATION: 150 Steeles Ave. East M: Geodetic ICATION: N 4818858 E 589307 SOIL PROFILE DESCRIPTION JDESCRIPTION SANDY CLAY dark brown SANDY CLAY some gravel, light brown GRAVEL few sand, few silt, brown-grey,wet. GRAVEL few sand, few silt, grey,wet.coarse gravels increase towards bottom. QUEENSTON SHALE I. Soil descriptions based on drillers field observation. 2. Water level : 8.3 mbgs- May	ELT: 150 Steeles Ave. East T: Neatt Communities ECT LOCATION: 150 Steeles Ave. East M: Geodetic CATION: N 4818858 E 589307 SOIL PROFILE DESCRIPTION DESCRIPTION SAMPY CLAY dark brown SANDY CLAY some gravel, light SANDY CLAY some gravel, dark GRAVEL few sand, few Sill, prey,wet. GRAVEL few sand, few Sill, prey,wet. OU GRAVEL few sand, few Sill, prey,wet.coarse gravels increase SUBERSTON SHALE OUEENSTON SHALE Vater level : 8.3 mbgs- May 1. Soil descriptions based on drillers field observation. 2. Water level : 8.3 mbgs- May 1. Water level : 8.3 mbgs- May	EU : 100 Steeles Ave. East T: Neatt Communities ECT LOCATION: 150 Steeles Ave. East M: Geodetic CATION: N 4818858 E 589307 SOIL PROFILE DESCRIPTION BESCRIPTION CATORY dark brown SANDY CLAY dark brown SANDY CLAY some gravel, light brown GRAVEL few sand, few silt, prown-grey, wet. GRAVEL few sand, few silt, prown-grey, wet. COMPARED COARSE gravels increase towards bottom. CARVEL few sand, few silt, prown-grey, wet. CARVEL few sand, few silt, prown-grey, few	EU : 10 Steeles Ave. East T: Neatt Communities ECT LOCATION: 10 Steeles Ave. East M: Geodetic CATION: N 4818858 E 589307 SOL PROFILE SAMPLES DESCRIPTION UP IN INFORMATION SANDY CLAY dark brown SANDY CLAY some gravel, light brown SANDY CLAY some gravel, dark brown GRAVEL few sand, few silt,brown-grey,wet. GRAVEL few sand, few silt,grey,wet.coarse gravels increase towards bottom. GRAVEL few sand, few silt,grey,wet.coarse gravels increase OUEENSTON SHALE END OF BOREHOLE Notes : 1. Soil descriptions based on drillers field observation. 2. Water level : 8.3 mbgs- May 18,2023	CUI 100 Steeles Ave. East T: Neatt Communities ECT LOCATION: 150 Steeles Ave. East M: Geodetic CATION: N 4818858 E 589307 DESCRIPTION DESCRIPTION Automatical and the second and th	CLI 1:03 Steeles Ave. East Method: 1 T: Neatt Communities Method: 1 COLLON: 150 Steeles Ave. East Method: 1 CATION: N4818858 E 589307 SOIL PROFILE SAMPLES WILL SAMPLE SAMPY CLAY dark brown SILDrown Server, light brown Subtrom State of the sand, few sa	CLI 1:03 Steeles Ave. East T: Neatt Communities SCT LCATION: N 4818658 E 589307 SOIL PROFILE SAMPLES SOIL PROFILE DESCRIPTION SANDY CLAY dark brown SANDY CLAY some gravel, light brown GRAVEL few sand, few sittbrown, grey,wet. GRAVEL few sand, few sittbrown, grey,wet. CATECH few sand, few sittbrown gravel, dark brown GRAVEL few sand, few sittbrown GRAVEL few sand, few sittbrown GRAVEL few sand, few SIG few	CUT: 150 Steeles Ave. East T: Neat Communities COTLOCATIN: 180 Steeles Ave. East Method: Mud Ready Dameter: 150mm Date: Cdr/10/2023 CATION: N 4818858 E 589307 SOIL PROFILE SAMPLES SOIL PROFILE DESCRIPTION SANDY CLAY dark brown SANDY CLAY some gravel, light brown GRAVEL few sand, few situ gray.wet. GRAVEL few sand, few situ gray.wet. CATION: Shale CATION: Shale CATION: Shale CATION: N 4818858 E 589307 Solid Head Sp PID PID PID PID PID PID PID PID	CL: 150 Steeles Ave. East DRLLING DATA T: Neat Communities Method: Mud Rotary ECT LOCATION: 150 Steeles Ave. East Diameter: 150mm CATION: N 4818858 E 589307 Soil Head Space V SOL PROFILE SAMPLES UBESCRIPTION UBB UBESC	CLI: 150 Steeles Ave. East DRLLING UATA IT: Neat Communities Method: Mud Rotary Diameter: 150mm Dameter: 150mm CATION: 150 Steeles Ave. East Diameter: 150mm SOL PROFILE SAMPLES IDESCRIPTION Image: Provide Community of the second community of t	CL: 1: 50 Steletes Ave. East DRLING UAT A I: Neat Communities Date: Out102/223 CATION: N4 418858 E 589307 Date: Out102/223 SOIL PROFILE SAMPLES DESCRIPTION U U Soil State State SANDY CLAY dark brown U SANDY CLAY some gravel, light U SANDY CLAY some gravel, light U SANDY CLAY some gravel, dark U Bandry CLAY some gravel, light U GRAVEL few sand, few U SANDY CLAY some gravel, light U SANDY CLAY some gravel, light U Bandry CLAY some gravel, light U SANDY CLAY some gravel, light U SANDY CLAY some gravel, light U SANDY CLAY some gravel, light U Bandry CLAY some gravel, light U SANDY CLAY some	EUL: 150 Steeles Ave. East DRLINE UAT A To basic Committies Dameter: 150mm K: Genderic Dameter: 150mm CATTON: N41888/E 588307 Diameter: 150mm SOLL PROFILE SAMPLES US Soll Pred Space Vapors SANDY CLAY dark brown US SANDY CLAY some gravel, light US SANDY CLAY some gravel, light US SANDY CLAY some gravel, dark brown US GRAVEL few sand, few sitt reasons US sitt commungers, woll US GRAVEL few sand, few sitt reasons US SUB PROFILE US US US US US GRAVEL few sand, few sitt reasons US SUB PROFILE US US US US US US US SANDY CLAY some gravel, dark US Down US US US US US US US US US US US US US US </td <td>CL: 15 Usedies AVe. East DefILING Carry T: Neit Communities Diameter. 150mm M: Geodefic Diameter. 150mm CCTOX: N418685 E 58807 Diameter. 150mm SOL PROFILE SAMPLES DESCRIPTION In the second secon</td> <td>ECI: 150 stolete AVe. East Directories The Nett Communities Damater: 150mm ECI: 150 stolete Ave. East Damater: 150mm COLTON: 150 Stolete Ave. East Damater: 150mm SOLL PROFILE SAMPLES SOLL PROFILE SAMPLES DESCRIPTION Iso Iso Description SANDY CLAY dark brown Iso SANDY CLAY some gravel, light Iso SANDY CLAY some gravel, light Iso GRAVEL few sand, few alt.crown gravel, dark Iso OUEENSTON SHALE Iso Iso Iso</td> <td>CIT. TO Statements in the second of the seco</td> <td>ELT: 100 stores Ave. East Theat Communities The CATCOM: 150 Stedles Ave. East CATCOM: N. 4618658 E 560307 CATCOM: N. 4618658 E 560307 CATCOM: N. 4618658 E 560307 DESCRIPTION SOL PROFILE DESCRIPTION SAMPLES SANDY CLAY dark brown SANDY CLAY some gravel, light Benorate SANDY CLAY some gravel, light GRAVEL few sand, few situations based on driller SANDY CLAY some gravel, light DESCRIPTION SHALE CATCOM: N. 4618658 E 500307 DESCRIPTION SANDY CLAY some gravel, light DESCRIPTION SANDY CLAY some gravel, light DESCRIPTION</td> <td>ELT: 100 Identifies Ave. East Demonstration for the formation of the forma</td>	CL: 15 Usedies AVe. East DefILING Carry T: Neit Communities Diameter. 150mm M: Geodefic Diameter. 150mm CCTOX: N418685 E 58807 Diameter. 150mm SOL PROFILE SAMPLES DESCRIPTION In the second secon	ECI: 150 stolete AVe. East Directories The Nett Communities Damater: 150mm ECI: 150 stolete Ave. East Damater: 150mm COLTON: 150 Stolete Ave. East Damater: 150mm SOLL PROFILE SAMPLES SOLL PROFILE SAMPLES DESCRIPTION Iso Iso Description SANDY CLAY dark brown Iso SANDY CLAY some gravel, light Iso SANDY CLAY some gravel, light Iso GRAVEL few sand, few alt.crown gravel, dark Iso OUEENSTON SHALE Iso Iso Iso	CIT. TO Statements in the second of the seco	ELT: 100 stores Ave. East Theat Communities The CATCOM: 150 Stedles Ave. East CATCOM: N. 4618658 E 560307 CATCOM: N. 4618658 E 560307 CATCOM: N. 4618658 E 560307 DESCRIPTION SOL PROFILE DESCRIPTION SAMPLES SANDY CLAY dark brown SANDY CLAY some gravel, light Benorate SANDY CLAY some gravel, light GRAVEL few sand, few situations based on driller SANDY CLAY some gravel, light DESCRIPTION SHALE CATCOM: N. 4618658 E 500307 DESCRIPTION SANDY CLAY some gravel, light DESCRIPTION SANDY CLAY some gravel, light DESCRIPTION	ELT: 100 Identifies Ave. East Demonstration for the formation of the forma

 $\begin{array}{c} 1 \\ \text{Measurement} \quad \underbrace{\overset{1 \\ \text{st}}{\underline{\nabla}}} \quad \underbrace{\overset{2 \\ \text{measurement}}{\underline{\nabla}} \quad \underbrace{\overset{2 \\ \text{$

NOTES











Appendix D: PW1 Pumping Test Analysis













Appendix E: Groundwater Control Model for Construction Dewatering



	PW1	PW2	PW3	PW4	PW5	PW6	PW7	PW8	PW9	PW10	PW11	PW12	PW13	OW1	OW2	
PW1	1.00	0.44	0.39	0.36	0.33	0.33	0.34	0.40	0.38	0.45	0.38	0.36	0.34	 0.42	0.36	
PW2	0.44	1.00	0.44	0.38	0.33	0.34	0.33	0.38	0.40	0.42	0.42	0.36	0.36	0.45	0.36	
PW3	0.39	0.44	1.00	0.40	0.34	0.33	0.33	0.36	0.38	0.38	0.45	0.34	0.36	0.42	0.36	
PW4	0.36	0.38	0.40	1.00	0.40	0.38	0.36	0.39	0.44	0.38	0.45	0.38	0.45	0.42	0.42	
PW5	0.33	0.33	0.34	0.40	1.00	0.44	0.39	0.36	0.38	0.34	0.36	0.38	0.45	0.36	0.42	
PW6	0.33	0.34	0.33	0.38	0.44	1.00	0.44	0.38	0.40	0.36	0.36	0.42	0.42	0.36	0.45	
PW7	0.34	0.33	0.33	0.36	0.39	0.44	1.00	0.40	0.38	0.36	0.34	0.45	0.38	0.36	0.42	
PW8	0.40	0.38	0.36	0.39	0.36	0.38	0.40	1.00	0.42	0.38	0.45	0.38	0.40	0.42	0.42	
PW9	0.38	0.40	0.38	0.44	0.38	0.40	0.38	0.44	1.00	0.42	0.42	0.42	0.42	0.45	0.45	
PW10	0.45	0.42	0.38	0.38	0.34	0.36	0.36	0.45	0.42	1.00	0.39	0.40	0.36	0.44	0.38	
PW11	0.38	0.42	0.45	0.45	0.36	0.36	0.34	0.38	0.42	0.39	1.00	0.36	0.40	0.44	0.38	
PW12	0.36	0.36	0.34	0.38	0.38	0.42	0.45	0.45	0.42	0.40	0.36	1.00	0.39	0.38	0.44	
PW13	0.34	0.36	0.36	0.45	0.45	0.42	0.38	0.38	0.42	0.36	0.40	0.39	1.00	0.38	0.44	
Total Drawdown																
(ft)	5.50	5.61	5.50	5.78	5.50	5.61	5.50	5.78	5.87	5.63	5.78	5.63	5.72	5.32	5.32	
Total Drawdown at each location (m)	1.68	1.71	1.68	1.76	1.68	1.71	1.68	1.76	1.79	1.72	1.76	1.72	1.74	1.62	1.62	
Final Pumping																
Elev. (masl)	196.22	196.19	196.22	196.14	196.22	196.19	196.22	196.14	196.11	196.18	196.14	196.18	196.16	196.28	196.28	

Finished Floor Elevation	207.4						
Current Ground Level Elev. (masl)	206.2	Well	Q _{S (IGPM)}	Q (l/min)	Units		
Static Water Elev. (masl)	197.9	PW1-PW13	22.00	99.9	S	2.6.E-04	
Est. Elevator Pit (masl) -P2 Design (199.9masl - 2.5m)	197.4	Total	286.0	1298	t	12	day(s)
Factor of safety 1 m	1				т	59700	igpd/ft
Tannat Dumaina Water Lauri	400 40						

Target Pumping Water Level 196.40

Notes: In Rows - Drawdown in feet at each location due to pumping of well in that row

In Columns - Drawdown in feet in each column due to interference from pumping indicated well W/L elevation at each location is shown in bottom of row of matrix.

FIGURE E-2

150 Stoples Ave E	,		DS CONSULTANTS LTD.
Million Dataria Million Dataria	150 Steeles Ave. E Date:	30-Jun-23	Geotechnical & Environmental & Materials & Hydrogeology

	PW1	PW2	PW3	PW4	PW5	PW6	PW7	PW8	PW9	PW10	PW11	PW12	PW13	OW1	OW2	
PW1	4.00	1.25	1.09	1.02	0.92	0.94	0.95	1.11	1.08	1.28	1.07	1.02	0.97	1.18	1.00	
PW2	1.25	4.00	1.25	1.08	0.94	0.95	0.94	1.08	1.11	1.18	1.18	1.00	1.00	 1.28	1.02	
PW3	1.09	1.25	4.00	1.11	0.95	0.94	0.92	1.02	1.08	1.07	1.28	0.97	1.02	1.18	1.00	
PW4	1.02	1.08	1.11	4.00	1.11	1.08	1.02	1.09	1.25	1.07	1.28	1.07	1.28	1.18	1.18	
PW5	0.92	0.94	0.95	1.11	4.00	1.25	1.09	1.02	1.08	0.97	1.02	1.07	1.28	1.00	1.18	
PW6	0.94	0.95	0.94	1.08	1.25	4.00	1.25	1.08	1.11	1.00	1.00	1.18	1.18	1.02	1.28	
PW7	0.95	0.94	0.92	1.02	1.09	1.25	4.00	1.11	1.08	1.02	0.97	1.28	1.07	1.00	1.18	
PW8	1.11	1.08	1.02	1.09	1.02	1.08	1.11	4.00	1.18	1.07	1.28	1.07	1.11	1.18	1.18	
PW9	1.08	1.11	1.08	1.25	1.08	1.11	1.08	1.25	4.00	1.18	1.18	1.18	1.18	1.28	1.28	
PW10	1.28	1.18	1.07	1.07	0.97	1.00	1.02	1.28	1.18	4.00	1.09	1.11	1.02	1.25	1.08	
PW11	1.07	1.18	1.28	1.28	1.02	1.00	0.97	1.07	1.18	1.09	4.00	1.02	1.11	1.25	1.08	
PW12	1.02	1.00	0.97	1.07	1.07	1.18	1.28	1.28	1.18	1.11	1.02	4.00	1.09	1.08	1.25	
PW13	0.97	1.00	1.02	1.28	1.28	1.18	1.07	1.07	1.18	1.02	1.11	1.09	4.00	1.08	1.25	
Total Drawdown at each location	16 69	16.98	16 69	17 /6	16 69	16.98	16 69	17.46	17 73	17.05	17 /8	17.05	17 31	14 98	14 98	
(11)	10.09	10.30	10.09	17.40	10.09	10.30	10.09	17.40	11.13	17.05	17.40	17.05	17.31	14.30	14.30	
Total Drawdown at each location (m)	5.09	5.18	5.09	5.32	5.09	5.18	5.09	5.32	5.40	5.20	5.33	5.20	5.28	4.57	4.57	
Final Pumping Elev. (masl)	192.81	192.72	192.81	192.58	192.81	192.72	192.81	192.58	192.50	192.70	192.57	192.70	192.62	193.33	193.33	

Finished Floor Elevation	207.4						
Current Ground Level Elev. (masl)	206.2	Well	Q _{S (IGPM)}	Q (l/min)	Units		
Static Water Elev. (masl)	197.9	PW1-PW13	62.00	281	S	2.6.E-04	
Est. Elevator Pit (masl) -P3 Design (196.9masl - 2.5m)	194.4	Total	806.0	3659	t	12	day(s)
Factor of safety 1 m	1				т	59700	igpd/ft
Terret Dumping Water Louis	402.40						

Target Pumping Water Level 193.40 Notes: In Rows - Drawdown in feet at each location due to pumping of well in that row

In Columns - Drawdown in feet in each column due to interference from pumping indicated well W/L elevation at each location is shown in bottom of row of matrix.

