Hydrogeological Investigation

Proposed Highrise Buildings
1771-1775 Jane Street
Toronto, ON

Prepared For:

Medallion Corporation

Project #: 25-163-100
Date: October 2, 2025

DS CONSULTANTS LTD.
6221 Highway 7, Unit 16
Vaughan, Ontario, L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

25-163-100 **October 2, 2025**

Medallion Corporation

Attention: Luka Kot
via email: LukaKot@medallioncorp.com

RE: Hydrogeological Investigation- Proposed Highrise Buildings at 1771-1775 Jane Street, Toronto M9N 2S5

DS Consultants Limited (DS) was retained by Medallion Corporation to conduct a hydrogeological investigation for the proposed residential development at 1771-1775 Jane Street, Toronto, Ontario (the Site). The Site is currently occupied by a 14-storey apartment building with one level of underground parking. DS understands that two additional residential buildings are proposed in phases at the north and south ends of the existing building, each with underground parking. The north building (Phase 1) will include one (1) level of underground parking (P1), whereas the south building (Phase 2) will include two (2) levels of underground parking (P2). The proposed ground elevation is approximately 127.3 masl. The lowest finished floor elevations are 123.7 masl for the P1 level and 121 masl for the P2 level.

This hydrogeological investigation includes an overview of the existing geological and hydrogeological conditions at the Site and the surrounding area, an assessment of the hydrogeological constraints, and impacts of the proposed development on the local groundwater and provides an estimation of construction dewatering and permanent drainage requirements during the proposed development phases. This investigation is based on monitoring wells installed by DS in July 2025 and by SPL in 2015.

The hydrogeological investigation report has been prepared in general accordance with the Ontario Water Resource Act (OWRA), the Ontario Water Taking Regulation (O.Reg.387/04), and the City of Toronto Sewers By-law (Toronto Municipal Code, Chapter 681, Sewers). If needed, the results of this investigation can be used in support of an Environmental Activity Sector Registry (EASR) for construction dewatering from the Ministry of the Environment, Conservation and Parks (MECP). The hydrogeological report may also be used to support Site Plan Approvals (SPA) and discharge permitting from the City of Toronto. Based on the results of our investigation, the following conclusions and recommendations are presented:

Based on the results of our investigation, the following conclusions and recommendations are presented:

1. Based on the Ministry of Environment, Conservation and Parks (MECP) water well records search, there are 67 water wells within a 500 m radius of the Site. All wells are noted as monitoring/test holes or not-in-use wells. The study area is fully serviced with municipal water, and therefore, no groundwater users are expected in the area.

2. In September 2025, DS advanced two boreholes (BH 25-1 and BH 25-2) in the proposed building footprints to a depth of approximately 46.3 and 49.4 m below the existing ground level (mbgl). Both boreholes were equipped with a monitoring well. Monitoring wells were screened within silty clay to clayey silt till at 7.7 and 20 mbgs. In addition, the existing monitoring wells installed by SPL Consultant

Limited (BH 15-1, BH 15-2 Shallow and Deep and BH 15-3) were incorporated to assess groundwater conditions at the site. The monitoring wells BH 15-1, BH 15-2 S and BH 15-3 were screened within silty clay to clayey silt(till), each to a depth of 9.2 m. The deep monitoring well was screened within sand, sand and gravel at 41.6 mbgs.

3. The study area (500 m radius) lies within the Iroquois Plain physiographic region of Southern Ontario. The surficial geology is characterized by coarse-textured glaciolacustrine deposits consisting of sand, gravel, minor silt and clay. The geology at the Site consists of glacial deposits of clayey silt till to silty clay till to 36.7-42.7 mbgs, followed by a 3-7 m thick silty sand/sand unit to the termination depth of about 49 mbgs.

4. A total of five (5) monitoring wells (MWs) were used to enable groundwater monitoring. The wells were installed in the clayey silt to silty clay, sandy units. A bi-weekly groundwater monitoring was completed for three (3) months from June to August 2025 to assess groundwater fluctuation and to comply with guidelines provided by the City of Toronto for discharge permitting and foundation drainage. The groundwater in overburden ranges between 3.42 and 5.2 mbgs (Elev 123.85- 121.0 masl). The peak static groundwater level observed in June was 123.85 masl, and the determined maximum anticipated groundwater level is 125.75 masl with a fluctuation allowance of 1.9 m for October. The maximum anticipated groundwater level is determined using “Option 1: flexible, year-round monitoring”, outlined in sections 2.2 and 2.3 of the City’s foundation policy guideline.

5. Short-term Dewatering: Considering the unsealed excavation method, the estimated dewatering rates for buildings with P1-P2 levels are summarised below.

Building	Flow Rate Q- without a safety factor (L/day)	Flow Rate Q- with a safety factor x 2 (L/day)	Stormwater (@ 10 mm/24 hrs.) (L/day)	Design Flow Rate (L/day)
Phase 1- North Building with P1 Level	2,000	4,000	51,000	55,000
Phase 2- South Building with P2 Levels	4,000	8,000	24,000	32,000

6. Permanent Drainage/ Foundation Drainage: Following the construction of the underground structure, long-term groundwater flow to the underfloor drainage system for the building will be a function of the upward flux and drainage along the foundation wall. The estimated dewatering rates for the buildings with P1-P2 levels are summarised below.

Building	Flow Rate Q-without a safety factor (L/day)	Flow Rate Q- with a safety factor x 1.5 (L/day)
Phase 1- North Building with P1 Level	500	1,000
Phase 2- South Building with P2 Levels	2,000	4,000

7. The City of Toronto’s foundation drainage policy has been reviewed during the design for on-site management of foundation drainage or permanent drainage. As per the policy, discharge of foundation drainage or permanent groundwater flow to the building is not allowed to the City’s sewer system. As mentioned in the policy, on-site management options for foundation drains/permanent

drainage may include, but are not limited to, waterproofing the foundation, modifying the building design to avoid intersection with the maximum anticipated groundwater level, and/or above-ground discharge and infiltration from sump pumps.

8. For Phase 1 (North Building) construction, the anticipated dewatering rate may exceed the daily pumping limit of 50,000 L/day, triggering the need for an EASR. However, dewatering requirements for Phase 2(South Building) are expected to remain below the daily pumping limit and therefore an EASR is not expected. Dewatering below the 50,000 L/day would eliminate the requirement for an EASR.

9. A discharge permit will be required from the City of Toronto if private water is to be sent to the sewer system for the short term. As per the City of Toronto's foundation drainage policy, January 2022, discharge of foundation drains or permanent flow into sewers is not allowed. Therefore, on-site management of permanent drainage will be required.

10. An unfiltered groundwater sample was collected from monitoring well BH/MW 15-3 on June 16, 2025. The sample was submitted to SGS Laboratory for analysis in accordance with the City of Toronto Sewer Use By-law to assess groundwater quality for potential discharge. Groundwater quality analysis indicates that all parameters tested met the City's Sanitary Sewer Use by-law discharge criteria. However, exceedances were reported for TSS and manganese for the City's Storm Sewer By-law discharge criteria. Therefore, groundwater at the development site is suitable for discharge into the City's sanitary sewer without pre-treatment, but not into the storm sewer. The treatment requirement can be changed during the construction based on the pumped water quality. Additional water quality testing will be a part of the discharge permit to comply with the city's sewer discharge criteria during short-term discharge. Treatment options include, but are not limited to, settlement and filtration of sediments.

11. If 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 because of dewatering.

12. In conformance with Regulation 903 of the Ontario Water Resources Act, the decommissioning of any dewatering system and monitoring wells should be conducted 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.

Prepared By:

P.A. Patel

Pradeep Patel, M.Sc. P.Geo.
Hydrogeologist

PROFESSIONAL GEOSCIENTIST
PRADEEPKUMAR A. PATEL
PRACTISING MEMBER
2710
ONTARIO
P.P. Oct 2/25

Reviewed By:

Martin Gedeon

Martin Gedeon, M.Sc., P.Geo.
Senior Hydrogeologist

Table of Contents

1.0 INTRODUCTION 1

1.1 Purpose 1
1.2 Scope of Work 1

2.0 FIELD INVESTIGATION 2

3.0 PHYSICAL SETTING 2

3.1 Physiography and Drainage 2
3.2 Geology 2
3.2.1 Quaternary Geology 3
3.2.2 Bedrock Geology 3
3.2.3 Site Geology 3
3.3 Hydrogeology 3
3.3.1 Local Groundwater Use 3
3.3.2 Groundwater Conditions 4
3.3.3 Hydraulic Conductivity 4
3.3.4 Groundwater Quality 5

4.0 CONSTRUCTION DEWATERING 5

4.1 Estimation of Flow Rate – Underground Parking (P1 and P2 Levels) 5
4.2 Total Flow Rate (Short-Term/ Temporary Discharge) 6
4.3 Permanent Drainage (Long-term Discharge) 6
4.4 Permit Requirements 7
4.4.1 Environmental Activity and Sector Registry (EASR) 7
4.4.2 Discharge Permit (Construction Dewatering) 8

5.0 POTENTIAL IMPACTS 8

5.1 Local Groundwater Use 8
5.2 Source Protection Area 8
5.3 Highly Vulnerable Aquifer 8
5.4 Wellhead Protection Area 8
5.5 Intake Protection Zone 8
5.6 Surface Water 9
5.7 Point of Discharge and Groundwater Quality 9
5.8 Settlement Due to Dewatering Activities 9

6.0 MONITORING AND MITIGATION 9

7.0 CONSULTANTS QUALIFICATIONS 11

8.0 REFERENCES 12

FIGURES

Figure 1 Site Location and MECP Water Well Record Map
Figure 2 Surficial Geology Map
Figure 3 Borehole and Monitoring Well Location Plan
Figure 4 Geological Cross Section A-A'

APPENDICES

Appendix A Borehole Logs
Appendix B MECP Water Well Record
Appendix C Hydraulic Conductivity Analysis
Appendix D Groundwater Quality Certificate of Analysis
Appendix D Groundwater Monitoring Data

1.0 INTRODUCTION

DS Consultants Limited (DS) was retained by Medallion Corporation to conduct a hydrogeological investigation for the proposed residential development at 1771-1775 Jane Street, Toronto, Ontario (the Site). The Site is currently occupied by a 14-storey apartment building with one level of underground parking. DS understands that two additional buildings are proposed in phases at the north and south ends of the existing building, each with underground parking. The north building (Phase 1) will include one (1) level of underground parking (P1), whereas the south building (Phase 2) will include two (2) levels of underground parking (P2). The proposed ground elevation is approximately 127.3 masl. The lowest finished floor elevations are 123.7 masl for the P1 level and 121 masl for the P2 level.

This hydrogeological investigation includes an overview of the existing geological and hydrogeological conditions at the Site and the surrounding area, an assessment of the hydrogeological constraints, and impacts of the proposed development on the local groundwater and provides an estimation of construction dewatering and permanent drainage requirements during the proposed development phases. This investigation is based on monitoring wells installed by DS in July 2025 and by SPL in 2015.

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 an Environmental Activity Sector Registry (EASR) from the Ministry of Environment and Conservation and Parks (MECP) for construction dewatering. 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 and environmental studies completed at the Site;

(iii) In-situ hydraulic conductivity testing of newly installed and existing monitoring wells;

(iv) Estimation of the temporary groundwater flow rate during the construction;

(v) Estimation of long-term or permanent discharge rate;

(vi) Assessing groundwater quantity and quality to evaluate discharge options; and,

(vii) Potential impacts assessment due to dewatering activities

(viii) Data analysis and report preparation.

2.0 FIELD INVESTIGATION

- In September 2025, DS advanced two boreholes (BH 25-1 and BH 25-2) in the proposed building footprints to a depth of approximately 46.3 and 49.4 m below the existing ground level (mbgl). Both boreholes were equipped with a monitoring well. Monitoring wells were screened within silty clay to clayey silt till at 7.7 and 20 mbgs. In addition, the existing monitoring wells installed by SPL Consultant Limited (BH 15-1, BH 15-2 Shallow and Deep and BH 15-3) were incorporated to assess groundwater conditions at the site. The monitoring wells BH 15-1, BH 15-2 S and BH 15-3 were screened within silty caly to clayey silt(till), each to a depth of 9.2 m. The deep monitoring well was screened within sand, sand and gravel at 41.6 mbgs.

- A total of five (5) monitoring wells were used for hydrological investigation. All monitoring wells available with water were developed before use to allow for groundwater level monitoring, hydraulic conductivity testing, and assessing groundwater quality.

- A total of five (5) well response tests (SWRTs) were completed by performing a rising head test to estimate the hydraulic conductivity values of the overburden at the Site.

- One unfiltered groundwater sample was collected and analyzed against the City of Toronto Sewers Discharge Bylaw to assess groundwater discharge options during construction.

3.0 PHYSICAL SETTING

Available topographic maps and 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 topography at the Site is relatively flat with a surface elevation ranging between 126 and 127 meters above sea level (masl). The topography within the study area generally slopes south, towards Black Creek, which is located approximately 170 m west of the Site. The site is within a well-developed urban area. Drainages in the study area follow local topography and are controlled by streams, artificial channels, 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 Iroquois Plain physiographic region of Southern Ontario. As shown on the surficial geology map in **Figure 2**, the surficial geology is characterized by coarse-textured glaciolacustrine deposits consisting of sand, gravel, minor silt and clay.

3.2.2 Bedrock Geology

Available published mapping shows that bedrock in the area is predominantly shale and limestone, as part of the Georgian Bay Formation (MNDM Map 2544 Bedrock Geology of Ontario). Based on the review of existing borehole logs and well record information, the depth to bedrock in the study area is estimated to be deeper than 50 meters below the existing ground. Bedrock was not encountered during drilling.

3.2.3 Site Geology

On-site subsurface soils were interpreted according to a geotechnical and hydrogeology investigation report prepared by DS based on the boreholes/monitoring wells (BHs/MWs) drilled by DS and Others. 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 soil sequence identified from the boreholes is as follows, and the geologic cross-section (A-A') is presented in **Figure 4.**

- **Clayey silt to silty clay till:** These layers with an intervening silty clay and sand layer, encountered in all boreholes and extending to a maximum explored depth of 49.4 meters below ground surface (mbgs).
- **Sand/Sand and Gravel/CoarseSand:** A 3-7 m thick silty sand and sand gravel unit encountered in deeper boreholes at 36.6 and 42.7 mbgs, extending to a maximum explored depth of 49 mbgs.