FIGURE E-3

	maloatoa mon me		
GROUNDWATER CONTROL MODEL P3 DESIGN Hydrogeological Investigation	Project No.:	21-122-106	DS CONSULTANTS LTD.
150 Steeles Ave. E	Date:	4-Jul-23	Geotechnical & Environmental & Materials & Hydrogeology
Milton, Ontario		4 oui 20	

					DWE	DIALC			DW/O	DW/40	D\A/1.1	DW/40		0)4/4	014/2	
	PW1	PWZ	PW3	PVV4	PW5	PVV6	PW7	PVV8	PW9	PW10	PW11	PW12	PW13	OW1	Ow2	
PW1	7.00	2.06	1.79	1.68	1.51	1.55	1.56	1.83	1.78	2.10	1.76	1.67	1.59	1.95	1.65	
PW2	2.06	7.00	2.06	1.78	1.55	1.56	1.55	1.78	1.83	1.95	1.95	1.65	1.65	2.10	1.67	
PW3	1.79	2.06	7.00	1.83	1.56	1.55	1.51	1.68	1.78	1.76	2.10	1.59	1.67	1.95	1.65	
PW4	1.68	1.78	1.83	7.00	1.83	1.78	1.68	1.79	2.06	1.76	2.10	1.76	2.10	1.95	1.95	
PW5	1.51	1.55	1.56	1.83	7.00	2.06	1.79	1.68	1.78	1.59	1.67	1.76	2.10	1.65	1.95	
PW6	1.55	1.56	1.55	1.78	2.06	7.00	2.06	1.78	1.83	1.65	1.65	1.95	1.95	1.67	2.10	
PW7	1.56	1.55	1.51	1.68	1.79	2.06	7.00	1.83	1.78	1.67	1.59	2.10	1.76	1.65	1.95	
PW8	1.83	1.78	1.68	1.79	1.68	1.78	1.83	7.00	1.95	1.76	2.10	1.76	1.83	1.95	1.95	
PW9	1.78	1.83	1.78	2.06	1.78	1.83	1.78	2.06	7.00	1.95	1.95	1.95	1.95	2.10	2.10	
PW10	2.10	1.95	1.76	1.76	1.59	1.65	1.67	2.10	1.95	7.00	1.79	1.83	1.68	2.06	1.78	
PW11	1.76	1.95	2.10	2.10	1.67	1.65	1.59	1.76	1.95	1.79	7.00	1.68	1.83	2.06	1.78	
PW12	1.67	1.65	1.59	1.76	1.76	1.95	2.10	2.10	1.95	1.83	1.68	7.00	1.79	1.78	2.06	
PW13	1.59	1.65	1.67	2.10	2.10	1.95	1.76	1.76	1.95	1.68	1.83	1.79	7.00	1.78	2.06	
Total Drawdown																
at each location (ft)	27.88	28.36	27.88	29.15	27.88	28.36	27.88	29.15	29.58	28.47	29.17	28.47	28.90	24.65	24.65	
Total Drawdown at each location (m)	8.50	8.65	8.50	8.89	8.50	8.65	8.50	8.89	9.02	8.68	8.89	8.68	8.81	7.52	7.52	
Final Pumping	189 40	189 25	189 40	189 01	189 40	189 25	189 40	189 01	188 88	189 22	189 01	189 22	189.09	190.38	190.38	

Finished Floor Elevation	207.4						
Current Ground Level Elev. (masl)	206.2	Well	Q _{S (IGPM)}	Q (l/min)	Units		
Static Water Elev. (masl)	197.9	PW1-PW13	102.00	463.1	S	2.6.E-04	
Est. Elevator Pit (masl) -P4 Design (193.9masl - 2.5m)	191.4	Total	1326.0	6020	t	12	day(s)
Factor of safety 1 m	1				т	59700	igpd/ft
Target Rumping Water Level	100 /0						

Target Pumping Water Level 190.40

In Columns - Drawdown in feet in each column due to interference from pumping indicated well W/L elevation at each location is shown in bottom of row of matrix.

FIGURE E-4

GROUNDWATER CONTROL MODEL P4 DESIGN Hydrogeological Investigation	Project No.:	21-122-106	DS CONSULTANTS LTD.
150 Steeles Ave. E	Date:	4-Jul-23	Geotechnical & Environmental & Materials & Hydrogeology
Milton, Ontario			

Appendix F: Groundwater Control Model for Permanent Drainage System

	PW1	PW2	PW3	PW4	PW5	PW6	PW7	PW8	PW9	PW10	PW11	PW12	PW13	OW1	OW2
PW1	2.00	0.41	0.36	0.34	0.30	0.31	0.31	0.37	0.36	0.42	0.35	0.34	0.32	0.39	0.33
PW2	0.41	2.00	0.41	0.36	0.31	0.31	0.31	0.36	0.37	0.39	0.39	0.33	0.33	0.42	0.34
PW3	0.36	0.41	2.00	0.37	0.31	0.31	0.30	0.34	0.36	0.35	0.42	0.32	0.34	0.39	0.33
PW4	0.34	0.36	0.37	2.00	0.37	0.36	0.34	0.36	0.41	0.35	0.42	0.35	0.42	 0.39	0.39
PW5	0.30	0.31	0.31	0.37	2.00	0.41	0.36	0.34	0.36	0.32	0.34	0.35	0.42	 0.33	0.39
PW6	0.31	0.31	0.31	0.36	0.41	2.00	0.41	0.36	0.37	0.33	0.33	0.39	0.39	 0.34	0.42
PW7	0.31	0.31	0.30	0.34	0.36	0.41	2.00	0.37	0.36	0.34	0.32	0.42	0.35	0.33	0.39
PW8	0.37	0.36	0.34	0.36	0.34	0.36	0.37	2.00	0.39	0.35	0.42	0.35	0.37	0.39	0.39
PW9	0.36	0.37	0.36	0.41	0.36	0.37	0.36	0.41	2.00	0.39	0.39	0.39	0.39	0.42	0.42
PW10	0.42	0.39	0.35	0.35	0.32	0.33	0.34	0.42	0.39	2.00	0.36	0.37	0.34	0.41	0.36
PW11	0.35	0.39	0.42	0.42	0.34	0.33	0.32	0.35	0.39	0.36	2.00	0.34	0.37	0.41	0.36
PW12	0.34	0.33	0.32	0.35	0.35	0.39	0.42	0.42	0.39	0.37	0.34	2.00	0.36	0.36	0.41
PW13	0.32	0.33	0.34	0.42	0.42	0.39	0.35	0.35	0.39	0.34	0.37	0.36	2.00	0.36	0.41
Fotal Drawdown at each location (ft)	6.20	6.29	6.20	6.45	6.20	6.29	6.20	6.45	6.53	6.31	6.45	6.31	6.40	4.94	4.94
otal Drawdown at each location (m)	1.89	1.92	1.89	1.97	1.89	1.92	1.89	1.97	1.99	1.92	1.97	1.92	1.95	1.51	1.51
Final Pumping Elev. (masl)	196.01	195.98	196.01	195.93	196.01	195.98	196.01	195.93	195.91	195.98	195.93	195.98	195.95	196.39	196.39
Finished Floor El	evation	207.4]						I						
Static Water Flow	Elev. (masl)	206.2		Q _{S (IGPM)}	Q (l/min)	Units	26 E-04								
Est. P3 SOG (r	masl)	196.9	Total	260.0	1180	t	15	day(s)							
Factor of safety	0.5 m	0.5				т	59700	igpd/ft							

Project No.:

Date:

21-122-106

4-Jul-23

GROUNDWATER CONTROL MODEL P3 DESIGN

Hydrogeological Investigation 150 Steeles Ave. E

Milton, Ontario

DS CONSULTANTS LTD. Geotechnical & Environmental & Materials & Hydrogeology

	PW1	PW2	PW3	PW4	PW5	PW6	PW7	PW8	PW9	PW10	PW11	PW12	PW13	OW1	OW2	
PW1	4.00	1.24	1.08	1.01	0.91	0.94	0.94	1.10	1.07	1.26	1.06	1.01	0.96	1.17	1.00	
PW2	1.24	4.00	1.24	1.07	0.94	0.94	0.94	1.07	1.10	1.17	1.17	1.00	1.00	1.26	1.01	
PW3	1.08	1.24	4.00	1.10	0.94	0.94	0.91	1.01	1.07	1.06	1.26	0.96	1.01	1.17	1.00	
PW4	1.01	1.07	1.10	4.00	1.10	1.07	1.01	1.08	1.24	1.06	1.26	1.06	1.26	1.17	1.17	
PW5	0.91	0.94	0.94	1.10	4.00	1.24	1.08	1.01	1.07	0.96	1.01	1.06	1.26	1.00	1.17	
PW6	0.94	0.94	0.94	1.07	1.24	4.00	1.24	1.07	1.10	1.00	1.00	1.17	1.17	1.01	1.26	
PW7	0.94	0.94	0.91	1.01	1.08	1.24	4.00	1.10	1.07	1.01	0.96	1.26	1.06	1.00	1.17	
PW8	1.10	1.07	1.01	1.08	1.01	1.07	1.10	4.00	1.17	1.06	1.26	1.06	1.10	1.17	1.17	
PW9	1.07	1.10	1.07	1.24	1.07	1.10	1.07	1.24	4.00	1.17	1.17	1.17	1.17	1.26	1.26	
PW10	1.26	1.17	1.06	1.06	0.96	1.00	1.01	1.26	1.17	4.00	1.08	1.10	1.01	1.24	1.07	
PW11	1.06	1.17	1.26	1.26	1.01	1.00	0.96	1.06	1.17	1.08	4.00	1.01	1.10	1.24	1.07	
PW12	1.01	1.00	0.96	1.06	1.06	1.17	1.26	1.26	1.17	1.10	1.01	4.00	1.08	1.07	1.24	
PW13	0.96	1.00	1.01	1.26	1.26	1.17	1.06	1.06	1.17	1.01	1.10	1.08	4.00	1.07	1.24	
Total Drawdown																
at each location (ft)	16.59	16.87	16.59	17.34	16.59	16.87	16.59	17.34	17.59	16.94	17.35	16.94	17.19	14.83	14.83	
Total Drawdown at each location (m)	5.06	5.14	5.06	5.29	5.06	5.14	5.06	5.29	5.36	5.16	5.29	5.16	5.24	4.52	4.52	
Final Pumping		400 -0	402.04	100.01	400.04	400 70	400.04	400.04	402 54	400 74	400.04	400 74	400.00	102.20	102.20	

Current Ground Level Elev. (masl)	206.2	Well	Q _{S (IGPM)}	Q (l/min)	Units		
Static Water Elev. (masl)	197.9	PW1-PW13	60.00	272	S	2.6.E-04	
Est. P4 SOG (masl)	193.9	Total	780.0	3541	t	15	day(s)
Factor of safety 0.5 m	0.5				т	59700	igpd/ft
Target Drainage Water Level	193.40						

Notes: In Rows - Drawdown in feet at each location due to pumping of well in that row

In Columns - Drawdown in feet in each column due to interference from pumping indicated well W/L elevation at each location is shown in bottom of row of matrix.

FIGURE F-2

GROUNDWATER CONTROL MODEL P4 DESIGN Hydrogeological Investigation	Project No.: 21-122-106	DS CONSULTANTS LTD.
150 Steeles Ave. E	Date: 4-Jul-23	Geotechnical & Environmental & Materials & Hydrogeology
Milton, Ontario		

Appendix G: Groundwater Quality Certificate of Analysis



Your Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Your C.O.C. #: 934281-01-01

Attention: Meysam Jafari

DS Consultants Limited 6221 Highway 7, Unit 16 Vaughan, ON CANADA L4H 0K8

> Report Date: 2023/07/05 Report #: R7701176 Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3D4767 Received: 2023/05/11, 16:46

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Carbonaceous BOD	1	2023/05/13	2023/05/18	CAM SOP-00427	SM 23 5210B m
Total Cyanide	1	2023/05/12	2023/05/16	CAM SOP-00457	OMOE E3015 5 m
Fluoride	1	2023/05/12	2023/05/16	CAM SOP-00449	SM 23 4500-F C m
Mercury in Water by CVAA	1	2023/05/16	2023/05/16	CAM SOP-00453	EPA 7470A m
Total Metals Analysis by Axial ICP	1	2023/05/15	2023/05/16	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICPMS	1	2023/05/16	2023/05/18	CAM SOP-00447	EPA 6020B m
E.coli, (CFU/100mL)	1	N/A	2023/05/11	CAM SOP-00552	MECP E3371
Animal and Vegetable Oil and Grease	1	N/A	2023/05/20	CAM SOP-00326	EPA1664B m,SM5520B m
Total Oil and Grease	1	2023/05/19	2023/05/19	CAM SOP-00326	EPA1664B m,SM5520B m
PAH Compounds in Water by GC/MS (SIM)	1	2023/05/16	2023/05/17	CAM SOP-00318	EPA 8270E
рН	1	2023/05/12	2023/05/16	CAM SOP-00413	SM 4500H+ B m
Phenols (4AAP)	1	N/A	2023/05/16	CAM SOP-00444	OMOE E3179 m
Sulphate by Automated Turbidimetry	1	N/A	2023/05/18	CAM SOP-00464	SM 23 4500-SO42- E m
Total Kjeldahl Nitrogen in Water	1	2023/05/12	2023/05/16	CAM SOP-00938	OMOE E3516 m
Mineral/Synthetic O & G (TPH Heavy Oil) (1)	1	2023/05/19	2023/05/19	CAM SOP-00326	EPA1664B m,SM5520F m
Total Suspended Solids	1	2023/05/16	2023/05/16	CAM SOP-00428	SM 23 2540D m
Volatile Organic Compounds in Water	1	N/A	2023/05/15	CAM SOP-00228	EPA 8260D

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the

Page 1 of 15

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com



Your Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Your C.O.C. #: 934281-01-01

Attention: Meysam Jafari

DS Consultants Limited 6221 Highway 7, Unit 16 Vaughan, ON CANADA L4H 0K8

> Report Date: 2023/07/05 Report #: R7701176 Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3D4767

Received: 2023/05/11, 16:46 customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Note: TPH (Heavy Oil) is equivalent to Mineral / Synthetic Oil & Grease

Encryption Key

Please direct all questions regarding this Certificate of Analysis to: Ashton Gibson, Project Manager Email: Ashton.Gibson@bureauveritas.com Phone# (905)817-5765

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

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RESULTS OF ANALYSES OF WATER

Bureau Veritas ID)				VUD712					
Sampling Date					2023/05/11					
samping bate					11:30					
COC Number					934281-01-01					
		UNITS	Criteria	Criteria-2	MW23-20	RDL	QC Batch			
Calculated Param	neters									
Total Animal/Vegetable Oil and Grease		mg/L	-	150	1.2	0.50	8659113			
Inorganics										
Total Carbonaced	ous BOD	mg/L	-	300	<2	2	8663349			
Fluoride (F-)		mg/L	-	10	0.13	0.10	8662442			
Total Kjeldahl Nitrogen (TKN)		mg/L	-	100	0.21	0.10	8663021			
рН	рН	6.5:8.5	6.0:10.0	7.83		8662450				
Phenols-4AAP	mg/L	-	1	<0.0010	0.0010	8667786				
Total Suspended	mg/L	-	350	74	10	8661748				
Dissolved Sulphat	te (SO4)	mg/L	-	1500	69	1.0	8662235			
Total Cyanide (CN	1)	mg/L	-	2	<0.0050	0.0050	8660971			
Petroleum Hydro	carbons									
Total Oil & Greas	е	mg/L	-	-	1.2	0.50	8675238			
Total Oil & Greas	e Mineral/Synthetic	mg/L	-	-	<0.50	0.50	8675253			
No Fill	No Exceedance									
Grey	Exceeds 1 criteria poli	cy/leve	l							
Black	Exceeds both criteria/	levels								
RDL = Reportable	RDL = Reportable Detection Limit									
QC Batch = Qualit	QC Batch = Quality Control Batch									
Criteria: Halton St	Criteria: Halton Storm Sewer ByLaw									
Criteria-2: Halton	Sanitary & Combined S	ewer By	/law (2-03	3)						



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID			VUD712		
Sampling Date			2023/05/11		
			11:30		
COC Number			934281-01-01		
	UNITS	Criteria	MW23-20	RDL	QC Batch
Metals					
Total Aluminum (Al)	mg/L	50	<0.1	0.1	8665796
Total Antimony (Sb)	mg/L	5	<0.02	0.02	8665796
Total Arsenic (As)	mg/L	1	<0.01	0.01	8665796
Total Beryllium (Be)	mg/L	5	<0.0005	0.0005	8665796
Total Cadmium (Cd)	mg/L	1	<0.002	0.002	8665796
Total Chromium (Cr)	mg/L	3	<0.01	0.01	8665796
Total Cobalt (Co)	mg/L	5	<0.002	0.002	8665796
Total Copper (Cu)	mg/L	3	<0.01	0.01	8665796
Total Iron (Fe)	mg/L	50	1.2	0.02	8665796
Total Lead (Pb)	mg/L	3	<0.01	0.01	8665796
Total Manganese (Mn)	mg/L	5	0.043	0.001	8665796
Mercury (Hg)	mg/L	0.05	<0.00010	0.00010	8666881
Total Molybdenum (Mo)	mg/L	5	<0.005	0.005	8665796
Total Nickel (Ni)	mg/L	3	<0.005	0.005	8665796
Total Phosphorus (P)	mg/L	10	<0.05	0.05	8665796
Total Selenium (Se)	mg/L	5	<0.02	0.02	8665796
Total Silver (Ag)	mg/L	5	<0.01	0.01	8665796
Total Tin (Sn)	mg/L	5	<0.02	0.02	8665796
Total Titanium (Ti)	mg/L	5	<0.005	0.005	8665796
Total Zinc (Zn)	mg/L	3	<0.005	0.005	8665796
Total Aluminum (Al)	ug/L	50000	93	4.9	8667576
Total Antimony (Sb)	ug/L	5000	<0.50	0.50	8667576
Total Arsenic (As)	ug/L	1000	3.5	1.0	8667576
Total Barium (Ba)	ug/L	-	51	2.0	8667576
Total Beryllium (Be)	ug/L	5000	<0.40	0.40	8667576
Total Bismuth (Bi)	ug/L	-	<1.0	1.0	8667576
Total Boron (B)	ug/L	-	94	10	8667576
Total Cadmium (Cd)	ug/L	1000	<0.090	0.090	8667576
Total Calcium (Ca)	ug/L	-	120000	200	8667576
Total Chromium (Cr)	ug/L	3000	<5.0	5.0	8667576
No Fill No Exceedan	ice				
Grey Exceeds 1 cri	teria pol	icy/level			
Black Exceeds both	n criteria,	/levels			
RDL = Reportable Detection	Limit				
QC Batch = Quality Control B	atch				
Criteria: Halton Sanitary & C	ombined	Sewer B	ylaw (2-03)		

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Bureau Veritas ID			VUD712					
Comulius Data			2023/05/11					
Sampling Date			11:30					
COC Number			934281-01-01					
	UNITS	Criteria	MW23-20	RDL	QC Batch			
Total Cobalt (Co)	ug/L	5000	<0.50	0.50	8667576			
Total Copper (Cu)	ug/L	3000	<0.90	0.90	8667576			
Total Iron (Fe)	ug/L	50000	1300	100	8667576			
Total Lead (Pb)	ug/L	3000	<0.50	0.50	8667576			
Total Lithium (Li)	ug/L	-	33	5.0	8667576			
Total Magnesium (Mg)	ug/L	-	53000	50	8667576			
Total Manganese (Mn)	ug/L	5000	43	2.0	8667576			
Total Molybdenum (Mo)	ug/L	5000	1.3	0.50	8667576			
Total Nickel (Ni)	ug/L	3000	<1.0	1.0	8667576			
Total Potassium (K)	ug/L	-	3800	200	8667576			
Total Selenium (Se)	ug/L	5000	<2.0	2.0	8667576			
Total Silicon (Si)	ug/L	-	7900	50	8667576			
Total Silver (Ag)	ug/L	5000	<0.090	0.090	8667576			
Total Sodium (Na)	ug/L	-	31000	100	8667576			
Total Strontium (Sr)	ug/L	-	3400	1.0	8667576			
Total Tellurium (Te)	ug/L	-	<1.0	1.0	8667576			
Total Thallium (Tl)	ug/L	-	<0.050	0.050	8667576			
Total Tin (Sn)	ug/L	5000	1.0	1.0	8667576			
Total Titanium (Ti)	ug/L	5000	<5.0	5.0	8667576			
Total Tungsten (W)	ug/L	-	<1.0	1.0	8667576			
Total Uranium (U)	ug/L	-	1.5	0.10	8667576			
Total Vanadium (V)	ug/L	-	0.79	0.50	8667576			
Total Zinc (Zn)	ug/L	3000	<5.0	5.0	8667576			
Total Zirconium (Zr)	ug/L	-	<1.0	1.0	8667576			
No Fill No Excee	edance							
Grey Exceeds	Exceeds 1 criteria policy/level							
Black Exceeds	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Halton Sanitary	& Combined	Sewer B	ylaw (2-03)					

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)



SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Verit	as ID			VUD712						
Sampling Dat	to			2023/05/11						
	le			11:30						
COC Number				934281-01-01						
		UNITS	Criteria	MW23-20	RDL	QC Batch				
Polyaromatic Hydrocarbons										
Naphthalene		140	<0.050	0.050	8667408					
Surrogate Recovery (%)										
D10-Anthrace	%	-	102		8667408					
D14-Terphen	%	-	80		8667408					
D8-Acenapht	hylene	%	-	88		8667408				
No Fill	No Exceedanc	e								
Grey	Exceeds 1 crite	eria poli	cy/level							
Black	Exceeds both	criteria/	levels							
RDL = Report	able Detection L	imit								
QC Batch = Q	QC Batch = Quality Control Batch									
Criteria: Halto	on Sanitary & Co	mbined	Sewer By	ylaw (2-03)						



VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas	ID			VUD712			
Comulius Data				2023/05/11			
Sampling Date				11:30			
COC Number				934281-01-01			
		UNITS	Criteria	MW23-20	RDL	QC Batch	
Volatile Organi	ics						
Benzene		ug/L	10	<0.20	0.20	8664241	
Chloroform		ug/L	40	<0.20	0.20	8664241	
1,4-Dichlorobe	nzene	ug/L	80	<0.40	0.40	8664241	
Ethylbenzene		ug/L	160	<0.20	0.20	8664241	
Methylene Chloride(Dichloromethane)		ug/L	2000	<2.0	2.0	8664241	
Tetrachloroethylene		ug/L	1000	<0.20	0.20	8664241	
Toluene		ug/L	16	<0.20	0.20	8664241	
Trichloroethyle	ne	ug/L	400	<0.20	0.20	8664241	
Surrogate Reco	overy (%)						
4-Bromofluoro	benzene	%	-	100		8664241	
D4-1,2-Dichloro	pethane	%	-	110		8664241	
D8-Toluene		%	-	94		8664241	
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy	/level					
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Halton	Sanitary & Combined Sev	wer Byla	w (2-03)				



MICROBIOLOGY (WATER)

Bureau Verita	as ID			VUD712					
Sampling Date				2023/05/11					
				11:30					
COC Number				934281-01-01					
		UNITS	Criteria	MW23-20	RDL	QC Batch			
Microbiologic	al								
Escherichia co	Escherichia coli CFU/100mL			<10	10	8660593			
No Fill	No Exceedance	ce							
Grey	Exceeds 1 crit	eria policy/le	vel						
Black	Exceeds both criteria/levels								
RDL = Reporta	RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch									
Criteria: Halto	on Storm Sewer	ByLaw							

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Collected: 2023/05/11

TEST SUMMARY

Bureau Veritas ID:	VUD712
Sample ID:	MW23-20
Matrix:	Water

Sample ID: MW23-20 Matrix: Water					Shipped: Received: 2023/05/11
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Carbonaceous BOD	DO	8663349	2023/05/13	2023/05/18	Gurjot Kaur
Total Cyanide	SKAL/CN	8660971	2023/05/12	2023/05/16	Prgya Panchal
Fluoride	ISE	8662442	2023/05/12	2023/05/16	Kien Tran
Mercury in Water by CVAA	CV/AA	8666881	2023/05/16	2023/05/16	Jaswinder Kaur
Total Metals Analysis by Axial ICP	ICPX	8665796	2023/05/15	2023/05/16	Gagandeep Rai
Total Metals Analysis by ICPMS	ICP/MS	8667576	2023/05/16	2023/05/18	Prempal Bhatti
E.coli, (CFU/100mL)	PL	8660593	N/A	2023/05/11	Soham Patel
Animal and Vegetable Oil and Grease	BAL	8659113	N/A	2023/05/20	Automated Statchk
Total Oil and Grease	BAL	8675238	2023/05/19	2023/05/19	Rutvik Patel
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8667408	2023/05/16	2023/05/17	Mitesh Raj
рН	AT	8662450	2023/05/12	2023/05/16	Kien Tran
Phenols (4AAP)	TECH/PHEN	8667786	N/A	2023/05/16	Mandeep Kaur
Sulphate by Automated Turbidimetry	KONE	8662235	N/A	2023/05/18	Massarat Jan
Total Kjeldahl Nitrogen in Water	SKAL	8663021	2023/05/12	2023/05/16	Jency Sara Johnson
Mineral/Synthetic O & G (TPH Heavy Oil)	BAL	8675253	2023/05/19	2023/05/19	Rutvik Patel
Total Suspended Solids	BAL	8661748	2023/05/16	2023/05/16	Shaneil Hall
Volatile Organic Compounds in Water	GC/MS	8664241	N/A	2023/05/15	Hai Son Tran



GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt								
	Package 1	15.0°C						
	•							

Revised Report[5/24/2023]: PWQO criteria added to C of A

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix Spike		SPIKED	BLANK	Method I	Blank	RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8664241	4-Bromofluorobenzene	2023/05/15	99	70 - 130	99	70 - 130	100	%				
8664241	D4-1,2-Dichloroethane	2023/05/15	107	70 - 130	105	70 - 130	106	%				
8664241	D8-Toluene	2023/05/15	96	70 - 130	97	70 - 130	96	%				
8667408	D10-Anthracene	2023/05/17	100	50 - 130	81	50 - 130	111	%				
8667408	D14-Terphenyl (FS)	2023/05/17	96	50 - 130	91	50 - 130	98	%				
8667408	D8-Acenaphthylene	2023/05/17	91	50 - 130	88	50 - 130	95	%				
8660971	Total Cyanide (CN)	2023/05/16	110	80 - 120	111	80 - 120	<0.0050	mg/L	NC	20		
8661748	Total Suspended Solids	2023/05/16					<10	mg/L	NC	20	98	85 - 115
8662235	Dissolved Sulphate (SO4)	2023/05/18	89	75 - 125	97	80 - 120	<1.0	mg/L	NC	20		
8662442	Fluoride (F-)	2023/05/16	64 (1)	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
8662450	рН	2023/05/16			102	98 - 103			1.3	N/A		
8663021	Total Kjeldahl Nitrogen (TKN)	2023/05/16	106	80 - 120	104	80 - 120	<0.10	mg/L	14	20	99	80 - 120
8663349	Total Carbonaceous BOD	2023/05/18					<2	mg/L	1.1	30	98	85 - 115
8664241	1,4-Dichlorobenzene	2023/05/15	99	70 - 130	103	70 - 130	<0.40	ug/L	NC	30		
8664241	Benzene	2023/05/15	84	70 - 130	88	70 - 130	<0.20	ug/L	NC	30		
8664241	Chloroform	2023/05/15	89	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
8664241	Ethylbenzene	2023/05/15	80	70 - 130	85	70 - 130	<0.20	ug/L	NC	30		
8664241	Methylene Chloride(Dichloromethane)	2023/05/15	88	70 - 130	90	70 - 130	<2.0	ug/L	NC	30		
8664241	Tetrachloroethylene	2023/05/15	80	70 - 130	85	70 - 130	<0.20	ug/L	NC	30		
8664241	Toluene	2023/05/15	80	70 - 130	85	70 - 130	<0.20	ug/L	3.2	30		
8664241	Trichloroethylene	2023/05/15	89	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
8665796	Total Aluminum (Al)	2023/05/16	101	80 - 120	94	80 - 120	<0.1	mg/L	NC	20		
8665796	Total Antimony (Sb)	2023/05/16	103	80 - 120	101	80 - 120	<0.02	mg/L	NC	20		
8665796	Total Arsenic (As)	2023/05/16	105	80 - 120	101	80 - 120	<0.01	mg/L	NC	20		
8665796	Total Beryllium (Be)	2023/05/16	103	80 - 120	104	80 - 120	<0.0005	mg/L				
8665796	Total Cadmium (Cd)	2023/05/16	104	80 - 120	102	80 - 120	<0.002	mg/L	NC	20		
8665796	Total Chromium (Cr)	2023/05/16	102	80 - 120	100	80 - 120	<0.01	mg/L	NC	20		
8665796	Total Cobalt (Co)	2023/05/16	96	80 - 120	100	80 - 120	<0.002	mg/L	NC	20		
8665796	Total Copper (Cu)	2023/05/16	103	80 - 120	103	80 - 120	<0.01	mg/L	NC	20		
8665796	Total Iron (Fe)	2023/05/16	102	80 - 120	102	80 - 120	<0.02	mg/L	4.6	20		
8665796	Total Lead (Pb)	2023/05/16	94	80 - 120	100	80 - 120	<0.01	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8665796	Total Manganese (Mn)	2023/05/16	102	80 - 120	105	80 - 120	<0.001	mg/L	0.93	20		
8665796	Total Molybdenum (Mo)	2023/05/16	100	80 - 120	101	80 - 120	<0.005	mg/L	NC	20		
8665796	Total Nickel (Ni)	2023/05/16	96	80 - 120	101	80 - 120	<0.005	mg/L	NC	20		
8665796	Total Phosphorus (P)	2023/05/16	105	80 - 120	102	80 - 120	<0.05	mg/L	NC	20		
8665796	Total Selenium (Se)	2023/05/16	106	80 - 120	103	80 - 120	<0.02	mg/L	NC	20		
8665796	Total Silver (Ag)	2023/05/16	96	80 - 120	96	80 - 120	<0.01	mg/L	NC	20		
8665796	Total Tin (Sn)	2023/05/16	97	80 - 120	101	80 - 120	<0.02	mg/L	NC	20		
8665796	Total Titanium (Ti)	2023/05/16	101	80 - 120	102	80 - 120	<0.005	mg/L	NC	20		
8665796	Total Zinc (Zn)	2023/05/16	98	80 - 120	102	80 - 120	<0.005	mg/L	1.3	20		
8666881	Mercury (Hg)	2023/05/16	98	75 - 125	101	80 - 120	<0.00010	mg/L	NC	20		
8667408	Naphthalene	2023/05/17	102	50 - 130	96	50 - 130	<0.050	ug/L	NC	30		
8667576	Total Aluminum (Al)	2023/05/19	100	80 - 120	96	80 - 120	<4.9	ug/L	4.1	20		
8667576	Total Antimony (Sb)	2023/05/18	112	80 - 120	106	80 - 120	<0.50	ug/L				
8667576	Total Arsenic (As)	2023/05/19	101	80 - 120	99	80 - 120	<1.0	ug/L	4.2	20		
8667576	Total Barium (Ba)	2023/05/18	96	80 - 120	93	80 - 120	<2.0	ug/L				
8667576	Total Beryllium (Be)	2023/05/18	95	80 - 120	92	80 - 120	<0.40	ug/L				
8667576	Total Bismuth (Bi)	2023/05/18	88	80 - 120	93	80 - 120	<1.0	ug/L				
8667576	Total Boron (B)	2023/05/18	NC	80 - 120	91	80 - 120	<10	ug/L				
8667576	Total Cadmium (Cd)	2023/05/18	95	80 - 120	96	80 - 120	<0.090	ug/L				
8667576	Total Calcium (Ca)	2023/05/18	NC	80 - 120	98	80 - 120	<200	ug/L				
8667576	Total Chromium (Cr)	2023/05/19	96	80 - 120	94	80 - 120	<5.0	ug/L	NC	20		
8667576	Total Cobalt (Co)	2023/05/19	94	80 - 120	94	80 - 120	<0.50	ug/L	4.1	20		
8667576	Total Copper (Cu)	2023/05/19	97	80 - 120	94	80 - 120	<0.90	ug/L	0.64	20		
8667576	Total Iron (Fe)	2023/05/18	98	80 - 120	99	80 - 120	<100	ug/L				
8667576	Total Lead (Pb)	2023/05/19	90	80 - 120	96	80 - 120	<0.50	ug/L	1.4	20		
8667576	Total Lithium (Li)	2023/05/18	NC	80 - 120	97	80 - 120	<5.0	ug/L				
8667576	Total Magnesium (Mg)	2023/05/18	NC	80 - 120	96	80 - 120	<50	ug/L				
8667576	Total Manganese (Mn)	2023/05/19	94	80 - 120	94	80 - 120	<2.0	ug/L	2.7	20		
8667576	Total Molybdenum (Mo)	2023/05/19	105	80 - 120	99	80 - 120	<0.50	ug/L	0.71	20		
8667576	Total Nickel (Ni)	2023/05/19	91	80 - 120	94	80 - 120	<1.0	ug/L	4.3	20		
8667576	Total Potassium (K)	2023/05/18	NC	80 - 120	96	80 - 120	<200	ug/L				