3.3 Hydrogeology

The hydrogeology at the Site was evaluated using the on-site monitoring wells installed by DS and SPL, local domestic wells, and existing hydrogeological and geotechnical 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 (**Appendix B**). Based on the Ministry of Environment, Conservation and Parks (MECP) water well records search, there are 67 water wells within a 500 m radius of the Site. All wells are noted as monitoring/test holes or not-in-use wells. The study area is fully serviced with municipal water, and therefore, no groundwater users are expected in the area. **Figure 1** shows the MECP water well location plan.

3.3.2 Groundwater Conditions

A total of five (5) monitoring wells (MWs) were used to enable groundwater monitoring. The wells were installed in the clayey, silty to silty clay, sandy units. A bi-weekly groundwater monitoring was completed for three (3) months from June to August 2025 to assess groundwater fluctuation and to comply with guidelines provided by the City of Toronto for discharge permitting and foundation drainage. Based on groundwater level measurements taken, two groundwater regimes were identified. The Groundwater in overburden ranges between 3.42 and 5.2 mbgs (Elev 123.85- 121.0 masl). **Table 3- 1** presents the groundwater levels in all monitoring wells, and the groundwater monitoring data are presented in **Appendix E**. The peak static groundwater level observed in June was 123.85 masl, and the determined maximum anticipated groundwater level is 125.75 masl with a fluctuation allowance of 1.9 m for October. The maximum anticipated groundwater level is determined using "Option 1: flexible, year-round monitoring", outlined in sections 2.2 and 2.3 of the City's foundation policy guideline.

Table 1: Groundwater Levels in Monitoring Wells (August- October 2024)

Well ID	Ground Elevation (masl)	Screened Interval (mbgs)	Screened Formation	Groundwater Level	
				Depth to Water (mbgs)	Groundwater Elevation (masl)
MW 25-1	126.20	4.7-7.7	Clayey Silt to Silty Clayey (Till)	3.65-5.20	122.65-121.0
MW 25-2	126.90	17.0-20.0	Clayey Silt to Silty Clayey (Till)	4.32-5.15	122.58-121.72
MW 15-1	126.60	6.2-9.2	Clayey Silt to Silty Clayey (Till)	3.42-4.73	123.18-121.87
MW 15-2	127.00	6.2-9.2	Clayey Silt to Silty Clayey (Till)	3.45-3.62	123.55-123.38
MW 15-3	127.30	6.2-9.2	Clayey Silt to Silty Clayey (Till)	3.45-3.95	123.85-123.35

3.3.3 Hydraulic Conductivity

A Single Well Response Test (SWRT) was completed in five(5) monitoring wells 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 every 1 sec up to 1 to 24 hrs. Hydraulic conductivity (k) values were calculated using the Hvorslev method.

The calculated hydraulic conductivity (k) for the representative clayey silt to silty clay (till) ranged from 3.8 x 10^{-6} m/s to 4 x 10^{-9} m/s with a geometric mean k-value of 6.3 x 10^{-8} m/s. **Table 3-2** presents a summary of the hydraulic conductivity (k) results for the representative geological units.

Table 2: Summary of Hydraulic Conductivity (k) Test Results

Well ID	Screen Interval (m)	Screened Formation	K- Value (m/s)
MW 25-1	4.7-7.7	Clayey Silt to Silty Clayey (Till)	4.0 x 10^{-9}
MW 25-2	17.0-20.0	Clayey Silt to Silty Clayey (Till)	4.5 x 10^{-9}

Well ID	Screen Interval (m)	Screened Formation	K- Value (m/s)
MW 15-1	6.2-9.2	Clayey Silt to Silty Clayey (Till)	2.6×10^{-9}
MW 15-2	6.2-9.2	Clayey Silt to Silty Clayey (Till), Sandy	3.8×10^{-6}
MW 15-3	6.2-9.2	Clayey Silt to Silty Clayey (Till)	5.5×10^{-7}
Geomean			6.3×10^{-8}

3.3.4 Groundwater Quality

An unfiltered groundwater sample was collected from monitoring well BH/MW 15-3 on June 16, 2025. The sample was submitted to SGS Laboratory for analysis in accordance with the City of Toronto Sewer Use By-law to assess groundwater quality for potential discharge.

Groundwater quality analysis indicates that all parameters tested met the City's Sanitary Sewer Use by-law discharge criteria. However, exceedances were reported for TSS and manganese for the City's Storm Sewer By-law discharge criteria. **Table 3-3** presents a summary of exceeded parameters, and the certificates of analysis are provided in **Appendix D.**

Table 3-3: Parameters in Groundwater Exceeding the City of Toronto Sewer Use By-law

Parameter Exceeded	Unit	Sanitary Sewer Criteria	Storm Sewer Criteria	BH/MW 15-3 Concentration
Total Suspended Solids (TSS)	mg/L	350	15	**51**
Manganese	mg/L	5	0.05	**0.528**

Note: **Bold** – Exceeded sanitary sewer Criteria, Underline – Exceeded storm Sewer Criteria

4.0 CONSTRUCTION DEWATERING

For the dewatering assessment, the established ground elevation is approximately 127.3 meters above sea level (masl). DS understands that two additional buildings are proposed in phases at the north and south ends of the existing building, each with underground parking. The north building (Phase 1) will include one level of underground parking, whereas the south building (Phase 2) will include two levels of underground parking. The proposed ground elevation is approximately 127.3 masl. The lowest finished floor elevations are 123.7 masl for the P1 level and 121 masl for the P2 level. The proposed underground structure is expected to be below the groundwater level; therefore, dewatering will be required during the excavation of overburdened material. Below is a summary of the below-grade construction:

4.1 Estimation of Flow Rate – Underground Parking (P1 and P2 Levels)

This section calculates the estimated dewatering required during the construction of the proposed buildings based on the geomean k-value, the highest groundwater elevations at the Site, using the steady-state flow equation for unsealed excavation as follows. The estimated flow rates for the proposed buildings are summarised in **Table 4-1**.

$$Q_R = K\,x\frac{H^2 - h^2}{0.733}\,x\,Log\,(R_0/r_e)$$

$$r_e = \left(\frac{(a\,x\,b)}{\pi}\right)^{0.5}$$

$$R_0 = (r_e + 3000)(H - h)(k^{0.5})$$

Table: 4-1 Estimation of Flow Rate (Short-term Discharge)

Parameter	Phase 1- North Building (P1 Level)	Phase 1- South Building (P2 Levels)
Average Grade- masl	127.3	127.3
Underground Parling- Finished Floor Level (FFL)	123.7	121.0
Considered lowest excavation/Foundation Elevation- masl	121.7	119.0
Considered the bottom of the aquifer	120.7	118
Considered Groundwater Elevation- masl	124	124
Considered K -Hydraulic conductivity(m/s) -Geomen for Till	6.3×10^{-8}	6.3×10^{-8}
H-Distance from water level to the bottom of an aquifer (m)	3.3	6.0
h -Depth of water in the well while pumping (m)	0.5	0.5
Area (a x b)- (m)	72 m x 72 m	49 m x 49 m
r_e–equivalent radius, where a and b, excavation dimensions (m)	41	28
R_o- re+ Radius of the cone of depression/Zone of Influence (ZOI)- (m)	40+2=42	28+4=32
Estimated Flow Rate- L/day (without safety factor)	**2,000**	**4,000**
Estimated Flow Rate- L/day (with safety factor x 2)	**4,000**	**8,000**
Additional Dewatering- Stormwater (assumed 10 mm /24 hrs)- L/day	**51,000**	**24,000**

4.2 Total Flow Rate (Short-Term/ Temporary Discharge)

Considering the unsealed excavation method, the estimated dewatering during Phase 1 is 4,000 L/day and during Phase 2 construction is 8,000 L/day, with a safety factor of x 2.0. Additional water enters the open excavation as a result of precipitation. Therefore, the recommended pumping rate for construction dewatering design and permitting is 55,000 L/day for Phase 1 and 32,000 L/day for Phase 2 construction. The dewatering rates must be reassessed once final design drawings are available.

4.3 Permanent Drainage (Long-term Discharge)

Following the construction of the underground structure, long-term groundwater flow to the underfloor drainage system for the building will be a function of the upward flux and drainage along the foundation wall. The flow rate for the north building after construction would be 1,000 L/day, and for the south building would be 4,000, with a safety factor of x 2. The permanent discharge must be re-assessed once final design

drawings are available. The estimated permanent drainage flow rate, estimated using a steady-state flow equation, is summarised in **Table 4-2.**

The City of Toronto's foundation drainage policy has been reviewed during the design for on-site management of foundation drainage or permanent drainage. As per the policy, discharge of foundation drainage or permanent groundwater flow to the building is not allowed to the City's sewer system. As mentioned in the policy, on-site management options for foundation drains/permanent drainage may include, but are not limited to, waterproofing the foundation, modifying the building design to avoid intersection with the maximum anticipated groundwater level, and/or above-ground discharge and infiltration from sump pumps.

Table: 4-2 Estimation of Flow Rate -Long-term Discharge

Parameter	Phase 1- North Building (P1 Level)	Phase 2- South Building (P2 Levels)
Average Grade- masl	127.3	127.3
Underground Parling- Finished Floor Level (FFL)	123.7	121.0
Considered foundation drain Elevation- masl	123.5	120.5
Considered the bottom of the aquifer	123.5	120.5
Considered Groundwater Elevation- masl	124	124
Considered K -Hydraulic conductivity(m/s) -Geomean for Till	6.3×10^{-8}	6.3×10^{-8}
H-Distance from water level to the bottom of an aquifer (m)	0.5	3.5
h -Depth of water in the well while pumping (m)	0	0
Area (a x b)- (m)	72 m x 72 m	49 m x 49 m
r_e–equivalent radius, where a and b, excavation dimensions (m)	41	28
R_o- re+ Radius of the cone of depression/Zone of Influence(ZOI)- (m)	41+0=41	28+3=31
Estimated Flow Rate- L/day (without safety factor)	**500**	**2,000**
Estimated Flow Rate- L/day (with safety factor x 2)	**1000**	**4,000**

4.4 Permit Requirements

4.4.1 Environmental Activity and Sector Registry (EASR)

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

For Phase 1(North Building) construction, the anticipated dewatering rate may exceed the daily pumping limit of 50,000 litres, triggering the need for an EASR. However, dewatering requirements for Phase 2(South Building) are expected to remain below the daily pumping limit and therefore an EASR is not expected. Dewatering below the 50,000 L/day would eliminate the requirement for an EASR.

4.4.2 Discharge Permit (Construction Dewatering)

A discharge permit will be required from the City of Toronto if private water is to be sent to the sewer system for the short term. As per the City of Toronto's foundation drainage policy, discharge of foundation drains or permanent flow into sewers is not allowed. Therefore, on-site management of permanent drainage will be required.

5.0 POTENTIAL IMPACTS

The following are the predicted potential impacts of construction dewatering:

5.1 Local Groundwater Use

The area is fully serviced by a municipal water supply. Use of groundwater as a source of drinking water is not expected within a zone of influence of about 42 m from the centre of the site, and therefore, no short-term or long-term impacts are anticipated to private water wells because of dewatering activities.

5.2 Source Protection Area

The site is located within the Toronto Source Protection Area (SPA). The Toronto Source Protection Plan contains 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. Therefore, no impacts are anticipated on the drinking water supply within the zone of influence.

5.3 Highly Vulnerable Aquifer

The Site is located within a Highly Vulnerable Aquifer (HVA) with a vulnerability score of 6. This score indicates that groundwater is highly vulnerable to contamination from the surface. Any spills directly onto the ground should be avoided during construction to protect groundwater sources.

5.4 Wellhead Protection Area

The site and the study area are not located around municipal wells. Also, the site does not fall within the wellhead protection area (WHPA)-E for water quality.

5.5 Intake Protection Zone

The site and the study area are not located within a water intake protection zone (IPZ). No IPZ impacts are anticipated due to the proposed temporary or long-term dewatering.

5.6 Surface Water

Surface water bodies do not exist at the site or within the predicted zone of influence of about 42 m from the centre of the site, and therefore, impacts on surface water due to any dewatering activities are unlikely.

5.7 Point of Discharge and Groundwater Quality

Groundwater quality analysis indicates that all parameters tested met the City's Sanitary Sewer Use by-law discharge criteria. However, exceedances were reported for TSS and manganese for the City's Storm Sewer By-law discharge criteria. Therefore, groundwater at the development site is suitable for discharge into the City's sanitary sewer without pre-treatment, but not into the storm sewer. However, the treatment requirement can be changed during the construction based on the pumped water quality. Additional water quality testing will be a part of the discharge permit to comply with the city's sewer discharge criteria during short-term discharge. Treatment options include, but are not limited to, settlement and filtration of sediments.

5.8 Settlement Due to Dewatering Activities

Structures and utilities are expected within the predicted zone of influence (ZOI) of approximately 2-4 meters from the boundary of the site when considering an unsealed excavation. As construction will occur within low-permeable till, and the dewatering rate is expected to be minimal, settlement impacts related to dewatering are not anticipated.

6.0 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 before 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 guidelines or regulations associated with any permits from the MECP and the City of Toronto.

- A discharge permit is required to be submitted to the city for short-term dewatering if private water is sent to the sewer system.

- If 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 because of dewatering.

- 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 conducted by a licensed water well contractor per Regulation 903 of the Ontario Water Resources Act.

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

DS Consultants Ltd.

Prepared By:

P.A. Patel

Pradeep Patel, M.Sc. P.Geo.
Hydrogeologist

Reviewed By:

Martin Gedeon

Martin Gedeon, M.Sc., P.Geo.
Senior Hydrogeologist

PROFESSIONAL GEOSCIENTIST
PRADEEPKUMAR A. PATEL
PRACTISING MEMBER
2710
ONTARIO
P.P. Oct 2/25

7.0 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.

Pradeep Patel, M.Sc., P.Geo., is a hydrogeologist at DS Consultants Ltd. and has more than 17 years of experience working in the environmental industry. He engages in numerous Hydrogeological and Geotechnical investigation projects. His experience includes the preparation of construction dewatering activities and hydrogeological investigations in support of Environmental Activity and Sector Registry (EASR) and Permit to Take Water (PTTW) applications.

8.0 REFERENCES

Chapman, L.J., and D.F. Putnam; The Physiography of Southern Ontario, Third Edition, Ontario Geological Survey Special Volume 2; 1984, & 2007.

Freeze, R.A., and J.A. Cherry. “Groundwater”. Prentice-Hall, Inc. Englewood Cliffs, NJ. 1979.

Ontario Regulation 153/04 made under the Environmental Protection Act, July 1, 2011.

www.mndm.gov.on.ca/ogsearth.

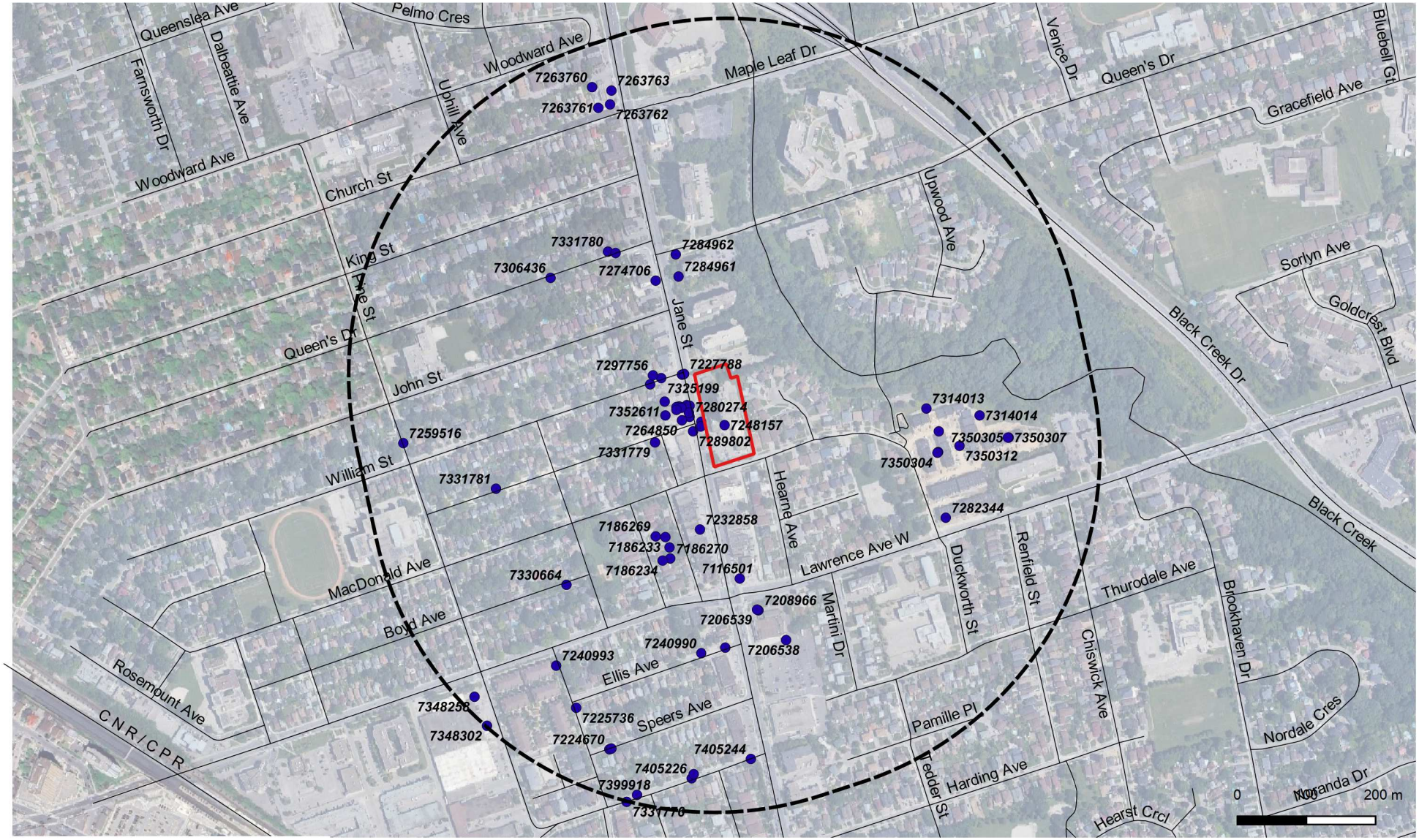
Ontario Regulation 245/11- Environmental Activity and Sector Registry.

Powers, J. Patrick, P.E. (1992); Construction Dewatering: New Methods and Applications - Second Edition, New York: John Wiley & Sons.

Pat M. Cashman and Martin Preene; Groundwater Lowering in Construction- Second Edition, CRC Press.

Figures

J:\-GIS\2025 PROJECTS\25-163-100 - 1771-1775 Jane Street, North York\1-QGIS\HydroG\Figure 1 – Site Location and MECP Well Records.qgs Sep-10 00:30



Legend

- Site Boundary
- 500m Buffer
- Registered Water Well (MECP WWR)

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Client: MEDALLION CORPORATION

Project: HYDROGEOLOGICAL INVESTIGATION
1771-1775 Jane Street, North York, ON

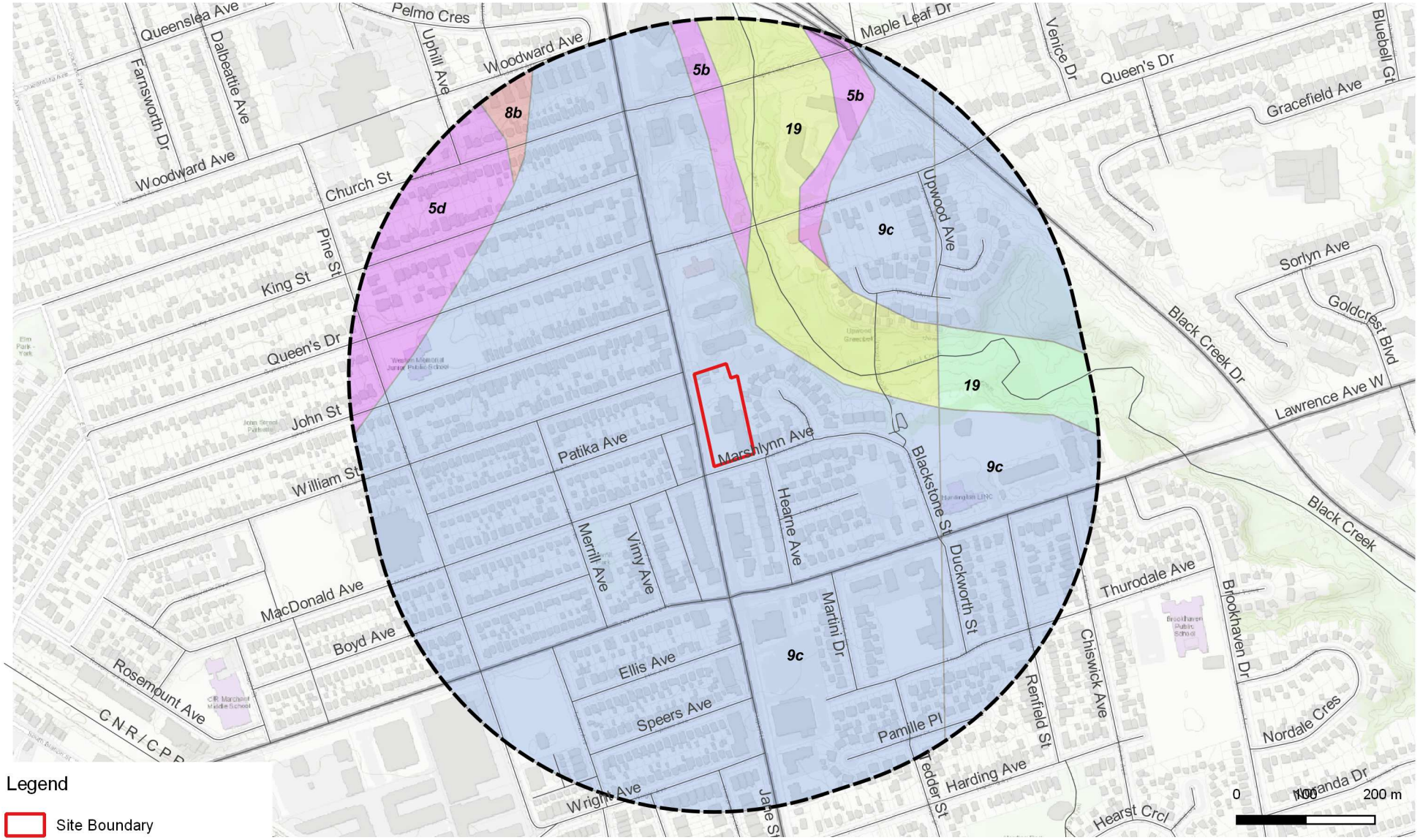
Title: **SITE LOCATION AND MECP WELL RECORDS**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	P.P	S.Y	September 2025
Rev: 0	Scale: As Shown	Project No.: 25-163-300	Figure No.: 1

Image/Map Source: *Google Satellite Image*

J:\-GIS\2025 PROJECTS\25-163-100 - 1771-1775 Jane Street, North York\1-QGIS\HydroG\Figure 2 – Surficial Geology Map.qgs Sep-10 00:41



Legend

- Site Boundary
- 500m Buffer
- 19 - Modern Alluvium
- 19 - River deposits
- 5b - Till
- 8b - Glaciolacustrine Deposits
- 9c - Coarse-textured Glacial Lake Deposits

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Project: HYDROGEOLOGICAL INVESTIGATION
1771-1775 Jane Street, North York, ON

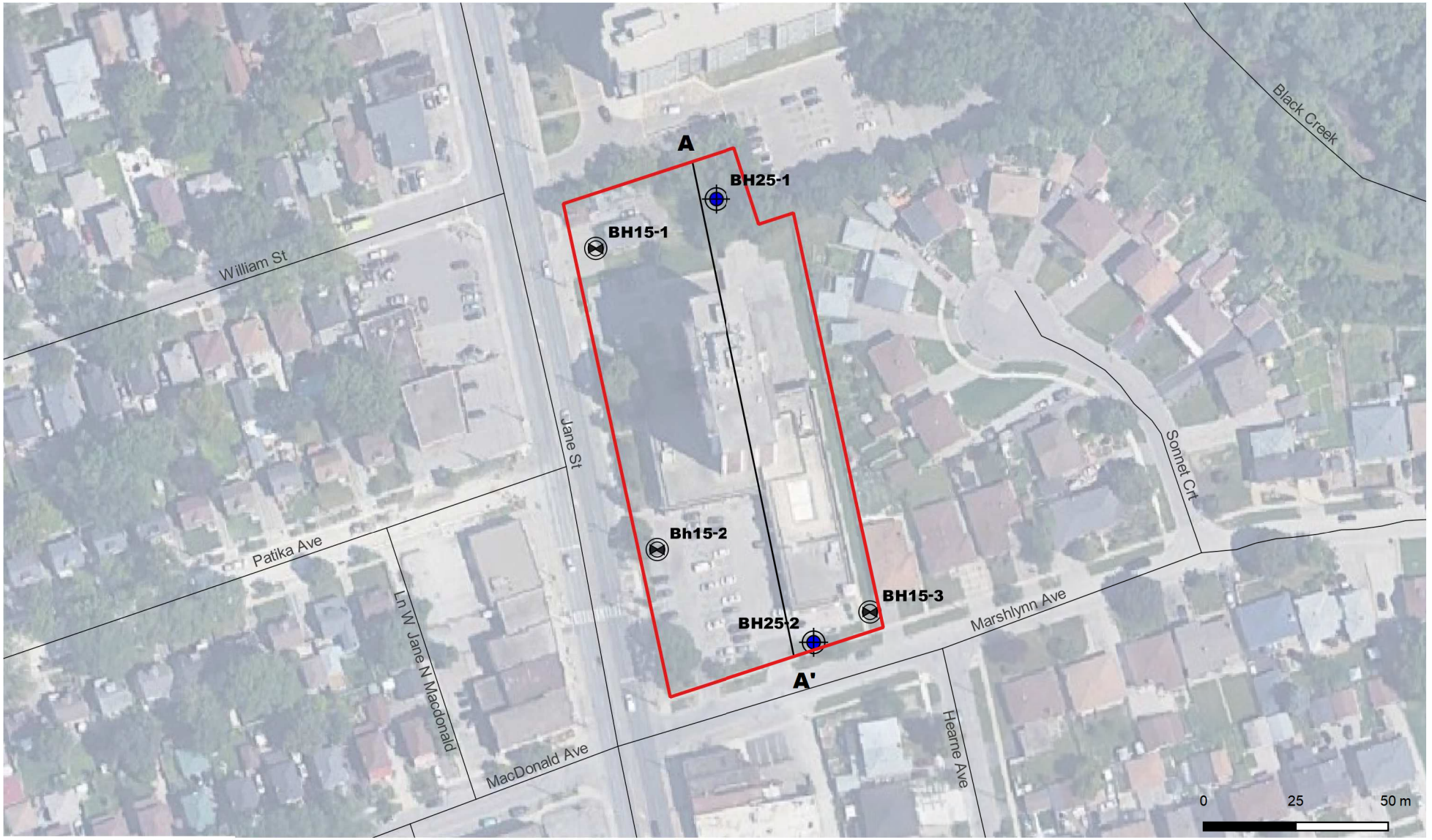
Title: **SURFICIAL GEOLOGY MAP**

Client: MEDALLION CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	P.P	S.Y	September 2025
Rev: 0	Scale: As Shown	Project No.: 25-163-300	Figure No.: 2

Image/Map Source: *Google Satellite Image*

J:\-GIS\2025 PROJECTS\25-163-100 - 1771-1775 Jane Street, North York\1-QGIS\HydroG\Figure 3 – Borehole and Monitoring Well Locations.qgs Sep-30 12:25



Legend

- Site Boundary
- Monitoring Well
- mointoring Well - Other
- Cross Section

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Client: MEDALLION CORPORATION