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QUALITY ASSURANCE REPORT(CONT'D)

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix	Spike	SPIKED	BLANK	Method	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8667576	Total Selenium (Se)	2023/05/19	98	80 - 120	102	80 - 120	<2.0	ug/L	NC	20		
8667576	Total Silicon (Si)	2023/05/18	100	80 - 120	97	80 - 120	<50	ug/L				
8667576	Total Silver (Ag)	2023/05/19	92	80 - 120	94	80 - 120	<0.090	ug/L	NC	20		
8667576	Total Sodium (Na)	2023/05/19	NC	80 - 120	97	80 - 120	<100	ug/L	0.63	20		
8667576	Total Strontium (Sr)	2023/05/18	NC	80 - 120	96	80 - 120	<1.0	ug/L				
8667576	Total Tellurium (Te)	2023/05/18	95	80 - 120	98	80 - 120	<1.0	ug/L				
8667576	Total Thallium (Tl)	2023/05/18	90	80 - 120	97	80 - 120	<0.050	ug/L				
8667576	Total Tin (Sn)	2023/05/19	102	80 - 120	98	80 - 120	<1.0	ug/L	0.89	20		
8667576	Total Titanium (Ti)	2023/05/19	100	80 - 120	96	80 - 120	<5.0	ug/L	NC	20		
8667576	Total Tungsten (W)	2023/05/18	98	80 - 120	99	80 - 120	<1.0	ug/L				
8667576	Total Uranium (U)	2023/05/18	95	80 - 120	97	80 - 120	<0.10	ug/L				
8667576	Total Vanadium (V)	2023/05/18	98	80 - 120	94	80 - 120	<0.50	ug/L				
8667576	Total Zinc (Zn)	2023/05/19	93	80 - 120	100	80 - 120	<5.0	ug/L	0.84	20		
8667576	Total Zirconium (Zr)	2023/05/18	106	80 - 120	99	80 - 120	<1.0	ug/L				
8667786	Phenols-4AAP	2023/05/16	105	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
8675238	Total Oil & Grease	2023/05/19			99	85 - 115	<0.50	mg/L	0.76	25		
8675253	Total Oil & Grease Mineral/Synthetic	2023/05/19			98	85 - 115	<0.50	mg/L	1.5	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Scham N Patel

Soham Patel, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.



Exceedance Summary Table – Halton Storm Sewer

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summa	ary table is for information purp	oses only and should	not be considered a comp	ehensive listing or	statement of	conformance to
applicable regulatory gu	uidelines.					

Exceedance Summary Table – Halton Sanitary Sewer

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS			
No Exceedances									
The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to									
applicable regulatory guid	elines.								



Your Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Your C.O.C. #: 934281-01-01

Attention: Meysam Jafari

DS Consultants Limited 6221 Highway 7, Unit 16 Vaughan, ON CANADA L4H 0K8

> Report Date: 2023/05/24 Report #: R7642032 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3D4767 Received: 2023/05/11, 16:46

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Carbonaceous BOD	1	2023/05/13	2023/05/18	CAM SOP-00427	SM 23 5210B m
Total Cyanide	1	2023/05/12	2023/05/16	CAM SOP-00457	OMOE E3015 5 m
Fluoride	1	2023/05/12	2023/05/16	CAM SOP-00449	SM 23 4500-F C m
Mercury in Water by CVAA	1	2023/05/16	2023/05/16	CAM SOP-00453	EPA 7470A m
Total Metals Analysis by Axial ICP	1	2023/05/15	2023/05/16	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICPMS	1	2023/05/16	2023/05/18	CAM SOP-00447	EPA 6020B m
E.coli, (CFU/100mL)	1	N/A	2023/05/11	CAM SOP-00552	MECP E3371
Animal and Vegetable Oil and Grease	1	N/A	2023/05/20	CAM SOP-00326	EPA1664B m,SM5520B m
Total Oil and Grease	1	2023/05/19	2023/05/19	CAM SOP-00326	EPA1664B m,SM5520B m
PAH Compounds in Water by GC/MS (SIM)	1	2023/05/16	2023/05/17	CAM SOP-00318	EPA 8270E
рН	1	2023/05/12	2023/05/16	CAM SOP-00413	SM 4500H+ B m
Phenols (4AAP)	1	N/A	2023/05/16	CAM SOP-00444	OMOE E3179 m
Sulphate by Automated Turbidimetry	1	N/A	2023/05/18	CAM SOP-00464	SM 23 4500-SO42- E m
Total Kjeldahl Nitrogen in Water	1	2023/05/12	2023/05/16	CAM SOP-00938	OMOE E3516 m
Mineral/Synthetic O & G (TPH Heavy Oil) (1)	1	2023/05/19	2023/05/19	CAM SOP-00326	EPA1664B m,SM5520F m
Total Suspended Solids	1	2023/05/16	2023/05/16	CAM SOP-00428	SM 23 2540D m
Volatile Organic Compounds in Water	1	N/A	2023/05/15	CAM SOP-00228	EPA 8260D

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the

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Your Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Your C.O.C. #: 934281-01-01

Attention: Meysam Jafari

DS Consultants Limited 6221 Highway 7, Unit 16 Vaughan, ON CANADA L4H 0K8

> Report Date: 2023/05/24 Report #: R7642032 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3D4767 Received: 2023/05/11, 16:46

customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Note: TPH (Heavy Oil) is equivalent to Mineral / Synthetic Oil & Grease

Encryption Key

Please direct all questions regarding this Certificate of Analysis to: Ashton Gibson, Project Manager Email: Ashton.Gibson@bureauveritas.com Phone# (905)817-5765

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> Total Cover Pages : 2 Page 2 of 15



RESULTS OF ANALYSES OF WATER

Bureau Veritas	ID			VUD712				
Sampling Date				2023/05/11				
Sampling Date				11:30				
COC Number				934281-01-01				
		UNITS	Criteria	MW23-20	RDL	QC Batch		
Calculated Para	meters							
Total Animal/Ve	egetable Oil and Grease	mg/L	-	1.2	0.50	8659113		
Inorganics								
Total Carbonace	eous BOD	mg/L	-	<2	2	8663349		
Fluoride (F-)		mg/L	-	0.13	0.10	8662442		
Total Kjeldahl N	itrogen (TKN)	mg/L	-	0.21	0.10	8663021		
рН			6.5:8.5	7.83		8662450		
Phenols-4AAP	mg/L	0.001	<0.0010 0.001		8667786			
Total Suspende	d Solids	mg/L	-	74	10	8661748		
Dissolved Sulph	ate (SO4)	mg/L	-	69	1.0	8662235		
Total Cyanide (C	CN)	mg/L	-	<0.0050	0.0050	8660971		
Petroleum Hyd	rocarbons							
Total Oil & Grea	ise	mg/L	-	1.2	0.50	8675238		
Total Oil & Grea	se Mineral/Synthetic	mg/L	0.5	<0.50	0.50	8675253		
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy	//level						
Black Exceeds both criteria/levels								
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario	Provincial Water Quality	, Objecti	ves					
Ref. to MOEE W	ater Management docum	nent dat	ed Feb.19	999				



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID			VUD712					
Sampling Date			2023/05/11					
Sampling Date			11:30					
COC Number			934281-01-01					
	UNITS	Criteria	MW23-20	RDL	QC Batch			
Metals								
Total Aluminum (Al)	mg/L	-	<0.1	0.1	8665796			
Total Antimony (Sb)	mg/L	0.02	<0.02	0.02	8665796			
Total Arsenic (As)	mg/L	0.1	<0.01	0.01	8665796			
Total Beryllium (Be)	mg/L	0.011	<0.0005	0.0005	8665796			
Total Cadmium (Cd)	mg/L	0.0002	<0.002 (1)	0.002	8665796			
Total Chromium (Cr)	mg/L	-	<0.01	0.01	8665796			
Total Cobalt (Co)	mg/L	0.0009	<0.002 (1)	0.002	8665796			
Total Copper (Cu)	mg/L	0.005	<0.01 (1)	0.01	8665796			
Total Iron (Fe)	mg/L	0.3	1.2	0.02	8665796			
Total Lead (Pb)	mg/L	0.005	<0.01 (1)	0.01	8665796			
Total Manganese (Mn)	mg/L	-	0.043	0.001	8665796			
Mercury (Hg)	mg/L	0.0002	<0.00010	0.00010	8666881			
Total Molybdenum (Mo)	mg/L	0.04	<0.005	0.005	8665796			
Total Nickel (Ni)	mg/L	0.025	<0.005	0.005	8665796			
Total Phosphorus (P)	mg/L	0.01	<0.05 (1)	0.05	8665796			
Total Selenium (Se)	mg/L	0.1	<0.02	0.02	8665796			
Total Silver (Ag)	mg/L	0.0001	<0.01 (1)	0.01	8665796			
Total Tin (Sn)	mg/L	-	<0.02	0.02	8665796			
Total Titanium (Ti)	mg/L	-	<0.005	0.005	8665796			
Total Zinc (Zn)	mg/L	0.03	<0.005	0.005	8665796			
Total Aluminum (Al)	ug/L	-	93	4.9	8667576			
Total Antimony (Sb)	ug/L	20	<0.50	0.50	8667576			
Total Arsenic (As)	ug/L	100	3.5	1.0	8667576			
Total Barium (Ba)	ug/L	-	51	2.0	8667576			
Total Beryllium (Be)	ug/L	11	<0.40	0.40	8667576			
Total Bismuth (Bi)	ug/L	-	<1.0	1.0	8667576			
Total Boron (B)	ug/L	200	94	10	8667576			
Total Cadmium (Cd)	ug/L	0.2	<0.090	0.090	8667576			
No Fill No Exceedance	ce							
Grey Exceeds 1 crit	eria pol	icy/level						
Black Exceeds both	criteria,	/levels						
RDL = Reportable Detection L	imit							
QC Batch = Quality Control Ba	atch							
Criteria: Ontario Provincial Water Quality Objectives								
Ref. to MOEE Water Manager	ment do	cument d	lated Feb.1999					
 RDL exceeds criteria 								



Bureau Verita	s ID			VUD712				
				2023/05/11				
Sampling Date	9			11:30				
COC Number				934281-01-01				
		UNITS	Criteria	MW23-20	RDL	QC Batch		
Total Calcium	(Ca)	ug/L	-	120000	200	8667576		
Total Chromiu	m (Cr)	ug/L	-	<5.0	5.0	8667576		
Total Cobalt (C	Co)	ug/L	0.9	<0.50	0.50	8667576		
Total Copper (Cu)	ug/L	5	<0.90	0.90	8667576		
Total Iron (Fe)		ug/L	300	1300	100	8667576		
Total Lead (Pb)	ug/L	5	<0.50	0.50	8667576		
Total Lithium ([Li)	ug/L	-	33	5.0	8667576		
Total Magnesi	um (Mg)	ug/L	-	53000	50	8667576		
Total Mangane	ese (Mn)	ug/L	-	43	2.0	8667576		
Total Molybde	num (Mo)	ug/L	40	1.3	0.50	8667576		
Total Nickel (N	li)	ug/L	25	<1.0	1.0	8667576		
Total Potassiu	m (K)	ug/L	-	3800	200	8667576		
Total Selenium (Se)		ug/L	100	<2.0	2.0	8667576		
Total Silicon (S	ug/L	-	7900	50	8667576			
Total Silver (Ag	g)	ug/L	0.1	<0.090	0.090	8667576		
Total Sodium (Na)	ug/L	-	31000	100	8667576		
Total Strontiur	m (Sr)	ug/L	-	3400	1.0	8667576		
Total Telluriun	n (Te)	ug/L	-	<1.0	1.0	8667576		
Total Thallium	(TI)	ug/L	0.3	<0.050	0.050	8667576		
Total Tin (Sn)		ug/L	-	1.0	1.0	8667576		
Total Titanium	ı (Ti)	ug/L	-	<5.0	5.0	8667576		
Total Tungster	ו (W)	ug/L	30	<1.0	1.0	8667576		
Total Uranium	(U)	ug/L	5	1.5	0.10	8667576		
Total Vanadiu	m (V)	ug/L	6	0.79	0.50	8667576		
Total Zinc (Zn)		ug/L	30	<5.0	5.0	8667576		
Total Zirconiur	m (Zr)	ug/L	4	<1.0	1.0	8667576		
No Fill	No Exceedanc	e						
Grey	Exceeds 1 criteria policy/level							
Black	Black Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontar	io Provincial Wa	ater Qua	ality Obje	ctives				
Ref. to MOEE \	Nater Managen	nent do	cument d	ated Feb.1999				

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)



SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Verit	as ID			VUD712			
Sampling Da	to			2023/05/11			
	le			11:30			
COC Number				934281-01-01			
		UNITS	Criteria	MW23-20	RDL	QC Batch	
Polyaromatio	C Hydrocarbons						
Naphthalene		ug/L	7	<0.050	0.050	8667408	
Surrogate Re	covery (%)						
D10-Anthrac	ene	%	-	102		8667408	
D14-Terphen	ıyl (FS)	%	-	80		8667408	
D8-Acenapht	hylene	%	-	88		8667408	
No Fill	No Exceedance	e					
Grey	Exceeds 1 crite	eria poli	cy/level				
Black	Exceeds both o	criteria/	levels				
RDL = Report	able Detection L	imit					
QC Batch = Quality Control Batch							
Criteria: Onta	ario Provincial Wa	ater Qua	ality Obje	ctives			
Ref. to MOEE	Water Managen	nent do	cument d	ated Feb.1999			



VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas	ID			VUD712			
Sampling Data				2023/05/11			
Sampling Date				11:30			
COC Number				934281-01-01			
		UNITS	Criteria	MW23-20	RDL	QC Batch	
Volatile Organ	ics						
Benzene	ug/L	100	<0.20	0.20	8664241		
Chloroform		ug/L	-	<0.20	0.20	8664241	
1,4-Dichlorobe	nzene	ug/L	4	<0.40	0.40	8664241	
Ethylbenzene		ug/L	8	<0.20	0.20	8664241	
Methylene Chl	oride(Dichloromethane)	ug/L	100	<2.0	2.0	8664241	
Tetrachloroeth	ylene	ug/L	50	<0.20	0.20	8664241	
Toluene		ug/L	0.8	<0.20	0.20	8664241	
Trichloroethyle	ene	ug/L	20	<0.20	0.20	8664241	
Surrogate Reco	overy (%)						
4-Bromofluoro	benzene	%	-	100		8664241	
D4-1,2-Dichlor	oethane	%	-	110		8664241	
D8-Toluene		%	-	94		8664241	
No Fill	No Exceedance			-			
Grey	Exceeds 1 criteria policy	/level					
Black	Exceeds both criteria/le						
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Ontari	Criteria: Ontario Provincial Water Quality Objectives						
Ref. to MOEE V	Vater Management docun	nent dat	ed Feb.19	999			

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



MICROBIOLOGY (WATER)

Bureau Verita	tas ID VUD712								
Sampling Dat	e			2023/05/11					
COC Number				934281-01-01					
		UNITS	Criteria	MW23-20	RDL	QC Batch			
Microbiologic	al								
Escherichia co	oli	CFU/100mL	100	<10	10	8660593			
No Fill	No Exceedance	ce							
Grey	Exceeds 1 crit	eria policy/le	vel						
Black	Exceeds both	criteria/level	S						
RDL = Reporta	able Detection L	imit							
QC Batch = Quality Control Batch									
Criteria: Ontai Ref. to MOEE	rio Provincial Wa Water Managen	ater Quality C nent docume	bjectives) nt dated	; Feb.1999					



DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

TEST SUMMARY

Bureau Veritas ID:	VUD712
Sample ID:	MW23-20
Matrix:	Water

Bureau Veritas ID: VUD712 Sample ID: MW23-20 Matrix: Water					Collected: 2023/05/11 Shipped: Received: 2023/05/11	
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Carbonaceous BOD	DO	8663349	2023/05/13	2023/05/18	Gurjot Kaur	
Total Cyanide	SKAL/CN	8660971	2023/05/12	2023/05/16	Prgya Panchal	
Fluoride	ISE	8662442	2023/05/12	2023/05/16	Kien Tran	
Mercury in Water by CVAA	CV/AA	8666881	2023/05/16	2023/05/16	Jaswinder Kaur	
Total Metals Analysis by Axial ICP	ICPX	8665796	2023/05/15	2023/05/16	Gagandeep Rai	
Total Metals Analysis by ICPMS	ICP/MS	8667576	2023/05/16	2023/05/18	Prempal Bhatti	
E.coli, (CFU/100mL)	PL	8660593	N/A	2023/05/11	Soham Patel	
Animal and Vegetable Oil and Grease	BAL	8659113	N/A	2023/05/20	Automated Statchk	
Total Oil and Grease	BAL	8675238	2023/05/19	2023/05/19	Rutvik Patel	
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8667408	2023/05/16	2023/05/17	Mitesh Raj	
рН	AT	8662450	2023/05/12	2023/05/16	Kien Tran	
Phenols (4AAP)	TECH/PHEN	8667786	N/A	2023/05/16	Mandeep Kaur	
Sulphate by Automated Turbidimetry	KONE	8662235	N/A	2023/05/18	Massarat Jan	
Total Kjeldahl Nitrogen in Water	SKAL	8663021	2023/05/12	2023/05/16	Jency Sara Johnson	
Mineral/Synthetic O & G (TPH Heavy Oil)	BAL	8675253	2023/05/19	2023/05/19	Rutvik Patel	
Total Suspended Solids	BAL	8661748	2023/05/16	2023/05/16	Shaneil Hall	
Volatile Organic Compounds in Water	GC/MS	8664241	N/A	2023/05/15	Hai Son Tran	



GENERAL COMMENTS

Each te	emperature is the ave	rage of up to th	ree cooler temperatures taken at receipt						
	Package 1 15.0°C								

Revised Report[5/24/2023]: PWQO criteria added to C of A

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8664241	4-Bromofluorobenzene	2023/05/15	99	70 - 130	99	70 - 130	100	%				
8664241	D4-1,2-Dichloroethane	2023/05/15	107	70 - 130	105	70 - 130	106	%				
8664241	D8-Toluene	2023/05/15	96	70 - 130	97	70 - 130	96	%				
8667408	D10-Anthracene	2023/05/17	100	50 - 130	81	50 - 130	111	%				
8667408	D14-Terphenyl (FS)	2023/05/17	96	50 - 130	91	50 - 130	98	%				
8667408	D8-Acenaphthylene	2023/05/17	91	50 - 130	88	50 - 130	95	%				
8660971	Total Cyanide (CN)	2023/05/16	110	80 - 120	111	80 - 120	<0.0050	mg/L	NC	20		
8661748	Total Suspended Solids	2023/05/16					<10	mg/L	NC	20	98	85 - 115
8662235	Dissolved Sulphate (SO4)	2023/05/18	89	75 - 125	97	80 - 120	<1.0	mg/L	NC	20		
8662442	Fluoride (F-)	2023/05/16	64 (1)	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
8662450	рН	2023/05/16			102	98 - 103			1.3	N/A		
8663021	Total Kjeldahl Nitrogen (TKN)	2023/05/16	106	80 - 120	104	80 - 120	<0.10	mg/L	14	20	99	80 - 120
8663349	Total Carbonaceous BOD	2023/05/18					<2	mg/L	1.1	30	98	85 - 115
8664241	1,4-Dichlorobenzene	2023/05/15	99	70 - 130	103	70 - 130	<0.40	ug/L	NC	30		
8664241	Benzene	2023/05/15	84	70 - 130	88	70 - 130	<0.20	ug/L	NC	30		
8664241	Chloroform	2023/05/15	89	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
8664241	Ethylbenzene	2023/05/15	80	70 - 130	85	70 - 130	<0.20	ug/L	NC	30		
8664241	Methylene Chloride(Dichloromethane)	2023/05/15	88	70 - 130	90	70 - 130	<2.0	ug/L	NC	30		
8664241	Tetrachloroethylene	2023/05/15	80	70 - 130	85	70 - 130	<0.20	ug/L	NC	30		
8664241	Toluene	2023/05/15	80	70 - 130	85	70 - 130	<0.20	ug/L	3.2	30		
8664241	Trichloroethylene	2023/05/15	89	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
8665796	Total Aluminum (Al)	2023/05/16	101	80 - 120	94	80 - 120	<0.1	mg/L	NC	20		
8665796	Total Antimony (Sb)	2023/05/16	103	80 - 120	101	80 - 120	<0.02	mg/L	NC	20		
8665796	Total Arsenic (As)	2023/05/16	105	80 - 120	101	80 - 120	<0.01	mg/L	NC	20		
8665796	Total Beryllium (Be)	2023/05/16	103	80 - 120	104	80 - 120	<0.0005	mg/L				
8665796	Total Cadmium (Cd)	2023/05/16	104	80 - 120	102	80 - 120	<0.002	mg/L	NC	20		
8665796	Total Chromium (Cr)	2023/05/16	102	80 - 120	100	80 - 120	<0.01	mg/L	NC	20		
8665796	Total Cobalt (Co)	2023/05/16	96	80 - 120	100	80 - 120	<0.002	mg/L	NC	20		
8665796	Total Copper (Cu)	2023/05/16	103	80 - 120	103	80 - 120	<0.01	mg/L	NC	20		
8665796	Total Iron (Fe)	2023/05/16	102	80 - 120	102	80 - 120	<0.02	mg/L	4.6	20		
8665796	Total Lead (Pb)	2023/05/16	94	80 - 120	100	80 - 120	<0.01	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8665796	Total Manganese (Mn)	2023/05/16	102	80 - 120	105	80 - 120	<0.001	mg/L	0.93	20		
8665796	Total Molybdenum (Mo)	2023/05/16	100	80 - 120	101	80 - 120	<0.005	mg/L	NC	20		
8665796	Total Nickel (Ni)	2023/05/16	96	80 - 120	101	80 - 120	<0.005	mg/L	NC	20		
8665796	Total Phosphorus (P)	2023/05/16	105	80 - 120	102	80 - 120	<0.05	mg/L	NC	20		
8665796	Total Selenium (Se)	2023/05/16	106	80 - 120	103	80 - 120	<0.02	mg/L	NC	20		
8665796	Total Silver (Ag)	2023/05/16	96	80 - 120	96	80 - 120	<0.01	mg/L	NC	20		
8665796	Total Tin (Sn)	2023/05/16	97	80 - 120	101	80 - 120	<0.02	mg/L	NC	20		
8665796	Total Titanium (Ti)	2023/05/16	101	80 - 120	102	80 - 120	<0.005	mg/L	NC	20		
8665796	Total Zinc (Zn)	2023/05/16	98	80 - 120	102	80 - 120	<0.005	mg/L	1.3	20		
8666881	Mercury (Hg)	2023/05/16	98	75 - 125	101	80 - 120	<0.00010	mg/L	NC	20		
8667408	Naphthalene	2023/05/17	102	50 - 130	96	50 - 130	<0.050	ug/L	NC	30		
8667576	Total Aluminum (Al)	2023/05/19	100	80 - 120	96	80 - 120	<4.9	ug/L	4.1	20		
8667576	Total Antimony (Sb)	2023/05/18	112	80 - 120	106	80 - 120	<0.50	ug/L				
8667576	Total Arsenic (As)	2023/05/19	101	80 - 120	99	80 - 120	<1.0	ug/L	4.2	20		
8667576	Total Barium (Ba)	2023/05/18	96	80 - 120	93	80 - 120	<2.0	ug/L				
8667576	Total Beryllium (Be)	2023/05/18	95	80 - 120	92	80 - 120	<0.40	ug/L				
8667576	Total Bismuth (Bi)	2023/05/18	88	80 - 120	93	80 - 120	<1.0	ug/L				
8667576	Total Boron (B)	2023/05/18	NC	80 - 120	91	80 - 120	<10	ug/L				
8667576	Total Cadmium (Cd)	2023/05/18	95	80 - 120	96	80 - 120	<0.090	ug/L				
8667576	Total Calcium (Ca)	2023/05/18	NC	80 - 120	98	80 - 120	<200	ug/L				
8667576	Total Chromium (Cr)	2023/05/19	96	80 - 120	94	80 - 120	<5.0	ug/L	NC	20		
8667576	Total Cobalt (Co)	2023/05/19	94	80 - 120	94	80 - 120	<0.50	ug/L	4.1	20		
8667576	Total Copper (Cu)	2023/05/19	97	80 - 120	94	80 - 120	<0.90	ug/L	0.64	20		
8667576	Total Iron (Fe)	2023/05/18	98	80 - 120	99	80 - 120	<100	ug/L				
8667576	Total Lead (Pb)	2023/05/19	90	80 - 120	96	80 - 120	<0.50	ug/L	1.4	20		
8667576	Total Lithium (Li)	2023/05/18	NC	80 - 120	97	80 - 120	<5.0	ug/L				
8667576	Total Magnesium (Mg)	2023/05/18	NC	80 - 120	96	80 - 120	<50	ug/L				
8667576	Total Manganese (Mn)	2023/05/19	94	80 - 120	94	80 - 120	<2.0	ug/L	2.7	20		
8667576	Total Molybdenum (Mo)	2023/05/19	105	80 - 120	99	80 - 120	<0.50	ug/L	0.71	20		
8667576	Total Nickel (Ni)	2023/05/19	91	80 - 120	94	80 - 120	<1.0	ug/L	4.3	20		
8667576	Total Potassium (K)	2023/05/18	NC	80 - 120	96	80 - 120	<200	ug/L				

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QUALITY ASSURANCE REPORT(CONT'D)

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix	Spike	SPIKED	BLANK	Method	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8667576	Total Selenium (Se)	2023/05/19	98	80 - 120	102	80 - 120	<2.0	ug/L	NC	20		
8667576	Total Silicon (Si)	2023/05/18	100	80 - 120	97	80 - 120	<50	ug/L				
8667576	Total Silver (Ag)	2023/05/19	92	80 - 120	94	80 - 120	<0.090	ug/L	NC	20		
8667576	Total Sodium (Na)	2023/05/19	NC	80 - 120	97	80 - 120	<100	ug/L	0.63	20		
8667576	Total Strontium (Sr)	2023/05/18	NC	80 - 120	96	80 - 120	<1.0	ug/L				
8667576	Total Tellurium (Te)	2023/05/18	95	80 - 120	98	80 - 120	<1.0	ug/L				
8667576	Total Thallium (Tl)	2023/05/18	90	80 - 120	97	80 - 120	<0.050	ug/L				
8667576	Total Tin (Sn)	2023/05/19	102	80 - 120	98	80 - 120	<1.0	ug/L	0.89	20		
8667576	Total Titanium (Ti)	2023/05/19	100	80 - 120	96	80 - 120	<5.0	ug/L	NC	20		
8667576	Total Tungsten (W)	2023/05/18	98	80 - 120	99	80 - 120	<1.0	ug/L				
8667576	Total Uranium (U)	2023/05/18	95	80 - 120	97	80 - 120	<0.10	ug/L				
8667576	Total Vanadium (V)	2023/05/18	98	80 - 120	94	80 - 120	<0.50	ug/L				
8667576	Total Zinc (Zn)	2023/05/19	93	80 - 120	100	80 - 120	<5.0	ug/L	0.84	20		
8667576	Total Zirconium (Zr)	2023/05/18	106	80 - 120	99	80 - 120	<1.0	ug/L				
8667786	Phenols-4AAP	2023/05/16	105	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
8675238	Total Oil & Grease	2023/05/19			99	85 - 115	<0.50	mg/L	0.76	25		
8675253	Total Oil & Grease Mineral/Synthetic	2023/05/19			98	85 - 115	<0.50	mg/L	1.5	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Scham N Patel

Soham Patel, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.



Exceedance Summary Table – Prov. Water Quality Obj.

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
MW23-20	VUD712-05	Total Iron (Fe)	300	1300	100	ug/L
MW23-20	VUD712-05	Total Iron (Fe)	0.3	1.2	0.02	mg/L
		Detection Limit Exce	edances			
Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
MW23-20	VUD712-05	Total Cadmium (Cd)	0.0002	<0.002	0.002	mg/L
MW23-20	VUD712-05	Total Cobalt (Co)	0.0009	<0.002	0.002	mg/L
MW23-20	VUD712-05	Total Copper (Cu)	0.005	<0.01	0.01	mg/L
MW23-20	VUD712-05	Total Lead (Pb)	0.005	<0.01	0.01	mg/L
MW23-20	VUD712-05	Total Phosphorus (P)	0.01	<0.05	0.05	mg/L
MW23-20	VUD712-05	Total Silver (Ag)	0.0001	<0.01	0.01	mg/L
The exceedance summary ta	ble is for information purp	oses only and should not be	considered a compret	nensive listing or	r statement of	conformance to

applicable regulatory guidelines.



Your Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Your C.O.C. #: 935407-01-01

Attention: Abdul Qadir

DS Consultants Limited 6221 Highway 7, Unit 16 Vaughan, ON CANADA L4H 0K8

> Report Date: 2023/07/05 Report #: R7701142 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3E3168 Received: 2023/05/18, 18:30

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Carbonaceous BOD	1	2023/05/19	2023/05/24	CAM SOP-00427	SM 23 5210B m
Total Cyanide	1	2023/05/23	2023/05/23	CAM SOP-00457	OMOE E3015 5 m
Fluoride	1	2023/05/20	2023/05/23	CAM SOP-00449	SM 23 4500-F C m
Mercury in Water by CVAA	1	2023/05/23	2023/05/23	CAM SOP-00453	EPA 7470A m
Total Metals Analysis by Axial ICP	1	2023/05/23	2023/05/24	CAM SOP-00408	EPA 6010D m
E.coli, (CFU/100mL)	1	N/A	2023/05/18	CAM SOP-00552	MECP E3371
Animal and Vegetable Oil and Grease	1	N/A	2023/05/26	CAM SOP-00326	EPA1664B m,SM5520B m
Total Oil and Grease	1	2023/05/26	2023/05/26	CAM SOP-00326	EPA1664B m,SM5520B m
PAH Compounds in Water by GC/MS (SIM)	1	2023/05/24	2023/05/25	CAM SOP-00318	EPA 8270E
рН	1	2023/05/20	2023/05/23	CAM SOP-00413	SM 4500H+ B m
Phenols (4AAP)	1	N/A	2023/05/24	CAM SOP-00444	OMOE E3179 m
Sulphate by Automated Turbidimetry	1	N/A	2023/05/25	CAM SOP-00464	SM 23 4500-SO42- E m
Total Kjeldahl Nitrogen in Water	1	2023/05/23	2023/05/24	CAM SOP-00938	OMOE E3516 m
Mineral/Synthetic O & G (TPH Heavy Oil) (1)	1	2023/05/26	2023/05/26	CAM SOP-00326	EPA1664B m,SM5520F m
Total Suspended Solids	1	2023/05/24	2023/05/25	CAM SOP-00428	SM 23 2540D m
Volatile Organic Compounds in Water	1	N/A	2023/05/24	CAM SOP-00228	EPA 8260D

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

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Your Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Your C.O.C. #: 935407-01-01

Attention: Abdul Qadir

DS Consultants Limited 6221 Highway 7, Unit 16 Vaughan, ON CANADA L4H 0K8

> Report Date: 2023/07/05 Report #: R7701142 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3E3168 Received: 2023/05/18, 18:30

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Note: TPH (Heavy Oil) is equivalent to Mineral / Synthetic Oil & Grease

Encryption Key

Please direct all questions regarding this Certificate of Analysis to: Ashton Gibson, Project Manager Email: Ashton.Gibson@bureauveritas.com Phone# (905)817-5765

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

> Total Cover Pages : 2 Page 2 of 13



RESULTS OF ANALYSES OF WATER

Bureau Veritas I)				VVX490		
Sampling Date					2023/05/18		
Sampling Date					11:00		
COC Number					935407-01-01		
		UNITS	Criteria	Criteria-2	PW1	RDL	QC Batch
Calculated Param	neters						
Total Animal/Veg	etable Oil and Grease	mg/L	-	150	<0.50	0.50	8671696
Inorganics							
Total Carbonaced	ous BOD	mg/L	-	300	4	2	8674463
Fluoride (F-)		mg/L	-	10	0.13	0.10	8677210
Total Kjeldahl Nit	rogen (TKN)	mg/L	-	100	0.31	0.10	8676524
рН		рН	6.5:8.5	6.0:10.0	7.53		8677213
Phenols-4AAP		mg/L	-	1	<0.0010	0.0010	8682239
Total Suspended	Solids	mg/L	-	350	18	10	8681749
Dissolved Sulphat	te (SO4)	mg/L	-	1500	78	1.0	8677246
Total Cyanide (CN	1)	mg/L	-	2	<0.0050	0.0050	8678607
Petroleum Hydro	ocarbons						
Total Oil & Greas	e	mg/L	-	-	<0.50	0.50	8685950
Total Oil & Greas	e Mineral/Synthetic	mg/L	-	-	<0.50	0.50	8685952
No Fill	No Exceedance						
Grey	Exceeds 1 criteria poli	icy/leve					
Black	Exceeds both criteria/	levels/					
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Halton Storm Sewer ByLaw							
Criteria-2: Halton	Sanitary & Combined S	ewer By	/law (2-03	3)			