Project: HYDROGEOLOGICAL INVESTIGATION
1771-1775 Jane Street, North York, ON

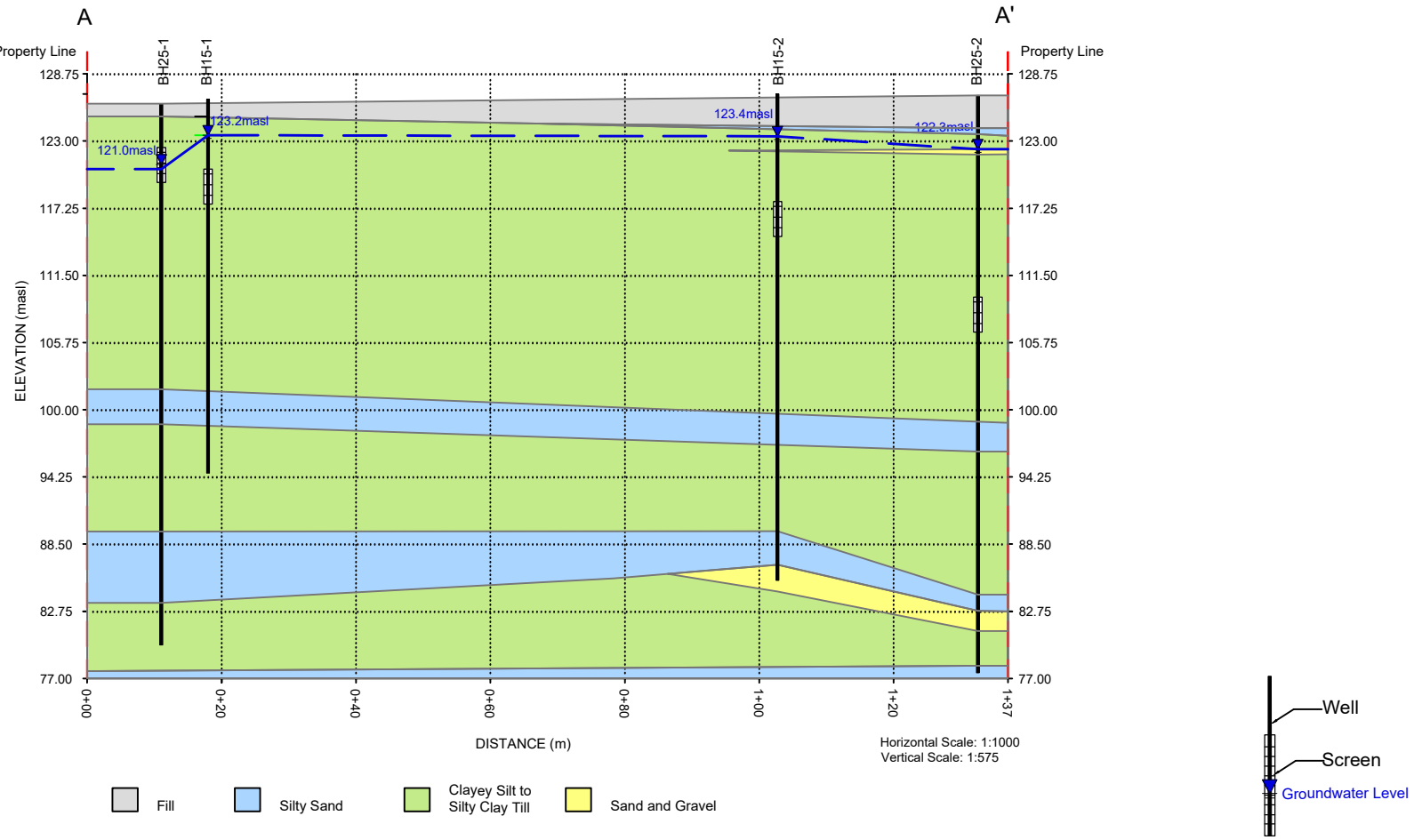
Title: **BOREHOLE AND MONITORING WELL LOCATIONS**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	P.P	S.Y	September 2025
Rev: 0	Scale: As Shown	Project No.: 25-163-300	Figure No.: 3

Image/Map Source: *Google Satellite Image*

Path:j:\-gis\2025 projects\25-163-100 - 1771-1775 jane street, north york\7-misc\cad\geological cross section 25-163.dwg



DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Project: HYDROGEOLOGICAL INVESTIGATION
1771-1775 Jane Street, North York, ON

Title: **GEOLOGICAL CROSS SECTION A-A'**

Client:	Size:	Approved By:	Drawn By:	Date:
MEDALLION CORPORATION	8.5 x 11	P.P	S.Y	October 2025
	Rev.	Scale: As Shown	Project No: 25-163-300	Figure No. 4

APPENDIX

Appendix A: Borehole Logs

DS CONSULTANTS LTD.
Geotechnical ◆ Environmental ◆ Materials ◆ Hydrogeology

LOG OF BOREHOLE BH25-1

PROJECT: Geotechnical Investigation
CLIENT: Medallion Corporation
PROJECT LOCATION: 1771-1775 Jane Street, North York, ON
DATUM: Geodetic
BH LOCATION: See Drawing 1 N 4840285.7 E 620541.5

DRILLING DATA
Method: Hollow Stem Auger/Mud Rotary
Diameter: 200mm
Date: Jun-02-2025 to Jun-03-2025

REF. NO.: 25-163-100
ENCL NO.: 2

ELEV / DEPTH (m)	DESCRIPTION	NUMBER	TYPE	BLOWS "N" 0.3 m
126.2				
126.0 / 0.1	**TOPSOIL/ORGANIC MATERIAL:** 100mm	1	SS	9
125.1 / 1.1	**FILL:** clayey silt, some sand, trace rootlets, trace organics, trace asphalt piece & brick piece, dark brown, very moist, stiff	2	SS	10
		3	SS	24
		4	SS	21
	CLAYEY SILT TO SILTY CLAY TILL: some sand to sandy, trace gravel, occasional cobble/boulder, brown, moist, stiff to very stiff	5	SS	21
	grey, stiff below 4.6m	6	SS	12
		7	SS	12
		8	SS	12
		9	SS	9
		10	SS	12
		11	SS	14
		12	SS	8
111.0 / 15.2	**SILTY CLAY:** trace sand, trace gravel, grey, moist to very moist, firm to stiff	13	SS	9
		14	SS	11
		15	SS	11
	firm at 19.8m	16	SS	4
		17	SS	10
	frequent wet sand seams at 22.9m	18	SS	12
101.8 / 24.4	**SILTY SAND:** trace clay, trace gravel, grey, wet, dense silty clay to clayey silt layer at 24.9m	19	SS	38
		20	SS	43
98.8 / 27.4	**SILTY CLAY:** wet silty sand layers/interbedded, trace gravel, grey, moist, hard	21	SS	54

W. L. 120.6 m
Jun 17, 2025

POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
200		
200		
175		Switched to mud rotary
8		
		2 22 52 24
		0 1 53 46
150		

DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100)
SHEAR STRENGTH (kPa)
○ UNCONFINED + FIELD VANE & Sensitivity
● QUICK TRIAXIAL × LAB VANE
(20 40 60 80 100)
PLASTIC LIMIT w_P NATURAL MOISTURE CONTENT w LIQUID LIMIT w_L
WATER CONTENT (%) (10 20 30)

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

LOG OF BOREHOLE BH25-1

PROJECT: Geotechnical Investigation
CLIENT: Medallion Corporation
PROJECT LOCATION: 1771-1775 Jane Street, North York, ON
DATUM: Geodetic
BH LOCATION: See Drawing 1 N 4840285.7 E 620541.5

DRILLING DATA
Method: Hollow Stem Auger/Mud Rotary
Diameter: 200mm
Date: Jun-02-2025 to Jun-03-2025

REF. NO.: 25-163-100
ENCL NO.: 2

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS "N" 0.3 m	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L — WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	SILTY CLAY: wet silty sand layers/interbedded, trace gravel, grey, moist, hard(Continued)						96					
			22	SS	36				○	175		
32							94					
			23	SS	49				○	150		
34							92					
36												
89.6							90					
36.6	**SILTY SAND:** trace clay, grey, wet, compact to dense		24	SS	42				○			0 71 22 7
38							88					
40			25	SS	28				○			
	gravelly sand layer at 40.5m						86					
42												
83.5							84					
42.7	**SILTY CLAY:** trace sand, trace gravel, grey, moist, hard		26	SS	54				○	150		
44							82					
80.5												
46 45.7 79.9	**SILTY CLAY:** interbedded wet silty sand, grey, moist, hard		27	SS	43		80		○			
46.3	**END OF BOREHOLE**											

Notes:
1) 50mm dia. monitoring well (MW) was installed upon completion.
2) Water Level Readings:

Date:	W.L.(mbgs):
June 17, 2025	5.6

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

DS CONSULTANTS LTD.
Geotechnical ◆ Environmental ◆ Materials ◆ Hydrogeology

LOG OF BOREHOLE BH25-2

PROJECT: Geotechnical Investigation
CLIENT: Medallion Corporation
PROJECT LOCATION: 1771-1775 Jane Street, North York, ON
DATUM: Geodetic
BH LOCATION: See Drawing 1 N 4840165.4 E 620568

DRILLING DATA
Method: Hollow Stem Auger/Mud Rotary
Diameter: 200mm
Date: May-29-2025 to May-30-2025

REF. NO.: 25-163-100
ENCL NO.: 3

ELEV / DEPTH (m)	DESCRIPTION	NUMBER	TYPE	BLOWS "N" 0.3 m	ELEVATION	POCKET PEN. (Cu) (kPa)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
126.9 / 0.0	**TOPSOIL/ORGANIC MATERIAL:** 180mm	1	SS	4	126		
126.1 / 0.8	**FILL:** clayey silt with organics, trace rock fragments, some organics, dark brown to black, moist, firm	2	SS	5			
		3	SS	9			
124.1 / 2.8	**FILL:** silty sand, trace clay, brown, wet, loose to compact	4	SS	12	124		
123.6 / 3.3	**SILTY SAND:** trace clay, brown, wet, loose to compact	5	SS	5			
122.3 / 4.6	**SILTY CLAY:** trace sand, grey, moist, firm	6	SS	14	W. L. 122.6 m Jun 17, 2025		Switched to mud rotary
122.0 / 4.9	**SAND AND GRAVEL:** trace clay, trace silt, brown, wet, compact						
	CLAYEY SILT TO SILTY CLAY TILL: some sand to sandy, trace gravel, occasional cobble/boulder, grey, moist, stiff to very stiff	7	SS	20	120	175	
		8	SS	11			
		9	SS	10	118		
		10	SS	10	116		
		11	SS	9			
		12	SS	11	114		
		13	SS	10	112		
		14	SS	9	110		
		15	SS	8	108		2 29 50 19
		16	SS	8			
105.6 / 21.3	**SILTY CLAY:** trace sand, grey, moist, very soft to firm	17	SS	5	106		
		18	SS	WH	104		
102.5 / 24.4	**CLAYEY SILT TILL:** trace to some sand, trace gravel, grey, moist, stiff to hard	19	SS	14	102		
		20	SS	45		200	
99.5 / 27.4	**SILTY CLAY:** trace sand, grey, moist, hard (verify)	21	SS	38	100		
99.0 / 27.9	**SILTY SAND:** trace clay, grey, wet, dense				98		

DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100)
SHEAR STRENGTH (kPa) (20 40 60 80 100)
○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE
PLASTIC LIMIT w_P | NATURAL MOISTURE CONTENT w | LIQUID LIMIT w_L
WATER CONTENT (%) (10 20 30)

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

DS SOIL LOG-2021-DRAFT 25-163-100 GEO.GPJ DS.GDT 25-6-18

LOG OF BOREHOLE BH25-2

PROJECT: Geotechnical Investigation
CLIENT: Medallion Corporation
PROJECT LOCATION: 1771-1775 Jane Street, North York, ON
DATUM: Geodetic
BH LOCATION: See Drawing 1 N 4840165.4 E 620568

DRILLING DATA
Method: Hollow Stem Auger/Mud Rotary
Diameter: 200mm
Date: May-29-2025 to May-30-2025

REF. NO.: 25-163-100
ENCL NO.: 3

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
96.4												
30.5	**SILTY CLAY TILL:** trace to some sand, trace gravel, seams of sand and gravel, grey, moist, very stiff		22	SS	25		96					
32												
93.4							94					
33.5	**SILTY CLAY:** trace to some sand, trace gravel, frequent wet silty sand layers below, very stiff to hard		23	SS	35							
34							92					
36			24	SS	22							
38							90					
40			25	SS	18					125		2 10 46 42
42							88					
84.2												
42.7	**SILTY SAND:** some clay, trace gravel, grey, wet, compact		26	SS	28		86					
44 82.8												
44.1	**COARSE SAND:** trace silt, trace clay, grey, wet, compact		27	SS	33		84					
81.2												
46 45.7	**SILTY CLAY:** trace sand, frequent wet silty sand layers, grey, moist, very stiff		28	SS	18		82					
	150mm wet silty sand layer at 47.2m		29	SS	23		80					0 7 73 20
48												
78.1												
48.8 77.5	**SILTY SAND:** trace clay, grey, wet, dense		30	SS	40		78					
49.4	**END OF BOREHOLE**											

Notes:
1) WH-Weight of Hammer
2) 50mm dia. monitoring well (MW) was installed upon completion.
3) Water Level Readings:

Date:	W.L.(mbgs):
June 17, 2025	4.3

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

SPL

LOG OF BOREHOLE BH15-1

PROJECT: Geotechnical Investigation - Proposed Buildings
CLIENT: Medallion Realty Holdings Ltd.
PROJECT LOCATION: 1775 Jane Street, Toronto, ON
DATUM: Geodetic
BH LOCATION: Refer to Drawing 1

DRILLING DATA
Method: Hollow stem auger/Tricone
Diameter: 203 mm
Date: May/14/2015

REF. NO.: 10001779
ENCL NO.: 2

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER LEVEL	ELEVATION	GROUND WATER LEVEL	DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100	SHEAR STRENGTH (kPa) ○ UNCONFINED + FIELD VANE & Sensitivity ● QUICK TRIAXIAL × LAB VANE 20 40 60 80 100	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) 10 20 30	POCKET PEN (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
126.6														
126.5 0.1	**ASPHALT:** 100mm													
	FILL: sandy silt, mixed with topsoil, trace asphalt fragments, dark brown, moist, loose		1	SS	7		126							
1 125.1			2	SS	7									
1.5	**SANDY SILT:** trace clay, brown, very moist, loose		3	SS	5		125							
2 124.3						▽								
2.3	**SAND AND GRAVEL:** trace silt, trace clay, brown, saturated, compact		4	SS	20			W. L. 124.4 m: Jun 01, 2015 Holeplug						
3 123.5							124							
3.1	**SILTY CLAY TILL:** trace to some sand, trace gravel, grey, moist, stiff to hard		5	SS	21									
4							123							
5			6	SS	26		122							
6							121	Sand						
			7	SS	13									
7							120							
8			8	SS	12			Screen						
9							118							
			9	SS	7		117							2 18 51 29
10			10	SS	9									Tricone below 9.8m
11							116							
12	embedded silt layers, wet sand seams below 11.6m		11	SS	15		115							
13							114							
			12	SS	30									
14 112.0							113							
14.6 111.6	**SAND:** some gravel, grey, wet, compact		13	SS	15		112							
15 15.0	**SILT:** some clay, grey, very moist, compact													
16 110.1							111							
16.5			14	SS	23		110							

Continued Next Page

GROUNDWATER ELEVATIONS
Shallow/ Single Installation ▽ 1st ▼ 2nd Deep/Dual Installation ▽ 1st ▼ 2nd

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

SPL SOIL LOG-2014-2 SEPARATE WELLS 10001779 GINT FILE - FOR GEO.GPJ SPL.GDT 6/29/15

PROJECT: Geotechnical Investigation - Proposed Buildings

CLIENT: Medallion Realty Holdings Ltd.

PROJECT LOCATION: 1775 Jane Street, Toronto, ON

DATUM: Geodetic

BH LOCATION: Refer to Drawing 1

DRILLING DATA

Method: Hollow stem auger/Tricone

Diameter: 203 mm

Date: May/14/2015

REF. NO.: 10001779

ENCL NO.: 2

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES: NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER LEVEL	ELEVATION	GROUND WATER LEVEL	DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100 / SHEAR STRENGTH (kPa) ○ UNCONFINED + FIELD VANE & Sensitivity ● QUICK TRIAXIAL × LAB VANE 20 40 60 80 100	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	CLAYEY SILT: some sand, occasional gravel, grey, moist, stiff to very stiff(Continued)						109						
18			15	SS	12								
19 107.4							108						
19.2	**SILTY CLAY:** trace sand, contains sand seams, grey, moist, stiff		16	SS	8		107			○			
20													
21			17	SS	10		106			○			
22							105						
23			18	SS	8		104			○			
24							103						
25 101.3			19	SS	8					⊢○⊣			0 1 46 53
25.3	**SILTY CLAY TILL:** some sand, contains sand seams, trace gravel, grey, moist, hard		20	SS	83/ 275mm		102			○			
26 99.8							101						
27 26.8	**SILTY SAND:** trace clay, grey, wet, very dense		21	SS	59		100			○			0 64 28 8
28 98.3							99						
28.3	**SILTY CLAY TILL:** some sand, contains silt seams, trace gravel, grey, moist, hard		22	SS	41		98			⊢○⊣			2 16 49 33
29 96.7							97						
30 29.9	**SILTY SAND:** trace clay, grey, wet to saturated, very dense		23	SS	50					○			
31 95.2							96						
31.4	**CLAYEY SILT TILL:** sandy, trace gravel, occasional wet sand layers, ~~grey, moist, hard~~		24	SS	35		95			○			
32 94.6													
32.0	**END OF BOREHOLE** Notes: 1) 50mm diameter monitoring well installed to a depth of 9.m on completion of drilling. 2) Water level in well on June 1, 2015 recorded at 5.81 mbgs.												

SPL SOIL LOG-2014-2 SEPARATE WELLS 10001779 GINT FILE - FOR GEO.GPJ SPL.GDT 6/29/15

GROUNDWATER ELEVATIONS

Shallow/ Single Installation 1st ▽ 2nd ▼ Deep/Dual Installation 1st ▽ 2nd ▼

GRAPH NOTES $+^{3}$, $\times^{3}$: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

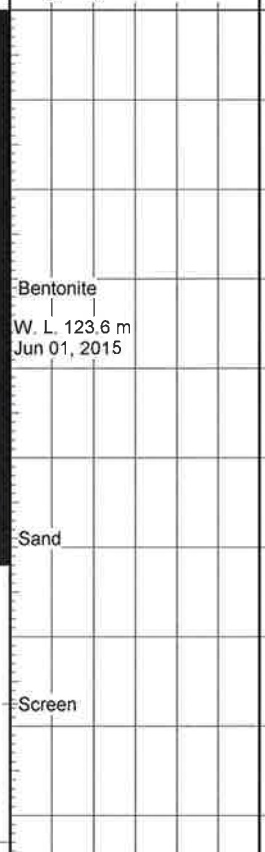
LOG OF BOREHOLE BH15-2

PROJECT: Geotechnical Investigation - Proposed Buildings
CLIENT: Medallion Realty Holdings Ltd.
PROJECT LOCATION: 1775 Jane Street, Toronto, ON
DATUM: Geodetic
BH LOCATION: Refer to Drawing 1

DRILLING DATA
Method: Hollow stem auger/Tricone
Diameter: 203 mm
Date: May/19/2015

REF. NO.: 10001779
ENCL NO.: 3

(m) ELEV / DEPTH	DESCRIPTION	NUMBER	TYPE	"N" BLOWS 0.3 m	ELEVATION
127.0					
0.0 / 126.2	**FILL:** silty sand, trace clay, trace to some asphalt, trace gravel, dark brown, moist, compact	1	SS	21	
0.8 / 125.2	**FILL:** sandy silt, some clay, trace rootlets, brown, moist, loose to compact	2	SS	9	126
		3	SS	11	
1.8 / 123.9	**SANDY SILT:** trace clay, brown, wet, compact to loose	4	SS	7	125
3.1 / 122.4	**CLAYEY SILT:** trace sand, trace gravel, brown to grey, moist, stiff	5	SS	9	124
4.6 / 122.0	**SAND AND GRAVEL:** trace clay, grey, saturated, loose	6	SS	9	123
5.0	**SILTY CLAY TILL:** some sand, trace gravel, grey, moist, stiff to very stiff	7	SS	18	122
		8	SS	14	121
	embedded silt layer at 10m	9	SS	9	120
		10	SS	9	119
		11	SS	8	118
	occasional sand layers below 12.9m	12	SS	8	117
		13	SS	8	116
		14	SS	9	115
					114
					113
					112
					111



DYNAMIC CONE PENETRATION RESISTANCE PLOT
20 40 60 80 100
SHEAR STRENGTH (kPa)
○ UNCONFINED + FIELD VANE & Sensitivity
● QUICK TRIAXIAL × LAB VANE
20 40 60 80 100

PLASTIC LIMIT w_P | NATURAL MOISTURE CONTENT w | LIQUID LIMIT w_L
WATER CONTENT (%)
10 20 30

POCKET PEN. (Cu) (kPa)
NATURAL UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

Tricone/Mud rotary below 9.8m

Continued Next Page

GROUNDWATER ELEVATIONS
Shallow/ Single Installation ▽ 1st ▼ 2nd
Deep/Dual Installation ▽ 1st ▼ 2nd

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

SPL SOIL LOG-2014-2 SEPARATE WELLS 10001779 GINT FILE - FOR GEO.GPJ SPL.GDT 6/29/15

PROJECT: Geotechnical Investigation - Proposed Buildings

CLIENT: Medallion Realty Holdings Ltd.

PROJECT LOCATION: 1775 Jane Street, Toronto, ON

DATUM: Geodetic

BH LOCATION: Refer to Drawing 1

DRILLING DATA

Method: Hollow stem auger/Tricone

Diameter: 203 mm

Date: May/19/2015

REF. NO.: 10001779

ENCL NO.: 3

SOIL PROFILE			SAMPLES			GROUND WATER LEVEL	ELEVATION	GROUND WATER LEVEL	DYNAMIC CONE PENETRATION RESISTANCE PLOT / SHEAR STRENGTH (kPa)	PLASTIC LIMIT / NATURAL MOISTURE CONTENT / LIQUID LIMIT / WATER CONTENT (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS 0.3 m				20 40 60 80 100	10 20 30			GR SA SI CL
107.8	**SILTY CLAY TILL:** some sand, trace gravel, grey, moist, stiff to very stiff(Continued)		15	SS	9		109						
19.2	**SILTY CLAY:** trace sand, occasional gravel, grey, moist, stiff		16	SS	12		107						
			17	SS	9		106						
			18	SS	9		105						
103.5							104						
23.5	**SILTY CLAY TILL:** some sand, trace gravel, occasional cobble/boulder, grey, moist, very stiff layer of gravelly sand at 24.2m		19	SS	21		103						
101.5							102						
25.5	**SAND:** some silt, grey, wet, compact		20	SS	28		101						
100.2													
26.8	**SILTY CLAY TILL:** some sand, trace gravel, contains wet sand seams, occasional silt seams, grey, moist, very stiff		21	SS	19		100						
98.7							99						
28.3	**SILTY SAND TO SANDY SILT:** trace clay, grey, wet to saturated, compact		22	SS	24		98						
			23	SS	31		97						
95.6							96						
31.4	**CLAYEY SILT:** trace sand, occasional gravel, contains wet sand seams, grey, moist, very stiff		24	SS	16		95						
94.1													
32.9	**SANDY SILT:** trace clay, grey, saturated, dense		25	SS	40		94						

Bentonite Grout

SHEAR STRENGTH (kPa): ○ UNCONFINED + FIELD VANE & Sensitivity ● QUICK TRIAXIAL × LAB VANE

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L

SPL SOIL LOG-2014-2 SEPARATE WELLS 10001779 GINT FILE - FOR GEO.GPJ SPL.GDT 6/29/15

Continued Next Page

GROUNDWATER ELEVATIONS

Shallow/ Single Installation 1st ▽ 2nd ▼ Deep/Dual Installation 1st ▼ 2nd ▼

GRAPH NOTES: $+^3$, $\times^3$: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

LOG OF BOREHOLE BH15-2

PROJECT: Geotechnical Investigation - Proposed Buildings
CLIENT: Medallion Realty Holdings Ltd.
PROJECT LOCATION: 1775 Jane Street, Toronto, ON
DATUM: Geodetic
BH LOCATION: Refer to Drawing 1

DRILLING DATA
Method: Hollow stem auger/Tricone
Diameter: 203 mm
Date: May/19/2015

REF. NO.: 10001779
ENCL NO.: 3

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER LEVEL	ELEVATION	GROUND WATER LEVEL	DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100 / SHEAR STRENGTH (kPa) ○ UNCONFINED + FIELD VANE & Sensitivity ● QUICK TRIAXIAL × LAB VANE 20 40 60 80 100	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) 10 20 30	POCKET PEN. (CU) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
92.6													
34.4	**SILTY CLAY TILL:** some sand, contains wet sand seams, trace gravel, grey, moist, stiff		26	SS	10		92			○			
35													
36			27	SS	12		91			○			
37							90						
89.5													
37.5	**SILTY SAND:** trace clay, embedded clayey silt layers, grey, saturated, dense		28	SS	35		89 Sand			○			
38													
39			29	SS	40		88			○			
40							Screen						
86.8													
40.2	**SAND:** some silt, trace clay, grey, saturated, dense		30	SS	41		86			○			
41													
85.8													
41.2	**SANDY GRAVEL:** trace silt, trace clay, occasional cobble/boulder,												
85.4													
41.6	grey, saturated, very dense		31	SS	50/ 125mm								
	END OF BOREHOLE												

Notes:
1) Tricone refusal at 41.6m on possible boulder or bedrock.
2) 19 mm dia. peizometer (deep well) installed to a depth of 41.6m in borehole upon completion.
3) Water level in 19mm piezometer on June 1, 2015 recorded at 11.7 mbgs.
4) 50mm dia. monitoring well (shallow well) installed in an adjacent separate borehole at 9.3m.
5) Water level in 50mm well on June 1, 2015 recorded at 3.4 mbgs.

GROUNDWATER ELEVATIONS
Shallow/ Single Installation 1st ▽ 2nd ▼ Deep/Dual Installation 1st ▼ 2nd ▼

GRAPH NOTES: $+^3$, $\times^3$: Numbers refer to Sensitivity; ○ ε=3% Strain at Failure

SPL SOIL LOG-2014-2 SEPARATE WELLS 10001779 GINT FILE - FOR GEO.GPJ SPL.GDT 6/29/15

LOG OF BOREHOLE BH15-3

PROJECT: Geotechnical Investigation - Proposed Buildings
CLIENT: Medallion Realty Holdings Ltd.
PROJECT LOCATION: 1775 Jane Street, Toronto, ON
DATUM: Geodetic
BH LOCATION: Refer to Drawing 1

DRILLING DATA
Method: Hollow stem auger
Diameter: 203 mm
Date: May/26/2015

REF. NO.: 10001779
ENCL NO.: 4

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER LEVEL	ELEVATION	GROUND WATER LEVEL
127.3								
127.0 0.4	**TOPSOIL:** 100mm							
126.5	**FILL:** sandy silt, some clay, trace rootlets, trace gravel, brown, moist, compact		1	SS	16		127	
1 0.8	**FILL:** clayey silt, some organics, dark brown to brown, moist, firm		2	SS	6		126	
125.6								
2 1.7	**SILTY SAND TO SANDY SILT:** trace clay, brown, moist, loose to compact		3	SS	6		125	
			4	SS	13		Holeplug	
3 124.0							124	
3.3	**SILTY CLAY:** trace sand, trace gravel, grey, moist, stiff		5	SS	8	▽	W. L. 123.6 m Jun 01, 2015	
4 122.7							123	
4.6	**SAND:** some gravel, trace silt, grey, saturated, compact		6	SS	21		122	
5 6 121.2							Sand	
6.1	**SILTY CLAY TILL:** some sand, contains wet sand seams, trace gravel, grey, moist, very stiff		7	SS	21		121	
7							120	
			8	SS	17		Screen	
8							119	
9 118.0	interbed of silty clay at 9.1 m							
9.3 117.6	**SAND:** trace silt, grey, wet, very loose		9	SS	3		118	
9.7	**END OF BOREHOLE**							

Notes:
1) 50mm diameter monitoring well installed to a depth of 9.1m on completion of drilling.
2) Water level in well on June 1, 2015 recorded at 3.67 mbgs.