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID				VVX490			VVX490		
Sampling Date				2023/05/18			2023/05/18		
				11:00			11:00		
COC Number				935407-01-01			935407-01-01		
	U	JNITS	Criteria	PW1	RDL	QC Batch	PW1 Lab-Dup	RDL	QC Batch
Metals									
Total Aluminum (Al) n	mg/L	50	0.2	0.1	8679547	0.2	0.1	8679547
Total Antimony (Sb)) n	mg/L	5	<0.02	0.02	8679547	<0.02	0.02	8679547
Total Arsenic (As)	n	mg/L	1	<0.01	0.01	8679547	<0.01	0.01	8679547
Total Beryllium (Be)	n	mg/L	5	<0.0005	0.0005	8679547	<0.0005	0.0005	8679547
Total Cadmium (Cd)) n	mg/L	1	<0.002	0.002	8679547	<0.002	0.002	8679547
Total Chromium (Cr	.) n	mg/L	3	<0.01	0.01	8679547	<0.01	0.01	8679547
Total Cobalt (Co)	n	mg/L	5	<0.002	0.002	8679547	<0.002	0.002	8679547
Total Copper (Cu)	n	mg/L	3	<0.01	0.01	8679547	<0.01	0.01	8679547
Total Iron (Fe)	n	mg/L	50	2.7	0.02	8679547	2.7	0.02	8679547
Total Lead (Pb)	n	mg/L	3	<0.01	0.01	8679547	<0.01	0.01	8679547
Total Manganese (N	/In) n	mg/L	5	0.082	0.001	8679547	0.082	0.001	8679547
Mercury (Hg)	n	mg/L	0.05	<0.00010	0.00010	8678866			
Total Molybdenum	(Mo) n	mg/L	5	0.011	0.005	8679547	0.005	0.005	8679547
Total Nickel (Ni)	n	mg/L	3	<0.005	0.005	8679547	<0.005	0.005	8679547
Total Phosphorus (F	r) n	mg/L	10	<0.05	0.05	8679547	<0.05	0.05	8679547
Total Selenium (Se)	n	mg/L	5	<0.02	0.02	8679547	<0.02	0.02	8679547
Total Silver (Ag)	n	mg/L	5	<0.01	0.01	8679547	<0.01	0.01	8679547
Total Tin (Sn)	n	mg/L	5	<0.02	0.02	8679547	<0.02	0.02	8679547
Total Titanium (Ti)	n	mg/L	5	<0.005	0.005	8679547	<0.005	0.005	8679547
Total Zinc (Zn)	n	mg/L	3	<0.005	0.005	8679547	<0.005	0.005	8679547
No Fill	No Exceed	dance							
Grey	Exceeds 1	criter	ia policy/	level					
Black	Exceeds bo	oth cr	iteria/lev	rels					

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

Criteria: Halton Sanitary & Combined Sewer Bylaw (2-03)



SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Verit	as ID			VVX490					
Sampling Dat	•			2023/05/18					
	le			11:00					
COC Number				935407-01-01					
		UNITS	Criteria	PW1	RDL	QC Batch			
Polyaromatic	Polyaromatic Hydrocarbons								
Naphthalene ug/L 140 0.42 0.050 868153									
Surrogate Recovery (%)									
D10-Anthrace	%	-	104		8681534				
D14-Terphen	yl (FS)	%	-	94		8681534			
D8-Acenapht	hylene	%	-	99		8681534			
No Fill	No Exceedance	e							
Grey	Exceeds 1 crite	eria poli	cy/level						
Black	Exceeds both	criteria/	levels						
RDL = Report	RDL = Reportable Detection Limit								
QC Batch = Q	QC Batch = Quality Control Batch								
Criteria: Halto	on Sanitary & Co	mbined	Sewer By	ylaw (2-03)					



VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas	ID			VVX490					
Comulius Data				2023/05/18					
Sampling Date				11:00					
COC Number				935407-01-01					
		UNITS	Criteria	PW1	RDL	QC Batch			
Volatile Organi	cs								
Benzene		ug/L	10	<0.20	0.20	8677631			
Chloroform		ug/L	40	<0.20	0.20	8677631			
1,4-Dichlorobe	nzene	ug/L	80	<0.40	0.40	8677631			
Ethylbenzene		ug/L	160	<0.20	0.20	8677631			
Methylene Chlo	ug/L	2000	<2.0	2.0	8677631				
Tetrachloroeth	ug/L	1000	<0.20	0.20	8677631				
Toluene		ug/L	16	<0.20	0.20	8677631			
Trichloroethyle	ne	ug/L	400	<0.20	0.20	8677631			
Surrogate Reco	overy (%)			-					
4-Bromofluorol	benzene	%	-	98		8677631			
D4-1,2-Dichloro	pethane	%	-	122		8677631			
D8-Toluene		%	-	86		8677631			
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy	/level							
Black Exceeds both criteria/levels									
RDL = Reportable Detection Limit									
QC Batch = Qua	QC Batch = Quality Control Batch								
Criteria: Halton	Sanitary & Combined Sev	wer Byla	w (2-03)						

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



MICROBIOLOGY (WATER)

Bureau Verita	as ID			VVX490		
Sampling Date				2023/05/18		
				11:00		
COC Number				935407-01-01		
		UNITS	Criteria	PW1	RDL	QC Batch
Microbiologic	al					
Escherichia co	oli	CFU/100mL	200	<10	10	8674241
No Fill	No Exceedance	ce				
Grey	Exceeds 1 crit	eria policy/le	vel			
Black	Exceeds both	criteria/level	s			
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Halto	on Storm Sewer	ByLaw				



TEST SUMMARY

Bureau Veritas ID:	VVX490
Sample ID:	PW1
Matrix:	Water

Bureau Veritas ID: VV2 Sample ID: PW Matrix: Wa	X490 '1 ter				Collected: Shipped: Received:	2023/05/18 2023/05/18
Test Description	Instrum	entation Batch	Extracted	Date Analyzed	Analyst	
Carbonaceous BOD	DO	8674463	2023/05/19	2023/05/24	Gurjot Kau	r
Total Cyanide	SKAL/C	N 8678607	2023/05/23	2023/05/23	Prgya Pano	hal
Fluoride	ISE	8677210	2023/05/20	2023/05/23	Kien Tran	
Mercury in Water by CVAA	CV/AA	8678866	2023/05/23	2023/05/23	Jaswinder	Kaur
Total Metals Analysis by Axial I	CP ICPX	8679547	2023/05/23	2023/05/24	Medhat Na	isr
E.coli, (CFU/100mL)	PL	8674241	N/A	2023/05/18	Soham Pat	el
Animal and Vegetable Oil and	Grease BAL	8671696	N/A	2023/05/26	Automated	l Statchk
Total Oil and Grease	BAL	8685950	2023/05/26	2023/05/26	Navneet Si	ngh
PAH Compounds in Water by O	GC/MS (SIM) GC/MS	8681534	2023/05/24	2023/05/25	Mitesh Raj	
рН	AT	8677213	2023/05/20	2023/05/23	Kien Tran	
Phenols (4AAP)	TECH/P	HEN 8682239	N/A	2023/05/24	Mandeep I	Kaur
Sulphate by Automated Turbid	limetry KONE	8677246	N/A	2023/05/25	Massarat J	an
Total Kjeldahl Nitrogen in Wat	er SKAL	8676524	2023/05/23	2023/05/24	Jency Sara	Johnson
Mineral/Synthetic O & G (TPH	Heavy Oil) BAL	8685952	2023/05/26	2023/05/26	Navneet Si	ngh
Total Suspended Solids	BAL	8681749	2023/05/24	2023/05/25	Shaneil Ha	I
Volatile Organic Compounds in	Water GC/MS	8677631	N/A	2023/05/24	Skylar Canı	ning

Bureau Veritas ID: Sample ID: Matrix:	VVX490 Dup PW1 Water					Collected: 2023/05/18 Shipped: Received: 2023/05/18	
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Total Metals Analysis by A	Axial ICP	ICPX	8679547	2023/05/23	2023/05/24	Medhat Nasr	



GENERAL COMMENTS

Each temperat	ure is the averag	e of up to thre	ee cooler tempe	ratures taken at receipt

Package 1 13.7°C

Revised Report[7/5/2023]: criteria added to C of A.

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits	
8677631	4-Bromofluorobenzene	2023/05/24	99	70 - 130	102	70 - 130	100	%					
8677631	D4-1,2-Dichloroethane	2023/05/24	109	70 - 130	108	70 - 130	114	%					
8677631	D8-Toluene	2023/05/24	98	70 - 130	107	70 - 130	87	%					
8681534	D10-Anthracene	2023/05/24	113	50 - 130	106	50 - 130	111	%					
8681534	D14-Terphenyl (FS)	2023/05/24	105	50 - 130	96	50 - 130	98	%					
8681534	D8-Acenaphthylene	2023/05/24	103	50 - 130	96	50 - 130	101	%					
8674463	Total Carbonaceous BOD	2023/05/24					<2	mg/L	4.0	30	96	85 - 115	
8676524	Total Kjeldahl Nitrogen (TKN)	2023/05/24	102	80 - 120	104	80 - 120	<0.10	mg/L	3.1	20	105	80 - 120	
8677210	Fluoride (F-)	2023/05/23	104	80 - 120	101	80 - 120	<0.10	mg/L	5.7	20			
8677213	рН	2023/05/23			101	98 - 103			0.57	N/A			
8677246	Dissolved Sulphate (SO4)	2023/05/25	123	75 - 125	100	80 - 120	<1.0	mg/L	1.4	20			
8677631	1,4-Dichlorobenzene	2023/05/24	110	70 - 130	106	70 - 130	<0.40	ug/L	NC	30			
8677631	Benzene	2023/05/24	93	70 - 130	98	70 - 130	<0.20	ug/L	NC	30			
8677631	Chloroform	2023/05/24	101	70 - 130	106	70 - 130	<0.20	ug/L	2.3	30			
8677631	Ethylbenzene	2023/05/24	91	70 - 130	85	70 - 130	<0.20	ug/L	NC	30			
8677631	Methylene Chloride(Dichloromethane)	2023/05/24	98	70 - 130	109	70 - 130	<2.0	ug/L	NC	30			
8677631	Tetrachloroethylene	2023/05/24	88	70 - 130	89	70 - 130	<0.20	ug/L	NC	30			
8677631	Toluene	2023/05/24	93	70 - 130	96	70 - 130	<0.20	ug/L	NC	30			
8677631	Trichloroethylene	2023/05/24	101	70 - 130	103	70 - 130	<0.20	ug/L	NC	30			
8678607	Total Cyanide (CN)	2023/05/23	100	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20			
8678866	Mercury (Hg)	2023/05/23	98	75 - 125	103	80 - 120	<0.00010	mg/L	NC	20			
8679547	Total Aluminum (Al)	2023/05/24	126 (1)	80 - 120	104	80 - 120	<0.1	mg/L	12	20			
8679547	Total Antimony (Sb)	2023/05/24	107	80 - 120	103	80 - 120	<0.02	mg/L	NC	20			
8679547	Total Arsenic (As)	2023/05/24	110	80 - 120	105	80 - 120	<0.01	mg/L	NC	20			
8679547	Total Beryllium (Be)	2023/05/24	104	80 - 120	103	80 - 120	<0.0005	mg/L	NC	20			
8679547	Total Cadmium (Cd)	2023/05/24	108	80 - 120	104	80 - 120	<0.002	mg/L	NC	20			
8679547	Total Chromium (Cr)	2023/05/24	109	80 - 120	104	80 - 120	<0.01	mg/L	NC	20			
8679547	Total Cobalt (Co)	2023/05/24	98	80 - 120	101	80 - 120	<0.002	mg/L	NC	20			
8679547	Total Copper (Cu)	2023/05/24	102	80 - 120	101	80 - 120	<0.01	mg/L	NC	20			
8679547	Total Iron (Fe)	2023/05/24	NC	80 - 120	108	80 - 120	<0.02	mg/L	0.67	20			
8679547	Total Lead (Pb)	2023/05/24	96	80 - 120	100	80 - 120	<0.01	mg/L	NC	20			

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QUALITY ASSURANCE REPORT(CONT'D)

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8679547	Total Manganese (Mn)	2023/05/24	101	80 - 120	102	80 - 120	<0.001	mg/L	0.12	20		
8679547	Total Molybdenum (Mo)	2023/05/24	101	80 - 120	102	80 - 120	<0.005	mg/L	NC	20		
8679547	Total Nickel (Ni)	2023/05/24	100	80 - 120	103	80 - 120	<0.005	mg/L	NC	20		
8679547	Total Phosphorus (P)	2023/05/24	102	80 - 120	99	80 - 120	<0.05	mg/L	NC	20		
8679547	Total Selenium (Se)	2023/05/24	109	80 - 120	107	80 - 120	<0.02	mg/L	NC	20		
8679547	Total Silver (Ag)	2023/05/24	98	80 - 120	96	80 - 120	<0.01	mg/L	NC	20		
8679547	Total Tin (Sn)	2023/05/24	98	80 - 120	100	80 - 120	<0.02	mg/L	NC	20		
8679547	Total Titanium (Ti)	2023/05/24	101	80 - 120	98	80 - 120	<0.005	mg/L	NC	20		
8679547	Total Zinc (Zn)	2023/05/24	101	80 - 120	101	80 - 120	<0.005	mg/L	NC	20		
8681534	Naphthalene	2023/05/25	110	50 - 130	105	50 - 130	<0.050	ug/L	NC	30		
8681749	Total Suspended Solids	2023/05/25					<10	mg/L	4.7	20	101	85 - 115
8682239	Phenols-4AAP	2023/05/24	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
8685950	Total Oil & Grease	2023/05/26			99	85 - 115	<0.50	mg/L	0.25	25		
8685952	Total Oil & Grease Mineral/Synthetic	2023/05/26			96	85 - 115	<0.50	mg/L	0	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

austin Camere

Cristina Carriere, Senior Scientific Specialist

Scham N Patel

Soham Patel, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.



Exceedance Summary Table – Halton Storm Sewer

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summa	ary table is for information purp	oses only and should	not be considered a comp	ehensive listing or	statement of	conformance to
applicable regulatory gu	uidelines.					

Exceedance Summary Table – Halton Sanitary Sewer

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS			
No Exceedances									
The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to									
applicable regulatory guid	elines.								