DYNAMIC CONE PENETRATION RESISTANCE PLOT
20 40 60 80 100

SHEAR STRENGTH (kPa)
○ UNCONFINED + FIELD VANE & Sensitivity
● QUICK TRIAXIAL × LAB VANE
20 40 60 80 100

PLASTIC LIMIT w_P | NATURAL MOISTURE CONTENT w | LIQUID LIMIT w_L
WATER CONTENT (%)
10 20 30

POCKET PEN (Cu) (kPa)

NATURAL UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

GROUNDWATER ELEVATIONS
Shallow/ Single Installation ▽ 1st ▼ 2nd
Deep/Dual Installation ▽ 1st ▼ 2nd

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

SPL SOIL LOG-2014-2 SEPARATE WELLS 10001779 GINT FILE - FOR GEO GPJ SPL.GDT 6/29/15

Appendix B: MECP Water Wells Records

Table: MECP Water Wells Records (500 m Radius)
Location: 1771-1775 Jane Street, Toronto

TOWNSHIP C	E	N	DATE CNTR	CASING	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TH YORK BORO	620493	4840223	2017-01 7241	2			MT	0006 10	7280274	BLCK 0010 BRWN SAND SILT 0016
TH YORK BORO	620913	4840225	2018-05 7644	2	14		TH MO	40	7314014	
TH YORK BORO	620836	4840235	2018-05 7644	2	7		TH MO	0040 10	7314013	
TH YORK BORO	620510	4840216	2017-05 7241	2			TH MO	0007 10	7290027	BLCK ---- 0000 GREY ---- 0001 BRWN FILL 0004 BRWN SAND SILT 0015 GREY CLAY 0017
TH YORK BORO	620509	4840209	2015-05 7241	2			TH MO	0010 10	7289803	BLCK ---- 0000 GREY ---- 0001 BRWN SAND SILT 0010 GREY CLAY SILT 0020
TH YORK BORO	620498	4840202	2017-05 7241	2			TH MO	0007 10	7289802	BLCK ---- 0000 GREY ---- 0001 BRWN SAND SILT 0010 GREY CLAY SILT 0017
TH YORK BORO	620473	4840458	2017-03 7241	2			TH MO	0004 8	7284962	BLCK LOAM 0004 BRWN SILT SAND 0012
TH YORK BORO	620477	4840426	2017-03 7241	2			TH MO	0004 8	7284961	BLUE LOAM 0003 BRWN SILT SAND 0012
TH YORK BORO	620854	4840202	2018-04 7644	2	14		TH MO	0015 5	7314015	
TH YORK BORO	620491	4840234	2017-01 7241	2			MT	0010 10	7280276	BLCK CMTD 0001 BRWN SAND 0008 BRWN SILT CLAY TILL 0020
TH YORK BORO	620489	4840240	2017-01 7241	2			MT	0010 10	7280277	BLCK CMTD 0001 BRWN SAND 0008 BRWN SILT CLAY TILL 0020
TH YORK BORO	620544	4840211	2015-05 6032	1			MO	0126 10	7248157	BRWN LOAM SAND SOFT 0003 BRWN SAND GRVL SOFT 0015 GREY SILT CLAY WBRG 0030 GREY CLAY SILT WBRG 0090 GREY SILT SAND DNSE 0110 GREY SILT CLAY WBRG 0136
TH YORK BORO	620482	4840284	2014-08 7241	2.04			MT	0004 10	7227789	BRWN SAND SLTY SOFT 0005 BRWN CLAY SLTY SOFT 0010 GREY CSND SOFT 0014
TH YORK BORO	620485	4840285	2014-08 7241	2.04			MT	0004 10	7227788	BRWN SAND SLTY SOFT 0005 BRWN SAND SLTY SOFT 0010 GREY CSND SOFT 0014
TH YORK BORO	620593	4839943	2013-09 7241	2			MT	0008 10	7208966	BRWN SAND 0010 BRWN SAND WBRG 0012 GREY CLAY 0018
TH YORK BORO	620591	4839944	2013-07 7241	2			MT	0015 10	7206539	BRWN SAND FILL 0009 GREY SILT CLAY 0025
TH YORK BORO	620633	4839900	2013-07 7241	2			MT	0010 10	7206538	BRWN SAND FILL 0011 GREY SILT CLAY 0020
TH YORK BORO	620864	4840077	2017-02 6607						7282344	
TH YORK BORO	620955	4840193	2019-11 7472						7350307	
TH YORK BORO	620954	4840193	2019-11 7472						7350305	
TH YORK BORO	620853	4840172	2019-11 7472						7350306	
TH YORK BORO	620884	4840181	2019-11 7472						7350312	
TH YORK BORO	620852	4840171	2019-11 7472						7350304	
TH YORK BORO	620493	4840239	2019-05 7230	2.04	UT 0009	///:	MT	0006 10	7336366	
TH YORK BORO	620492	4840229	2017-01 7241	0.79			MT	0020 33	7280275	BLCK CMTD 0033 BRWN SAND SILT 0052
TORONTO CITY	620566	4839989	2008-11 7147	12.6			TH NU	0003 10	7116501	BLCK 0001 BRWN FILL 0010 BRWN SILT CLAY 0015

Table: MECP Water Wells Records (500 m Radius)
Location: 1771-1775 Jane Street, Toronto

TORONTO CITY	620436	4840270	2004-08 6607	1.97	FR 0008			0005 10	6928184	GREY SAND GRVL FILL 0002 BRWN SILT CLAY SOFT 0010 GREY SILT CLAY 0015
ORK BOROUG	620478	4840238	2014-11 7241	2			MT	0009 10	7235398	BRWN FILL 0005 BRWN SAND SILT 0010 BRWN SAND GRVL 0014 GREY SILT CLAY 0019
ORK BOROUG	620474	4840237	2014-11 7241	2			MT	0011 10	7235397	BRWN FILL CLAY 0005 BRWN SAND SILT 0012 BRWN SAND GRVL 0018 GREY SILT CLAY 0021
ORK BOROUG	620377	4839742	2014-06 7360						7224670	
ORK BOROUG	620510	4839881	2015-02 7247		6				7240990	
ORK BOROUG	620380	4839743	2015-02 7247		UT 0008				7240991	
ORK BOROUG	620300	4839863	2015-02 7247		UT 0009				7240993	
ORK BOROUG	620079	4840185	2015-11 6032	2			MO	0025 5	7259516	BLCK GRVL HARD 0000 BLCK FILL LYRD 0010 BRWN SILT CLAY HARD 0020 GREY SAND SILT SOFT 0025
ORK BOROUG	620508	4840060	2014-11 7147						7232858	
ORK BOROUG	620329	4839802	2014-06 7360						7225736	
ORK BOROUG	620378	4840675	2016-04 7241	2			MT	0010 10	7263762	BLCK ---- 0004 BRWN SAND GRVL 0008 BRWN CLAY SILT TILL 0020
ORK BOROUG	620457	4840245	2019-10 7324						7352611	
ORK BOROUG	620417	4839676	2021-09 6946						7399918	
ORK BOROUG	620465	4840018	2012-07 7241	2			MT	0004 10	7186270	BRWN FILL 0005 BRWN CLAY SILT 0009 BRWN SAND SILT 0013 GREY CLAY SILT 0014
ORK BOROUG	620444	4840050	2012-07 7241	2			MT	0004 10	7186269	BRWN FILL 0005 BRWN CLAY SILT 0009 BRWN SAND SILT 0011 GREY CLAY SILT 0014
ORK BOROUG	620454	4840015	2012-07 7241	2			MT	0004 10	7186234	BRWN FILL 0005 BRWN CLAY SILT 0007 BRWN SAND SILT 0014
ORK BOROUG	620458	4840049	2012-07 7241	2			MT	0004 10	7186233	BRWN FILL 0005 BRWN CLAY SILT 0009 BRWN SAND 0010 GREY CLAY SILT 0014
ORK BOROUG	620464	4840034	2012-07 7241	2			MT	0005 10	7186232	BRWN FILL 0005 BRWN CLAY SILT 0011 BRWN SAND SILT 0014 GREY CLAY SILT 0015
ORK BOROUG	620496	4839700	2021-09 7472	2		///:	MO	0015 10	7405226	GREY GRVL SAND PCKD 0010 GREY SAND SILT PCKD 0016 GREY CLAY SILT PCKD 0025
ORK BOROUG	620545	4839889	2014-06 7360						7225737	
ORK BOROUG	620402	4839666	2019-04 7230	2.04	UT 0009	///:	MT	0007 10	7331776	
ORK BOROUG	620315	4839980	2019-03 7147	1.97		///:	NU	0010 5	7330664	
ORK BOROUG	620452	4840279	2018-10 7421						7325199	
ORK BOROUG	620375	4840462	2019-03 7230	2.04	UT 0004	///:	MT		7331780	
ORK BOROUG	620213	4840119	2019-04 7230	2.04	UT 0006	///:	MT	0008 10	7331781	
ORK BOROUG	620499	4839706	2019-03 7230	2.04	UT 0006	///:	MT	0008 10	7331782	

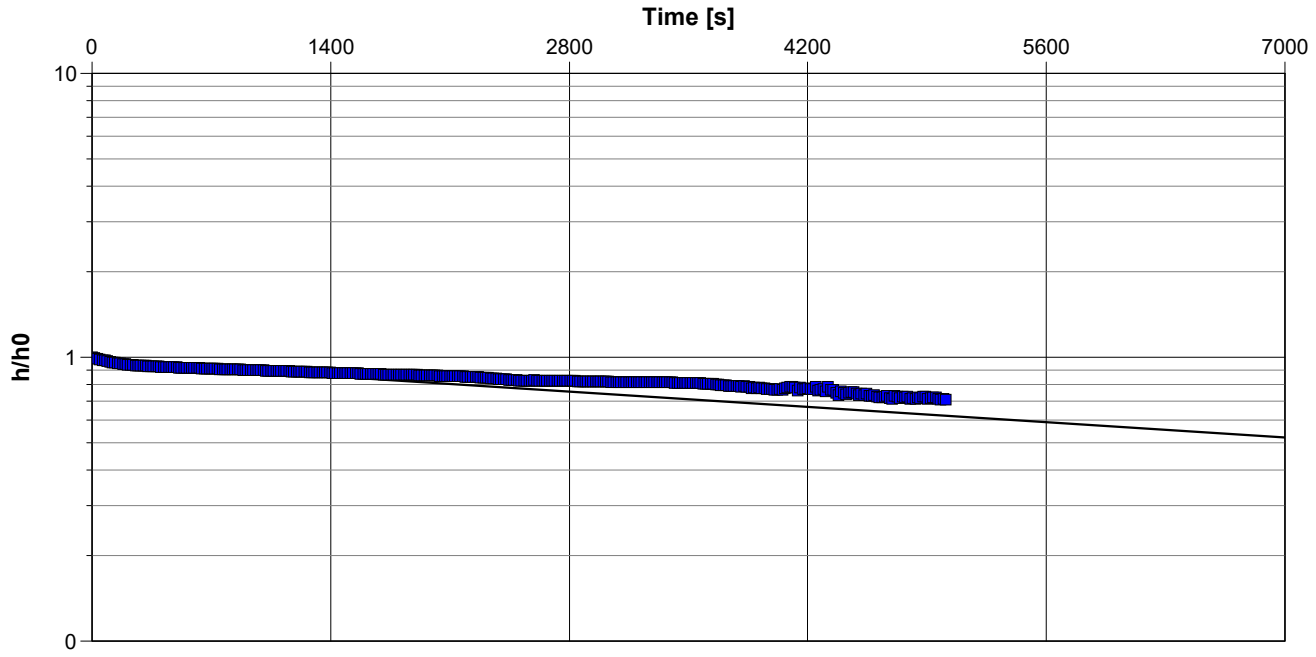
Table: MECP Water Wells Records (500 m Radius)
Location: 1771-1775 Jane Street, Toronto

ORK BOROUG	620292	4840424	2017-11 7472	2			MO	0010 10	7306436	BRWN SAND SILT LOOS 0010 GREY CLAY SILT PCKD 0020
ORK BOROUG	620386	4840460	2017-11 7147	1.17			MO	0010 10	7300883	BRWN SILT 0020
ORK BOROUG	620440	4840283	7383	2			MO	0010 5	7297756	BRWN SAND GRVL CLAY 0008 GREY CLAY SILT 0015
ORK BOROUG	620352	4840700	2016-04 7241	2			MT	0010 10	7263760	BLCK ---- 0004 BRWN SAND GRVL 0008 BRWN CLAY SILT 0020
ORK BOROUG	620182	4839818	2019-10 7241	2		///:	MT	0005 10	7348258	BRWN SAND 0003 BRWN SILT SAND 0008 GREY SAND SILT 0015
ORK BOROUG	620361	4840670	2016-04 7241	2			MT	0010 10	7263761	BLCK ---- 0004 BRWN SAND GRVL 0008 BRWN CLAY SILT TILL 0020
ORK BOROUG	620582	4839728	2021-09 7472	2		///:	MO	0015 10	7405244	GREY GRVL SAND PCKD 0010 GREY SAND SILT PCKD 0016 GREY CLAY SILT PCKD 0025
ORK BOROUG	620200	4839776	2019-10 7241	2		///:	MT	0005 10	7348302	BRWN SAND 0003 BRWN SILT SAND 0008 GREY SAND 0015
ORK BOROUG	620444	4840420	2016-08 6607	20	UT 0046		MO	0044 10	7274706	BRWN SAND SILT LOOS 0010 GREY CLAY SILT PCKD 0020 BRWN SAND SILT DNSE 0054
ORK BOROUG	620481	4840236	2016-05 7241	2			MT	0005 10	7264935	BLCK ---- 0000 BRWN FILL 0001 BRWN SILT SAND 0010 GREY SAND SILT 0015
ORK BOROUG	620474	4840233	2016-05 7241	2			MT	0005 10	7264934	BLCK ---- 0000 BRWN FILL 0001 BRWN SILT SAND 0009 GREY SAND SILT 0015
ORK BOROUG	620458	4840225	2016-05 7241	2			MT	0005 10	7264933	BLCK ---- 0000 BRWN FILL 0001 BRWN SAND SILT SOFT 0011 GREY SILT SAND 0015
ORK BOROUG	620482	4840218	2016-05 7241	2			MT	0005 10	7264850	BLCK ---- 0003 BRWN SAND 0009 GREY SILT SAND WBRG 0015
ORK BOROUG	620380	4840695	2016-04 7241	2			MT	0010 10	7263763	BLCK ---- 0004 BRWN SAND GRVL 0008 BRWN SILT CLAY TILL 0020
ORK BOROUG	620443	4840186	2019-04 7230	2.04	UT 0006	///:	MT	0007 10	7331779	

Appendix C: Hydraulic Conductivity Analysis

	Slug Test Analysis Report
	Project: Hydrogeological Investigation
	Number: 25-162-100
	Client: Medallion Corporation

Location: 1771-1775 Jane Street, Toronto	Slug Test: MW 25-1	Test Well: MW 25-1
Test Conducted by: PP		Test Date: 8/14/2025
Analysis Performed by: PP	Hvorslev	Analysis Date: 8/14/2025
Aquifer Thickness: 4.10 m		