Your Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Your C.O.C. #: 935407-01-01

Attention: Abdul Qadir

DS Consultants Limited 6221 Highway 7, Unit 16 Vaughan, ON CANADA L4H 0K8

> Report Date: 2023/07/05 Report #: R7701069 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3E3168 Received: 2023/05/18, 18:30

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Carbonaceous BOD	1	2023/05/19	2023/05/24	CAM SOP-00427	SM 23 5210B m
Total Cyanide	1	2023/05/23	2023/05/23	CAM SOP-00457	OMOE E3015 5 m
Fluoride	1	2023/05/20	2023/05/23	CAM SOP-00449	SM 23 4500-F C m
Mercury in Water by CVAA	1	2023/05/23	2023/05/23	CAM SOP-00453	EPA 7470A m
Total Metals Analysis by Axial ICP	1	2023/05/23	2023/05/24	CAM SOP-00408	EPA 6010D m
E.coli, (CFU/100mL)	1	N/A	2023/05/18	CAM SOP-00552	MECP E3371
Animal and Vegetable Oil and Grease	1	N/A	2023/05/26	CAM SOP-00326	EPA1664B m,SM5520B m
Total Oil and Grease	1	2023/05/26	2023/05/26	CAM SOP-00326	EPA1664B m,SM5520B m
PAH Compounds in Water by GC/MS (SIM)	1	2023/05/24	2023/05/25	CAM SOP-00318	EPA 8270E
рН	1	2023/05/20	2023/05/23	CAM SOP-00413	SM 4500H+ B m
Phenols (4AAP)	1	N/A	2023/05/24	CAM SOP-00444	OMOE E3179 m
Sulphate by Automated Turbidimetry	1	N/A	2023/05/25	CAM SOP-00464	SM 23 4500-SO42- E m
Total Kjeldahl Nitrogen in Water	1	2023/05/23	2023/05/24	CAM SOP-00938	OMOE E3516 m
Mineral/Synthetic O & G (TPH Heavy Oil) (1)	1	2023/05/26	2023/05/26	CAM SOP-00326	EPA1664B m,SM5520F m
Total Suspended Solids	1	2023/05/24	2023/05/25	CAM SOP-00428	SM 23 2540D m
Volatile Organic Compounds in Water	1	N/A	2023/05/24	CAM SOP-00228	EPA 8260D

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

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Your Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Your C.O.C. #: 935407-01-01

Attention: Abdul Qadir

DS Consultants Limited 6221 Highway 7, Unit 16 Vaughan, ON CANADA L4H 0K8

> Report Date: 2023/07/05 Report #: R7701069 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3E3168 Received: 2023/05/18, 18:30

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Note: TPH (Heavy Oil) is equivalent to Mineral / Synthetic Oil & Grease

Encryption Key

Please direct all questions regarding this Certificate of Analysis to: Ashton Gibson, Project Manager Email: Ashton.Gibson@bureauveritas.com Phone# (905)817-5765

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> Total Cover Pages : 2 Page 2 of 13

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RESULTS OF ANALYSES OF WATER

Bureau Veritas	ID			VVX490				
Sampling Date				2023/05/18				
Sampling Date				11:00				
COC Number				935407-01-01				
		UNITS	Criteria	PW1	RDL	QC Batch		
Calculated Para	meters							
Total Animal/Ve	egetable Oil and Grease	mg/L	-	<0.50	0.50	8671696		
Inorganics								
Total Carbonace	eous BOD	mg/L	-	4	2	8674463		
Fluoride (F-)		mg/L	-	0.13	0.10	8677210		
Total Kjeldahl N	mg/L	-	0.31	0.10	8676524			
рН	рН	6.5:8.5	7.53		8677213			
Phenols-4AAP		mg/L	0.001	<0.0010	0.0010	8682239		
Total Suspende	d Solids	mg/L	-	18	10	8681749		
Dissolved Sulph	ate (SO4)	mg/L	-	78	1.0	8677246		
Total Cyanide (0	CN)	mg/L	-	<0.0050	0.0050	8678607		
Petroleum Hyd	rocarbons							
Total Oil & Grea	ise	mg/L	-	<0.50	0.50	8685950		
Total Oil & Grea	ase Mineral/Synthetic	mg/L	0.5	<0.50	0.50	8685952		
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy	//level						
Black Exceeds both criteria/levels								
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario Ref. to MOEE W	o Provincial Water Quality ater Management docum	[,] Objecti nent dat	ves ed Feb.19	999				



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID				VVX490			VVX490		
Samuling Data				2023/05/18			2023/05/18		
Sampling Date				11:00			11:00		
COC Number				935407-01-01			935407-01-01		
		UNITS	Criteria	PW1	RDL	QC Batch	PW1 Lab-Dup	RDL	QC Batch
Metals									
Total Aluminum (Al)	mg/L	-	0.2	0.1	8679547	0.2	0.1	8679547
Total Antimony (Sb)	mg/L	0.02	<0.02	0.02	8679547	<0.02	0.02	8679547
Total Arsenic (As)		mg/L	0.1	<0.01	0.01	8679547	<0.01	0.01	8679547
Total Beryllium (Be)	mg/L	0.011	<0.0005	0.0005	8679547	<0.0005	0.0005	8679547
Total Cadmium (Cd)	mg/L	0.0002	<0.002 (1)	0.002	8679547	<0.002 (1)	0.002	8679547
Total Chromium (Ci	r)	mg/L	-	<0.01	0.01	8679547	<0.01	0.01	8679547
Total Cobalt (Co)		mg/L	0.0009	<0.002 (1)	0.002	8679547	<0.002 (1)	0.002	8679547
Total Copper (Cu)		mg/L	0.005	<0.01 (1)	0.01	8679547	<0.01 (1)	0.01	8679547
Total Iron (Fe)		mg/L	0.3	2.7	0.02	8679547	2.7	0.02	8679547
Total Lead (Pb)		mg/L	0.005	<0.01 (1)	0.01	8679547	<0.01 (1)	0.01	8679547
Total Manganese (I	√In)	mg/L	-	0.082	0.001	8679547	0.082	0.001	8679547
Mercury (Hg)		mg/L	0.0002	<0.00010	0.00010	8678866			
Total Molybdenum	(Mo)	mg/L	0.04	0.011	0.005	8679547	0.005	0.005	8679547
Total Nickel (Ni)		mg/L	0.025	<0.005	0.005	8679547	<0.005	0.005	8679547
Total Phosphorus (I	P)	mg/L	0.01	<0.05 (1)	0.05	8679547	<0.05 (1)	0.05	8679547
Total Selenium (Se)		mg/L	0.1	<0.02	0.02	8679547	<0.02	0.02	8679547
Total Silver (Ag)		mg/L	0.0001	<0.01 (1)	0.01	8679547	<0.01 (1)	0.01	8679547
Total Tin (Sn)		mg/L	-	<0.02	0.02	8679547	<0.02	0.02	8679547
Total Titanium (Ti)		mg/L	-	<0.005	0.005	8679547	<0.005	0.005	8679547
Total Zinc (Zn)		mg/L	0.03	< 0.005	0.005	8679547	<0.005	0.005	8679547
No Fill	No Exce	edance							
Grey	Exceeds	1 criter	ia policy/	'level					

Exceeds both criteria/levels

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

Criteria: Ontario Provincial Water Quality Objectives

Ref. to MOEE Water Management document dated Feb.1999

(1) RDL exceeds criteria

Black



SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Verit	as ID			VVX490					
Sampling Da	to			2023/05/18					
	le			11:00					
COC Number	•			935407-01-01					
		UNITS	Criteria	PW1	RDL	QC Batch			
Polyaromatic Hydrocarbons									
Naphthalene		ug/L	7	0.42	0.050	8681534			
Surrogate Recovery (%)									
D10-Anthrace	%	-	104	104					
D14-Terphen	yl (FS)	%	-	94		8681534			
D8-Acenapht	hylene	%	-	99		8681534			
No Fill	No Exceedance	е							
Grey	Exceeds 1 crite	eria poli	cy/level						
Black	Exceeds both o	criteria/	levels						
RDL = Report	able Detection L	imit							
QC Batch = Q	QC Batch = Quality Control Batch								
Criteria: Onta	ario Provincial Wa	ater Qua	ality Obje	ctives					
Ref. to MOEE	Water Managen	nent do	cument d	ated Feb.1999					

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VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas	; ID			VVX490				
Sampling Data				2023/05/18				
Sampling Date				11:00				
COC Number				935407-01-01				
		UNITS	Criteria	PW1	RDL	QC Batch		
Volatile Organ	ics							
Benzene		ug/L	100	<0.20	0.20	8677631		
Chloroform		ug/L	-	<0.20	0.20	8677631		
1,4-Dichlorobe	nzene	ug/L	4	<0.40	0.40	8677631		
Ethylbenzene		ug/L	8	<0.20	0.20	8677631		
Methylene Chl	ug/L	100	<2.0	2.0	8677631			
Tetrachloroeth	ylene	ug/L	50	<0.20	0.20	8677631		
Toluene		ug/L	0.8	<0.20	0.20	8677631		
Trichloroethyle	ene	ug/L	20	<0.20	0.20	8677631		
Surrogate Reco	overy (%)							
4-Bromofluoro	benzene	%	-	98		8677631		
D4-1,2-Dichlor	oethane	%	-	122		8677631		
D8-Toluene		%	-	86		8677631		
No Fill	No Exceedance			-				
Grey	Exceeds 1 criteria policy	/level						
Black Exceeds both criteria/levels								
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontari	Criteria: Ontario Provincial Water Quality Objectives							
Ref. to MOEE V	Vater Management docun	nent dat	ed Feb.19	999				



MICROBIOLOGY (WATER)

Bureau Verita	au Veritas ID VVX490								
Sampling Dat	e			2023/05/18					
	-			11:00					
COC Number				935407-01-01					
		UNITS	Criteria	PW1	RDL	QC Batch			
Microbiological									
Escherichia co	oli	CFU/100mL	100	<10	10	8674241			
No Fill	No Exceedance	ce							
Grey	Exceeds 1 crit	eria policy/le	vel						
Black	Exceeds both	criteria/level	s						
RDL = Reporta	able Detection L	imit							
QC Batch = Quality Control Batch									
Criteria: Onta Ref. to MOEE	rio Provincial Wa Water Managen	ater Quality C nent docume	bjectives) nt dated	; Feb.1999					

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TEST SUMMARY

Bureau Veritas ID:	VVX490
Sample ID:	PW1
Matrix:	Water

Bureau Veritas ID: VV Sample ID: PW Matrix: Wa	X490 '1 ter				Collected: Shipped: Received:	2023/05/18 2023/05/18
Test Description	Instrum	entation Batch	Extracted	Date Analyzed	Analyst	
Carbonaceous BOD	DO	8674463	2023/05/19	2023/05/24	Gurjot Kau	r
Total Cyanide	SKAL/C	N 8678607	2023/05/23	2023/05/23	Prgya Pano	hal
Fluoride	ISE	8677210	2023/05/20	2023/05/23	Kien Tran	
Mercury in Water by CVAA	CV/AA	8678866	2023/05/23	2023/05/23	Jaswinder	Kaur
Total Metals Analysis by Axial I	CP ICPX	8679547	2023/05/23	2023/05/24	Medhat Na	isr
E.coli, (CFU/100mL)	PL	8674241	N/A	2023/05/18	Soham Pat	el
Animal and Vegetable Oil and	Grease BAL	8671696	N/A	2023/05/26	Automated	l Statchk
Total Oil and Grease	BAL	8685950	2023/05/26	2023/05/26	Navneet Si	ngh
PAH Compounds in Water by O	GC/MS (SIM) GC/MS	8681534	2023/05/24	2023/05/25	Mitesh Raj	
рН	AT	8677213	2023/05/20	2023/05/23	Kien Tran	
Phenols (4AAP)	TECH/P	HEN 8682239	N/A	2023/05/24	Mandeep I	Kaur
Sulphate by Automated Turbid	limetry KONE	8677246	N/A	2023/05/25	Massarat J	an
Total Kjeldahl Nitrogen in Wat	er SKAL	8676524	2023/05/23	2023/05/24	Jency Sara	Johnson
Mineral/Synthetic O & G (TPH	Heavy Oil) BAL	8685952	2023/05/26	2023/05/26	Navneet Si	ngh
Total Suspended Solids	BAL	8681749	2023/05/24	2023/05/25	Shaneil Ha	I
Volatile Organic Compounds in	Water GC/MS	8677631	N/A	2023/05/24	Skylar Canı	ning

Bureau Veritas ID: Sample ID: Matrix:	VVX490 Dup PW1 Water					Collected: 2023/05/18 Shipped: Received: 2023/05/18	
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Total Metals Analysis by A	Axial ICP	ICPX	8679547	2023/05/23	2023/05/24	Medhat Nasr	

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GENERAL COMMENTS

Each temperat	ure is the averag	e of up to thre	ee cooler tempe	ratures taken at receipt

Package 1 13.7°C

Revised Report[7/5/2023]: criteria added to C of A.

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8677631	4-Bromofluorobenzene	2023/05/24	99	70 - 130	102	70 - 130	100	%				
8677631	D4-1,2-Dichloroethane	2023/05/24	109	70 - 130	108	70 - 130	114	%				
8677631	D8-Toluene	2023/05/24	98	70 - 130	107	70 - 130	87	%				
8681534	D10-Anthracene	2023/05/24	113	50 - 130	106	50 - 130	111	%				
8681534	D14-Terphenyl (FS)	2023/05/24	105	50 - 130	96	50 - 130	98	%				
8681534	D8-Acenaphthylene	2023/05/24	103	50 - 130	96	50 - 130	101	%				
8674463	Total Carbonaceous BOD	2023/05/24					<2	mg/L	4.0	30	96	85 - 115
8676524	Total Kjeldahl Nitrogen (TKN)	2023/05/24	102	80 - 120	104	80 - 120	<0.10	mg/L	3.1	20	105	80 - 120
8677210	Fluoride (F-)	2023/05/23	104	80 - 120	101	80 - 120	<0.10	mg/L	5.7	20		
8677213	рН	2023/05/23			101	98 - 103			0.57	N/A		
8677246	Dissolved Sulphate (SO4)	2023/05/25	123	75 - 125	100	80 - 120	<1.0	mg/L	1.4	20		
8677631	1,4-Dichlorobenzene	2023/05/24	110	70 - 130	106	70 - 130	<0.40	ug/L	NC	30		
8677631	Benzene	2023/05/24	93	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
8677631	Chloroform	2023/05/24	101	70 - 130	106	70 - 130	<0.20	ug/L	2.3	30		
8677631	Ethylbenzene	2023/05/24	91	70 - 130	85	70 - 130	<0.20	ug/L	NC	30		
8677631	Methylene Chloride(Dichloromethane)	2023/05/24	98	70 - 130	109	70 - 130	<2.0	ug/L	NC	30		
8677631	Tetrachloroethylene	2023/05/24	88	70 - 130	89	70 - 130	<0.20	ug/L	NC	30		
8677631	Toluene	2023/05/24	93	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
8677631	Trichloroethylene	2023/05/24	101	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
8678607	Total Cyanide (CN)	2023/05/23	100	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20		
8678866	Mercury (Hg)	2023/05/23	98	75 - 125	103	80 - 120	<0.00010	mg/L	NC	20		
8679547	Total Aluminum (Al)	2023/05/24	126 (1)	80 - 120	104	80 - 120	<0.1	mg/L	12	20		
8679547	Total Antimony (Sb)	2023/05/24	107	80 - 120	103	80 - 120	<0.02	mg/L	NC	20		
8679547	Total Arsenic (As)	2023/05/24	110	80 - 120	105	80 - 120	<0.01	mg/L	NC	20		
8679547	Total Beryllium (Be)	2023/05/24	104	80 - 120	103	80 - 120	<0.0005	mg/L	NC	20		
8679547	Total Cadmium (Cd)	2023/05/24	108	80 - 120	104	80 - 120	<0.002	mg/L	NC	20		
8679547	Total Chromium (Cr)	2023/05/24	109	80 - 120	104	80 - 120	<0.01	mg/L	NC	20		
8679547	Total Cobalt (Co)	2023/05/24	98	80 - 120	101	80 - 120	<0.002	mg/L	NC	20		
8679547	Total Copper (Cu)	2023/05/24	102	80 - 120	101	80 - 120	<0.01	mg/L	NC	20		
8679547	Total Iron (Fe)	2023/05/24	NC	80 - 120	108	80 - 120	<0.02	mg/L	0.67	20		
8679547	Total Lead (Pb)	2023/05/24	96	80 - 120	100	80 - 120	<0.01	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

DS Consultants Limited Client Project #: 21-122-106 Site Location: 150 STEELES AVE, MILTON Sampler Initials: AQ

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8679547	Total Manganese (Mn)	2023/05/24	101	80 - 120	102	80 - 120	<0.001	mg/L	0.12	20		
8679547	Total Molybdenum (Mo)	2023/05/24	101	80 - 120	102	80 - 120	<0.005	mg/L	NC	20		
8679547	Total Nickel (Ni)	2023/05/24	100	80 - 120	103	80 - 120	<0.005	mg/L	NC	20		
8679547	Total Phosphorus (P)	2023/05/24	102	80 - 120	99	80 - 120	<0.05	mg/L	NC	20		
8679547	Total Selenium (Se)	2023/05/24	109	80 - 120	107	80 - 120	<0.02	mg/L	NC	20		
8679547	Total Silver (Ag)	2023/05/24	98	80 - 120	96	80 - 120	<0.01	mg/L	NC	20		
8679547	Total Tin (Sn)	2023/05/24	98	80 - 120	100	80 - 120	<0.02	mg/L	NC	20		
8679547	Total Titanium (Ti)	2023/05/24	101	80 - 120	98	80 - 120	<0.005	mg/L	NC	20		
8679547	Total Zinc (Zn)	2023/05/24	101	80 - 120	101	80 - 120	<0.005	mg/L	NC	20		
8681534	Naphthalene	2023/05/25	110	50 - 130	105	50 - 130	<0.050	ug/L	NC	30		
8681749	Total Suspended Solids	2023/05/25					<10	mg/L	4.7	20	101	85 - 115
8682239	Phenols-4AAP	2023/05/24	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
8685950	Total Oil & Grease	2023/05/26			99	85 - 115	<0.50	mg/L	0.25	25		
8685952	Total Oil & Grease Mineral/Synthetic	2023/05/26			96	85 - 115	<0.50	mg/L	0	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

austin Camere

Cristina Carriere, Senior Scientific Specialist

Scham N Patel

Soham Patel, Senior Analyst

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Exceedance Summary Table – Prov. Water Quality Obj.