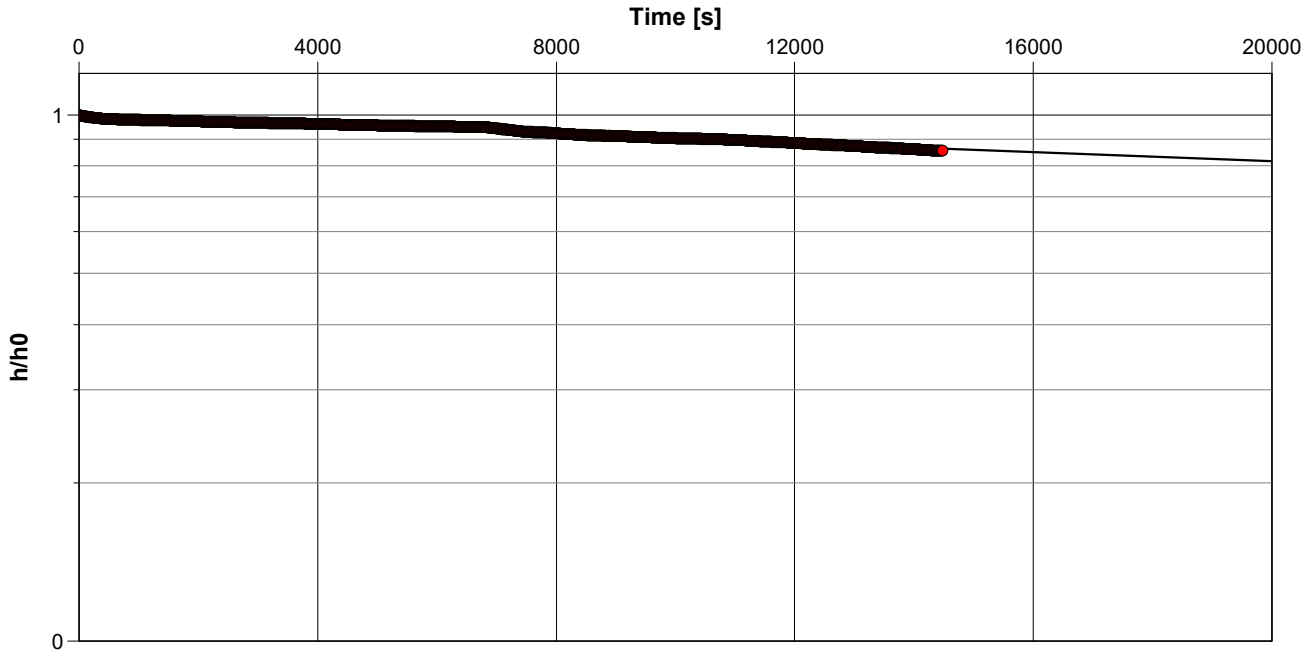


Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW 25-1	4.03×10^{-8}	

	Slug Test Analysis Report
	Project: Hydrogeological Investigation
	Number: 25-162-100
	Client: Medallion Corporation

Location: 1771-1775 Jane Street, Toronto	Slug Test: MW 25-2	Test Well: MW 25-2
Test Conducted by: PP		Test Date: 8/15/2025
Analysis Performed by: PP	Hvorslev	Analysis Date: 8/15/2025
Aquifer Thickness: 14.73 m		

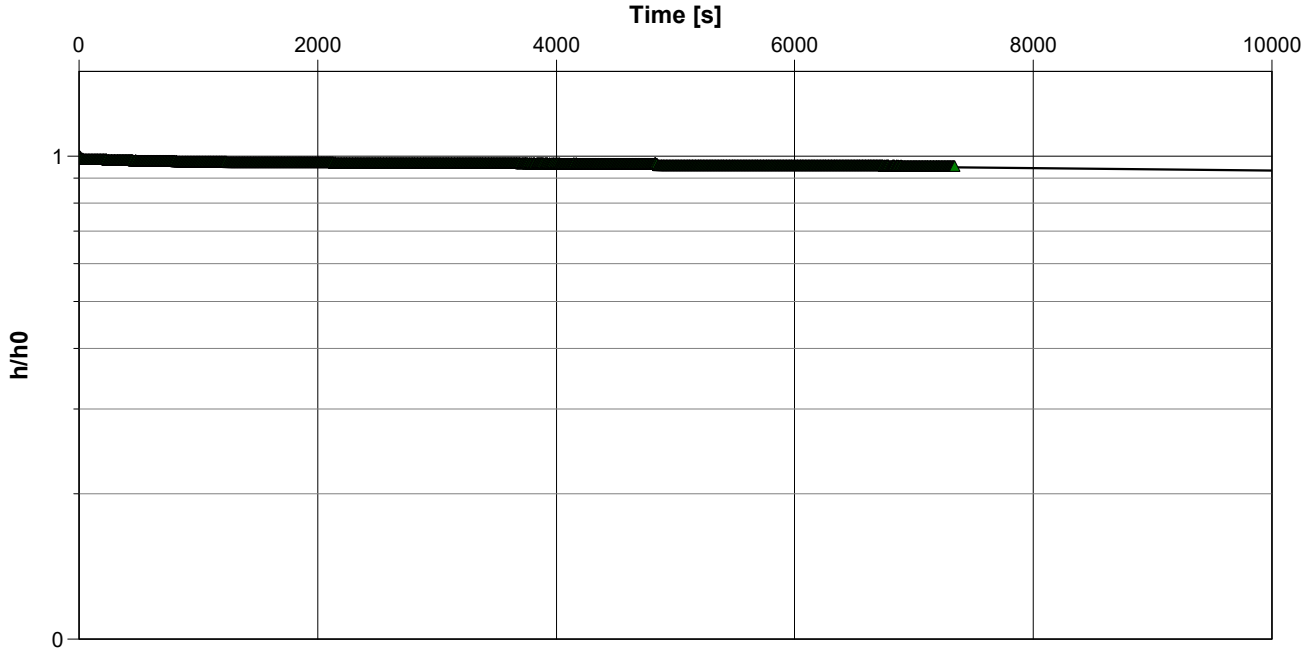


Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW 25-2	4.50×10^{-9}	

	Slug Test Analysis Report
	Project: Hydrogeological Investigation
	Number: 25-162-100
	Client: Medallion Corporation

Location: 1771-1775 Jane Street, Toronto	Slug Test: MW 15-1	Test Well: MW 15-1
Test Conducted by: pp		Test Date: 8/15/2025
Analysis Performed by: PP	Hvorslev	Analysis Date: 8/15/2025
Aquifer Thickness: 5.39 m		

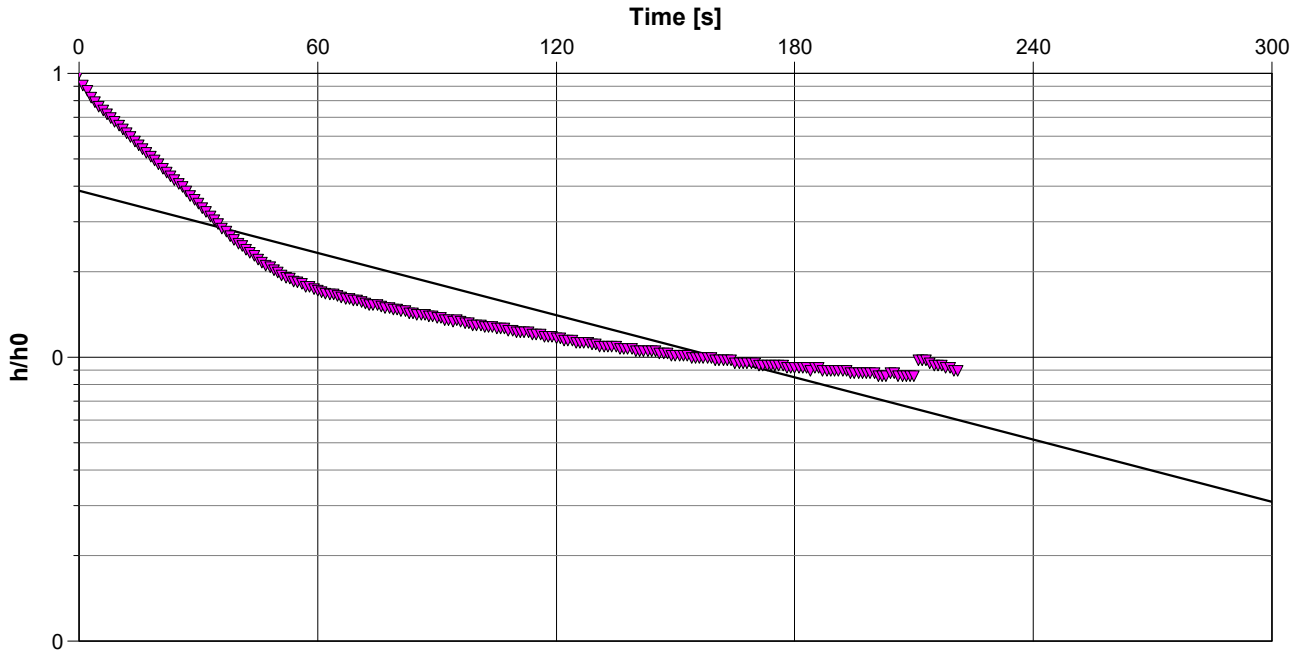


Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW 15-1	2.63×10^{-9}	

	Slug Test Analysis Report
	Project: Hydrogeological Investigation
	Number: 25-162-100
	Client: Medallion Corporation

Location: 1771-1775 Jane Street, Toronto	Slug Test: MW 15-2	Test Well: MW 15-2
Test Conducted by: PP		Test Date: 8/15/2025
Analysis Performed by: PP	Hvorslev	Analysis Date: 8/15/2025
Aquifer Thickness:		

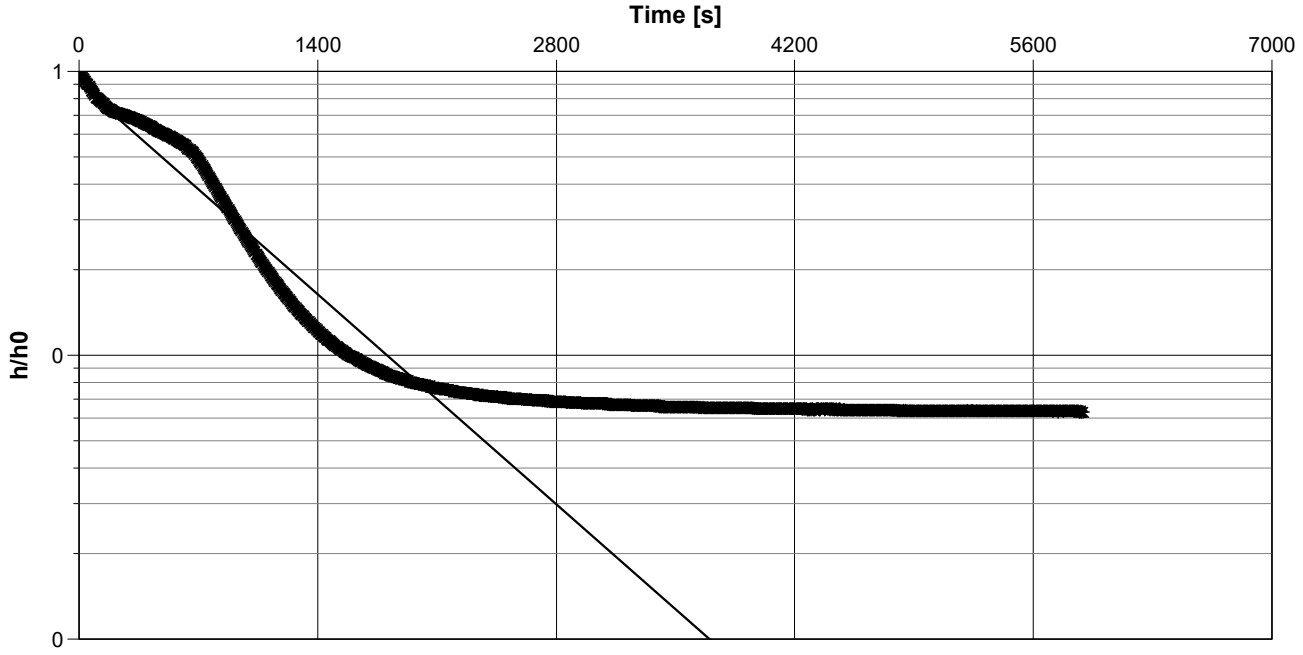


Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW 15-2	3.79×10^{-6}	

	Slug Test Analysis Report
	Project: Hydrogeological Investigation
	Number: 25-162-100
	Client: Medallion Corporation

Location: 1771-1775 Jane Street, Toronto	Slug Test: MW 15-3	Test Well: MW 15-3
Test Conducted by: PP		Test Date: 8/15/2025
Analysis Performed by: PP	Hvorslev	Analysis Date: 8/15/2025
Aquifer Thickness: 6.21 m		



Calculation using Hvorslev

Observation Well	Hydraulic Conductivity [m/s]	
MW 15-3	5.49×10^{-7}	

Appendix D: Groundwater Quality Certificate of Analysis

FINAL REPORT

CA40161-JUN25 R1

25-163-100, 1735 June St, North York

Prepared for

DS Consultants

FINAL REPORT

First Page

CLIENT DETAILS

Client	DS Consultants
Address	6221 Highway 7 Unit 16 Vaughan, Ontario L4H 0K8. Canada
Contact	Meysam Jafari
Telephone	905-264-9393
Facsimile	905-264-2685
Email	mjafari@dsconsultants.ca
Project	25-163-100, 1735 June St, North York
Order Number	
Samples	Ground Water (1)

LABORATORY DETAILS

Project Specialist	Maarit Wolfe, Hon.B.Sc
Laboratory	SGS Canada Inc.
Address	185 Concession St., Lakefield ON, K0L 2H0
Telephone	705-652-2000
Facsimile	705-652-6365
Email	Maarit.Wolfe@sgs.com
SGS Reference	CA40161-JUN25
Received	06/16/2025
Approved	06/23/2025
Report Number	CA40161-JUN25 R1
Date Reported	06/23/2025

COMMENTS

RL - SGS Reporting Limit

Nonylphenol Ethoxylates is the sum of nonylphenol monoethoxylate and nonylphenol diethoxylate.