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
PW1	VVX490-04-Lab Dup	Total Iron (Fe)	0.3	2.7	0.02	mg/L
PW1	VVX490-04	Total Iron (Fe)	0.3	2.7	0.02	mg/L
		Detection Limit Exc	eedances			
Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
PW1	VVX490-04-Lab Dup	Total Cadmium (Cd)	0.0002	<0.002	0.002	mg/L
PW1	VVX490-04	Total Cadmium (Cd)	0.0002	<0.002	0.002	mg/L
PW1	VVX490-04	Total Cobalt (Co)	0.0009	<0.002	0.002	mg/L
PW1	VVX490-04-Lab Dup	Total Cobalt (Co)	0.0009	<0.002	0.002	mg/L
PW1	VVX490-04-Lab Dup	Total Copper (Cu)	0.005	<0.01	0.01	mg/L
PW1	VVX490-04	Total Copper (Cu)	0.005	<0.01	0.01	mg/L
PW1	VVX490-04-Lab Dup	Total Lead (Pb)	0.005	<0.01	0.01	mg/L
PW1	VVX490-04	Total Lead (Pb)	0.005	<0.01	0.01	mg/L
PW1	VVX490-04-Lab Dup	Total Phosphorus (P)	0.01	<0.05	0.05	mg/L
PW1	VVX490-04	Total Phosphorus (P)	0.01	<0.05	0.05	mg/L
PW1	VVX490-04	Total Silver (Ag)	0.0001	<0.01	0.01	mg/L
PW1	VVX490-04-Lab Dup	Total Silver (Ag)	0.0001	<0.01	0.01	mg/L
The exceedance summary table applicable regulatory guidelines	is for information purp S.	oses only and should not b	e considered a compreh	ensive listing o	r statement of	conformance to

Appendix H: MECP Water Wells Records

Preliminary Hydrogeological Investigation - 150 Steeles Avenue East, Milton, ON												
TOWNSHIP C	UTM	Ε	Ν	DATE CNTR	CASING	WATER	PUMP TEST	WELL USE	SCREEN	WELL	1	FORMATION
MILTON TOWN (ESQUESI	17 W	588833	4819274	2012/08 7215						7188476	(C19383) A136173 P	
MILTON TOWN (ESQUESI	17 W	589533	4819537	2012/05 6607						7188798	(C18001) A115277 P	
MILTON TOWN (ESQUESI	17 W	588657	4819141	2013/08 6032	2			MO		7220266	(Z158163) A102001	GREY STNS HARD 0000 BRWN GRVL SAND LOOS 0002 RED SILT
MILTON TOWN (ESQUESI	17 W	588784	4818946	2012/04 6607						7189039	(C17936) A132947 P	
MILTON TOWN (ESQUESI	17 W	589056	4819013	2012/04 6607						7180021	(Z147803) A	
MILTON TOWN (ESQUESI	17 W	589046	4819052	2012/01 6607	2			MO	0012 10	7177417	(Z130562) A126292	0001 BRWN SAND GRVL LOOS 0015 GREY SILT SAND DNSE 0020
MILTON TOWN (ESQUESI	17 W	589087	4818980	2012/01 6607	2			MO	0015 10	7177413	(Z130560) A126123	0001 BRWN SAND GRVL DNSE 0007 BRWN SLT SAND HARD
MILTON TOWN (ESQUESI	17 W	589464	4819593	2010/04 7241	2.04			MT	0013 10	7145313	(Z113235) A097160	BRWN SAND GRVL LOOS 0003 BRWN SILT FSND HARD 0023
MILTON TOWN (ESQUESI	17 W	588840	4819170	2005/07 6607	2	15			0012 10	2810432	(Z32303) A027625	BRWN SAND GRVL 0003 GREY SILT CLAY 0011 GREY SILT SAND
MILTON TOWN (ESQUESI	17 W	589100	4819093	2015/12 7241	2			MT	0015 10	7256655	(Z224905) A183513	BRWN CLAY 0014 BRWN CLAY 0025
MILTON TOWN (ESQUESI	17 W	589109	4819065	2015/12 7241	2			МТ	0017 10	7256656	(Z224906) A188386	BRWN CLAY 0016 GREY CLAY DNSE 0027
MILTON TOWN (ESQUESI	17 W	589118	4819081	2015/12 7241	1.25			МТ	0019 10	7256657	(Z224907) A183387	BRWN CLAY 0019 GREY CLAY 0029
MILTON TOWN (ESQUESI	17 W	589124	4819115	2015/12 7241	2			МТ	0015 10	7256654	(Z224904) A162977	BRWN CLAY 0017 GREY CLAY DNSE 0025
MILTON TOWN (ESQUESI	17 W	588863	4819120	2015/05 7215	2			TH	0025 10	7247726	(Z203512) A178741	BRWN SAND DRY 0010 GREY SILT SAND WBRG 0025
MILTON TOWN (ESQUESI	17 W	588864	4819120	2015/05 7215				TH		7247725	(Z203491) A	GREY 0015
FON TOWN (ESQUESI CON 02	217 W	588635	4819007	2016/09 7464						7275759	(C35018) A208379 P	
FON TOWN (ESQUESI CON 02	217 W	588685	4818495	1961/04 4838	66	0035 FR 0	5/72/1/2:3	CO		2800711	0	PRDG 0005 CLAY GRVL 0027 RED SHLE 0072
FON TOWN (ESQUESI CON 02	2 17 W	588892	4818804	1965/03 4101	77	0076 FR 0	5/80/12/2:	CO		2800712	0	BRWN CLAY 0058 HPAN 0067 LMSN 0085
FON TOWN (ESQUESI CON 02	2 17 W	588798	4819173	2012/07 7147						7188813	(C16643) A132947 P	
FON TOWN (ESQUESI CON 02	17 W	588680	4818515	1951/11 1634	66	FR 0044	17//2/:	DO		2800707	0	CLAY 0031 RED SHLE 0048

FON TOWN (ESQUESI CON 02	17 L	588641	4818887	1993/02 6607		FR 0020		NU	0020 20	2808109	-117963	BRWN SILT CLAY DRY 0020 GREY SILT CLAY WBRG 0040
FON TOWN (ESQUESI CON 03	17 W	589407	4819637	2008/12 7215				TH	0020 10	7117890	(Z93459) A075233	BRWN GRVL FILL LOOS 0008 BRWN SILT TILL 0025 GREY SILT
MILTON TOWN (MILTON)	17 W	588966	4818925	2010/08 7241	1.5			MT	0010 10	7150312	(Z113282)	BRWN SAND GRVL FILL 0002 BRWN SAND GRVL FILL 0002 BRWN SUT GRVL CLAY 0015 GRFY
MILTON TOWN (MILTON)	17 W	589460	4818899	2009/10 7295	1.79			МО	0025 10	7135147	(Z108034)	BRWN TILL SOFT 0035
MILTON TOWN (MILTON)	17 W	589419	4819329	2005/09 6607	2	11			0006 10	2810388	(Z35424) A031692	BRWN SILT SAND GRVL 0015 GREY SILT SAND 0016
MILTON TOWN (MILTON)	17 W	589399	4819103	2006/06 6607		FR 0007				2810570	(Z49075) A	
MILTON TOWN (MILTON)	17 W	589411	4819322	2005/05 6607	2	FR 0007			0005 15	2810267	(Z27797) A026529	BRWN SAND FILL 0013 BLCK GRVL SAND 0017 GREY SILT FSND 0020
MILTON TOWN (MILTON)	17 W	589632	4819547	2010/04 7241	2.04			MT	0010 5	7145312	(Z113234) A097158	BRWN SAND GRVL LOOS 0003 BRWN SAND SOFT 0015
MILTON TOWN (MILTON)	17 W	589196	4819179	2007/12 6607	2	UK 0009		NU		7102060	(M00769) A059238	BRWN SAND 0007 GREY TILL 0010 GREY SHLE 0020
MILTON TOWN (MILTON)	17 W	589631	4819606	2010/04 7241	2.04			MT	0015 10	7145314	(Z113233) A097157	BRWN SAND GRVL LOOS 0003 BRWN SILT FSND HARD 0025
MILTON TOWN (MILTON)	17 W	588956	4819079	2010/05 7215				TH	00185	7147731	(Z112567) A100088	BRWN FILL DRY 0006 BRWN SILT TILL 0017 GREY SILT TILL
MILTON TOWN (MILTON)	17 W	589671	4818366	2005/01 6370	0.98	FR 0013		NU	002110	2810383	(Z17625) A004125	BRWN GRVL SAND PCKD 0000 BLCK FILL PCKD 0003 BRWN GRVL
MILTON TOWN (MILTON)	17 W	589294	4818588	1952/03 1642	6	FR 0028	15//20/:	NU		2802488	0	MSND 0028
MILTON TOWN (MILTON)	17 W	589106	4818606	1953/07 1642	66	FR 0041	/10/5/0:30	DO		2801687	0	PRDG 0006 CLAY MSND 0026 RED SHLE 0043
MILTON TOWN (MILTON)	17 W	589626	4818303	1957/09 1642	66	FR 0060	20/20/7/:	IN		2801695	0	FILL 0015 CLAY 0041 RED SHLE 0063
MILTON TOWN (MILTON)	17 W	589660	4818187	1959/11 1718	77	FR 0080	19/80/2/1:0	IN		2801696	0	PRDG 0038 RED SHLE 0085
MILTON TOWN (MILTON)	17 W	590154	4818696	1959/11 1307	30	FR 0025	8//25/:	IN		2801697	0	BRWN LOAM CLAY 0010 RED CLAY 0025 CSND 0028 RED SHLE
MILTON TOWN (MILTON)	17 W	588953	4819007	2010/08 7241	1.5			MT	0003 8	7150316	(Z113283) A091005	BRWN GRVL SAND FILL 0002 BRWN SILT SAND GRVL 0011
MILTON TOWN (MILTON)	17 W	588928	4818956	2010/08 7241	1.5			MT	0008 10	7150313	(Z113287) A102999	BRWN SAND GRVL FILL 0002 BRWN SILT GRVL TILL 0014 GREY
MILTON TOWN (MILTON)	17 W	590122	4818774	1973/11 3413	30	FR 0061	50/50/4/4:0	DO		2804329	0	BRWN CLAY 0015 BLUE CLAY 0043 GRVL 0045 BLUE CLAY 0061
MILTON TOWN (MILTON)	17 W	589629	4819112	1992/12 4868	60			DO		2808072	-103933	UNKN 0012 CMTD 0016 UNKN 0018 STNS 0025

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MILTON TOWN (MILTON)	17 W	588977	4818973	2010/08 7241	1.5			МТ	0008 15	7150317	(Z113285)	BRWN GRVL SAND FILL 0002
	17 W	588916	4818731	, 2007/10.6607	0.98	FR 0045	///·	NU		7101600	A080473 (Z60501)	BRWN SILT CLAY SAND 0015 GREY
	17 00	500710	4010731	2007/10/0007	0.70	FR 0045	///·	NO		7101000	A054618 (Z113284)	BRWN SAND GRVL FILL 0001
MILTON TOWN (MILTON)	17 W	588978	4819015	2010/08 7241	1.5			МТ	0008 10	7150315	A099946	BRWN SILT CLAY GRVL 0012 GREY
MILTON TOWN (MILTON)	17 W	588957	4818896	2010/08 7241	1.5			МТ	0008 10	7150314	(Z113286) A102962	BRWN GRVL SAND FILL 0001 BRWN SILT CLAY TILL 0010 GREY
MILTON TOWN (MILTON)	17 W	589725	4819119	1961/04 2801	2 2	FR 0039	1///:	NU	0044 10	2801698	0	LOAM 0001 BRWN CLAY GRVL 0016 BLUE CLAY GRVL 0039 BLUE
IILTON TOWN (MILTON) 00	17 W	589369	4819271	2004/05 4868				DO		2809943	(Z03986) A	
MILTON TOWN (TRAFALG	17 W	589587	4818771	2014/08 7215						7228292	(C26132) A163938 P	
MILTON TOWN (TRAFALG	17 W	589418	4819343	2013/03 7241	2			МТ	0010 10	7200443	(Z167608) A145248	BRWN FILL GRVL WBRG 0012 BRWN SILT SAND WBRG 0020
MILTON TOWN (TRAFALG	17 W	589113	4818908	2013/02 7215	2			TH	0020 10	7199512	(Z163841) A142366	
MILTON TOWN (TRAFALG	17 W	589714	4818250	2015/06 7464						7252865	(C29655) P	
MILTON TOWN (TRAFALG	17 W	589474	4818380	2015/06 7464						7252866	(C29652) P	
MILTON TOWN (TRAFALG	17 W	589456	4819301	2013/03 7241	1.25			МТ	0010 10	7200445	(Z167579) A145872	BRWN SILT 0011 GREY SILT 0020
MILTON TOWN (TRAFALG	17 W	589261	4818427	2012/03 7215						7202130	(C18047) A126330 P	
MILTON TOWN (TRAFALG	17 W	589714	4818270	2015/06 7464						7252864	(C29656) P	
MILTON TOWN (TRAFALG	17 W	589701	4818879	2013/10 7201						7210510	(M08261) A088529 P	
MILTON TOWN (TRAFALG	17 W	590228	4818859	2013/07 7295	1.79			МО	0020 10	7211605	(Z165874) A156071	BRWN SAND GRVL 0010 BRWN FILL SNDY 0020 BRWN SAND
MILTON TOWN (TRAFALG	17 W	589551	4818188	2013/11 7190	2			МО	0035 15	7214768	(Z169415) A146267	BRWN SILT CLAY 0010 RED SILT CLAY TILL 0035
MILTON TOWN (TRAFALG	17 W	589711	4818598	2009/05 7241	1.36			МО	0002 9	7123749	(Z098066) A086743	BLCK LOAM LOOS 0001 BRWN SAND GRVL DNSE 0011
MILTON TOWN (TRAFALG	17 W	589719	4818255	2015/06 7464						7252863	(C29657) P	
MILTON TOWN (TRAFALG	17 W	589123	4818753	2009/01 6607	2	UK 0023		MO	0020 10	7125331	(Z095141) A085385	BRWN SAND LOAM FILL 0005 BRWN CLAY TILL 0015 GREY CLAY
MILTON TOWN (TRAFALG	17 W	589103	4818934	2012/02 6607	2			МО	0017 10	7177414	(Z130561) A126311	BRWN GRVL SAND LOOS 0001 BRWN SAND GRVL DNSE 0003

MILTON TOWN (TRAFALG	17 W	589430	4819328	2013/03 7241	1.25			МТ	0010 10	7200444	(Z167578) A145253	BRWN SILT SAND 0011 GREY SAND SILT WBRG 0020
MILTON TOWN (TRAFALG	17 W	589704	4818285	2015/06 7464						7252862	(C29653) P	
MILTON TOWN (TRAFALG	17 W	589035	4818862	2014/12 7247	2	UT		МТ	0010 10	7239499	(Z198498) A174053	BRWN CLAY FILL SLTY 0007 BRWN CLAY SAND GRVL 0020
MILTON TOWN (TRAFALG	17 W	589100	4818903	2009/01 6607	2	UK 0020		МО	0020 10	7125332	(Z095116) A082763	BRWN LOAM SAND 0005 BRWN CLAY GRVL 0013 BRWN TILL DNSE
MILTON TOWN (TRAFALG	17 W	589708	4818275	2015/06 7464						7252861	(C29654) P	
MILTON TOWN (TRAFALG	17 W	589426	4818351	2009/01 6607	2	UK 0020		MO	0014 11	7125401	(Z095142) A082715	BRWN GRVL SAND FILL 0005 BRWN SILT SAND 0015 BRWN
MILTON TOWN (TRAFALG	17 W	589780	4818904	2014/04 7190	2	UT 0012		МО	0030 10	7220848	(Z180430) A146279	BRWN GRVL FILL LOOS 0005 GREY CLAY SILT 0022 RED SHLE HARD
MILTON TOWN (TRAFALG	17 W	589480	4818879	2009/09 6607	1.25			MO		7133598	(M05678) A088155	BRWN TILL 0020 GREY CLAY SAND 0033
TON TOWN (TRAFALG NS 01	17 W	588831	4818273	1972/12 3637	30 7 7	FR 0015	2/40/2/1:0	СО		2804115	0	RED SHLE 0040
ГОN TOWN (TRAFALG NS 02	17 W	589416	4819346	2004/07 6607	1.97	FR 0025			0005 15	2810040	(Z17041) A015762	BLCK 0000 BRWN GRVL 0001 BRWN CLAY SILT 0012 GREY SILT
TON TOWN (TRAFALG NS 02	17 W	589416	4819346	2004/11 6607	1.97	FR 0007			0005 15	2810127	(Z21571) A015762 A	BLCK 0000 BRWN GRVL 0001 BRWN CLAY SILT 0012 GREY SILT
TON TOWN (TRAFALG NS 02	17 W	589730	4818938	2015/01 7247	0.75	ОТ		MT	0010 5	7251432	(Z214035) A174080	BRWN SILT CLYY 0002 BRWN SILT GRVL HARD 0015