Temperature of Sample upon Receipt: 9 degrees C
Cooling Agent Present: yes
Custody Seal Present: yes

Chain of Custody Number: 043186

SIGNATORIES

Maarit Wolfe, Hon.B.Sc

TABLE OF CONTENTS

First Page..... 1

Index..... 2

Results..... 3-7

Exceedance Summary..... 8

QC Summary..... 9-18

Legend..... 19

Annexes..... 20

Client: DS Consultants
Project: 25-163-100, 1735 June St, North York
Project Manager: Meysam Jafari
Samplers: Ken

MATRIX: WATER

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	BH15-3
Sample Matrix	Ground Water
Sample Date	16/06/2025

Parameter	Units	RL	L1	L2	Result
General Chemistry					
Biochemical Oxygen Demand (BOD5)	mg/L	2	300	15	5
Total Kjeldahl Nitrogen	as N mg/L	0.5	100		0.6
Total Suspended Solids	mg/L	2	350	15	51
Metals and Inorganics					
Fluoride	mg/L	0.06	10		0.08
Cyanide (total)	mg/L	0.01	2	0.02	< 0.01
Aluminum (total)	mg/L	0.001	50		0.951
Antimony (total)	mg/L	0.0009	5		< 0.0009
Arsenic (total)	mg/L	0.0002	1	0.02	0.0043
Cadmium (total)	mg/L	0.000003	0.7	0.008	0.000271
Chromium (total)	mg/L	0.00008	4	0.08	0.00225
Cobalt (total)	mg/L	0.000004	5		0.00126
Copper (total)	mg/L	0.001	2	0.04	0.006
Lead (total)	mg/L	0.00009	1	0.12	0.00206
Manganese (total)	mg/L	0.00001	5	0.05	0.528
Molybdenum (total)	mg/L	0.0004	5		0.0009
Nickel (total)	mg/L	0.0001	2	0.08	0.0054
Phosphorus (total)	mg/L	0.003	10	0.4	0.091
Selenium (total)	mg/L	0.00004	1	0.02	0.00021
Silver (total)	mg/L	0.00005	5	0.12	< 0.00005
Tin (total)	mg/L	0.00006	5		0.00436

Client: DS Consultants
Project: 25-163-100, 1735 June St, North York
Project Manager: Meysam Jafari
Samplers: Ken

MATRIX: WATER

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	BH15-3
Sample Matrix	Ground Water
Sample Date	16/06/2025

Parameter	Units	RL	L1	L2	Result
Metals and Inorganics (continued)					
Titanium (total)	mg/L	0.0001	5		0.0155
Zinc (total)	mg/L	0.002	2	0.04	0.010
Microbiology					
Ecoli	mpn/100mL	0		200	0
Nonylphenol and Ethoxylates					
Nonylphenol	mg/L	0.001	0.02	0.001	< 0.001
Nonylphenol Ethoxylates	mg/L	0.01	0.2	0.01	< 0.01
Nonylphenol diethoxylate	mg/L	0.01			< 0.01
Nonylphenol monoethoxylate	mg/L	0.01			< 0.01
Oil and Grease					
Oil & Grease (total)	mg/L	2			< 4 ↑
Oil & Grease (animal/vegetable)	mg/L	4	150		< 4
Oil & Grease (mineral/synthetic)	mg/L	4	15		< 4

Client: DS Consultants
Project: 25-163-100, 1735 June St, North York
Project Manager: Meysam Jafari
Samplers: Ken

MATRIX: WATER

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	BH15-3
Sample Matrix	Ground Water
Sample Date	16/06/2025

Parameter	Units	RL	L1	L2	Result
Other (ORP)					
pH	No unit	0.05	11.5	9.5	7.53
Chromium VI	mg/L	0.0002	2	0.04	< 0.0002
Mercury (total)	mg/L	0.00001	0.01	0.0004	< 0.00001
PAHs					
Benzo(b+j)fluoranthene	mg/L	0.0001			< 0.0001
PCBs					
Polychlorinated Biphenyls (PCBs) - Total	mg/L	0.0001	0.001	0.0004	< 0.0001
Phenols					
4AAP-Phenolics	mg/L	0.001	1	0.008	0.002
SVOCs					
3,3-Dichlorobenzidine	mg/L	0.0005	0.002	0.0008	< 0.0005
di-n-Butyl Phthalate	mg/L	0.002	0.08	0.015	< 0.002
Bis(2-ethylhexyl)phthalate	mg/L	0.002	0.012	0.0088	0.005
Pentachlorophenol	mg/L	0.0005	0.005	0.002	< 0.0005
PAHs (Total)	mg/L		0.005	0.002	< 0.001
Perylene	mg/L	0.0005			< 0.0005

Client: DS Consultants
Project: 25-163-100, 1735 June St, North York
Project Manager: Meysam Jafari
Samplers: Ken

MATRIX: WATER

Sample Number 8
Sample Name BH15-3
Sample Matrix Ground Water
Sample Date 16/06/2025

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result
SVOCs - PAHs					
7Hdibenzo(c,g)carbazole	mg/L	0.0001			< 0.0001
Anthracene	mg/L	0.0001			< 0.0001
Benzo(a)anthracene	mg/L	0.0001			< 0.0001
Benzo(a)pyrene	mg/L	0.0001			< 0.0001
Benzo(e)pyrene	mg/L	0.0001			< 0.0001
Benzo(ghi)perylene	mg/L	0.0002			< 0.0002
Benzo(k)fluoranthene	mg/L	0.0001			< 0.0001
Chrysene	mg/L	0.0001			< 0.0001
Dibenzo(a,h)anthracene	mg/L	0.0001			< 0.0001
Dibenzo(a,i)pyrene	mg/L	0.0001			< 0.0001
Dibenzo(a,j)acridine	mg/L	0.0001			< 0.0001
Fluoranthene	mg/L	0.0001			< 0.0001
Indeno(1,2,3-cd)pyrene	mg/L	0.0002			< 0.0002
Phenanthrene	mg/L	0.0001			< 0.0001
Pyrene	mg/L	0.0001			< 0.0001

Client: DS Consultants
Project: 25-163-100, 1735 June St, North York
Project Manager: Meysam Jafari
Samplers: Ken

MATRIX: WATER

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	BH15-3
Sample Matrix	Ground Water
Sample Date	16/06/2025

Parameter	Units	RL	L1	L2	Result
VOCs					
Chloroform	mg/L	0.0005	0.04	0.002	< 0.0005
1,2-Dichlorobenzene	mg/L	0.0005	0.05	0.0056	< 0.0005
1,4-Dichlorobenzene	mg/L	0.0005	0.08	0.0068	< 0.0005
cis-1,2-Dichloroethylene	mg/L	0.0005	4	0.0056	< 0.0005
trans-1,3-Dichloropropene	mg/L	0.0005	0.14	0.0056	< 0.0005
Methylene Chloride	mg/L	0.0005	2	0.0052	< 0.0005
1,1,2,2-Tetrachloroethane	mg/L	0.0005	1.4	0.017	< 0.0005
Tetrachloroethylene (perchloroethylene)	mg/L	0.0005	1	0.0044	< 0.0005
Trichloroethylene	mg/L	0.0005	0.4	0.0076	< 0.0005
VOCs - BTEX					
Benzene	mg/L	0.0005	0.01	0.002	< 0.0005
Ethylbenzene	mg/L	0.0005	0.16	0.002	< 0.0005
Toluene	mg/L	0.0005	0.016	0.002	< 0.0005
Xylene (total)	mg/L	0.0005	1.4	0.0044	< 0.0005
m-p-xylene	mg/L	0.0005			< 0.0005
o-xylene	mg/L	0.0005			< 0.0005

EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	SANSEW / WATER / - - Toronto Sewer Use By Law - Sanitary and Combined Sewer Discharge - BL_100_2016 L1	SANSEW / WATER / - - Toronto Sewer Use By Law - Storm Sewer Discharge - BL_100_2016 L2
BH15-3					
Total Suspended Solids	SM 2540D	mg/L	51		15
Manganese	SM 3030/EPA 200.8	mg/L	0.528		0.05

QC SUMMARY

Biochemical Oxygen Demand

Method: SM 5210 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-007

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Biochemical Oxygen Demand (BOD5)	BOD0033-JUN25	mg/L	2	< 2	0	30	112	70	130	73	70	130

Cyanide by SFA

Method: SM 4500 I Internal ref.: ME-CA-IENVISFA-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Cyanide (total)	SKA0167-JUN25	mg/L	0.01	<0.01	ND	10	90	90	110	102	75	125

Fluoride by Specific Ion Electrode

Method: SM 4500 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-014

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Fluoride	EWL0476-JUN25	mg/L	0.06	<0.06	2	10	98	90	110	109	75	125

QC SUMMARY

Hexavalent Chromium by SFA

Method: EPA218.6/EPA3060A | Internal ref.: ME-CA-[ENV]SKA-LAK-AN-012

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Chromium VI	SKA0165-JUN25	mg/L	0.0002	<0.0002	ND	20	100	80	120	96	75	125

Mercury by CVAAS

Method: EPA 7471A/SM 3112B | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Mercury (total)	EHG0022-JUN25	mg/L	0.00001	< 0.00001	ND	20	115	80	120	123	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-IENVISPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Silver (total)	EMS0150-JUN25	mg/L	0.00005	<0.00005	ND	20	97	90	110	73	70	130
Aluminum (total)	EMS0150-JUN25	mg/L	0.001	<0.001	4	20	101	90	110	101	70	130
Arsenic (total)	EMS0150-JUN25	mg/L	0.0002	<0.0002	15	20	99	90	110	101	70	130
Cadmium (total)	EMS0150-JUN25	mg/L	0.000003	<0.000003	20	20	99	90	110	96	70	130
Cobalt (total)	EMS0150-JUN25	mg/L	0.000004	<0.000004	5	20	99	90	110	98	70	130
Chromium (total)	EMS0150-JUN25	mg/L	0.00008	<0.00008	ND	20	101	90	110	109	70	130
Copper (total)	EMS0150-JUN25	mg/L	0.001	<0.001	3	20	100	90	110	105	70	130
Manganese (total)	EMS0150-JUN25	mg/L	0.00001	<0.00001	9	20	99	90	110	100	70	130
Molybdenum (total)	EMS0150-JUN25	mg/L	0.0004	<0.0004	ND	20	103	90	110	101	70	130
Nickel (total)	EMS0150-JUN25	mg/L	0.0001	<0.0001	ND	20	104	90	110	96	70	130
Lead (total)	EMS0150-JUN25	mg/L	0.00009	<0.00009	9	20	100	90	110	96	70	130
Phosphorus (total)	EMS0150-JUN25	mg/L	0.003	<0.003	7	20	98	90	110	NV	70	130
Antimony (total)	EMS0150-JUN25	mg/L	0.0009	<0.0009	ND	20	99	90	110	96	70	130
Selenium (total)	EMS0150-JUN25	mg/L	0.00004	<0.00004	2	20	103	90	110	102	70	130
Tin (total)	EMS0150-JUN25	mg/L	0.00006	<0.00006	6	20	100	90	110	NV	70	130
Titanium (total)	EMS0150-JUN25	mg/L	0.0001	<0.0001	3	20	98	90	110	NV	70	130
Zinc (total)	EMS0150-JUN25	mg/L	0.002	<0.002	19	20	99	90	110	122	70	130

QC SUMMARY

Microbiology

Method: SM 9223B | Internal ref.: ME-CA-IENVIMIC-LAK-AN-021

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Ecoli	BAC9256-JUN25	mpn/100mL	-	ACCEPTED	ACCEPTED							

Nonylphenol and Ethoxylates

Method: ASTM D7065-06 | Internal ref.: ME-CA-IENVIGC-LAK-AN-015

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Nonylphenol diethoxylate	GCM0316-JUN25	mg/L	0.01	<0.01			92	55	120			
Nonylphenol monoethoxylate	GCM0316-JUN25	mg/L	0.01	<0.01			92	55	120			
Nonylphenol	GCM0316-JUN25	mg/L	0.001	<0.001			92	55	120			

QC SUMMARY

Oil & Grease

Method: MOE E3401 | Internal ref.: ME-CA-[ENV]GC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (total)	GCM0290-JUN25	mg/L	2	<2	NSS	20	104	75	125			

Oil & Grease-AV/MS

Method: MOE E3401/SM 5520F | Internal ref.: ME-CA-[ENV]GC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (animal/vegetable)	GCM0290-JUN25	mg/L	4	< 4	NSS	20	NA	70	130			
Oil & Grease (mineral/synthetic)	GCM0290-JUN25	mg/L	4	< 4	NSS	20	NA	70	130			

pH

Method: SM 4500 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
pH	EWL0411-JUN25	No unit	0.05	NA	0		100			NA		

QC SUMMARY

Phenols by SFA

Method: SM 5530B-D | Internal ref.: ME-CA-[ENVISFA-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
4AAP-Phenolics	SKA0190-JUN25	mg/L	0.001	0.005	ND	10	102	80	120	103	75	125

Polychlorinated Biphenyls

Method: MOE E3400/EPA 8082A | Internal ref.: ME-CA-[ENVIGC-LAK-AN-001

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Polychlorinated Biphenyls (PCBs) - Total	GCM0255-JUN25	mg/L	0.0001	<0.0001	NSS	30	77	60	140	NSS	60	140

QC SUMMARY

Semi-Volatile Organics

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
7Hdibenzo(c,g)carbazole	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	104	50	140	NSS	50	140
Anthracene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	90	50	140	NSS	50	140
Benzo(a)anthracene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	96	50	140	NSS	50	140
Benzo(a)pyrene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	90	50	140	NSS	50	140
Benzo(b+j)fluoranthene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	101	50	140	NSS	50	140
Benzo(e)pyrene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	104	50	140	NSS	50	140
Benzo(ghi)perylene	GCM0276-JUN25	mg/L	0.0002	< 0.0002	NSS	30	99	50	140	NSS	50	140
Benzo(k)fluoranthene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	97	50	140	NSS	50	140
Bis(2-ethylhexyl)phthalate	GCM0276-JUN25	mg/L	0.002	< 0.002	NSS	30	102	50	140	NSS	50	140
Chrysene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	96	50	140	NSS	50	140
di-n-Butyl Phthalate	GCM0276-JUN25	mg/L	0.002	< 0.002	NSS	30	100	50	140	NSS	50	140
Dibenzo(a,h)anthracene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	98	50	140	NSS	50	140
Dibenzo(a,i)pyrene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	98	50	140	NSS	50	140
Dibenzo(a,j)acridine	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	100	50	140	NSS	50	140
Fluoranthene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	96	50	140	NSS	50	140
Indeno(1,2,3-cd)pyrene	GCM0276-JUN25	mg/L	0.0002	< 0.0002	NSS	30	99	50	140	NSS	50	140
Pentachlorophenol	GCM0276-JUN25	mg/L	0.0005	< 0.0005	NSS	30	105	50	140	NSS	50	140
Perylene	GCM0276-JUN25	mg/L	0.0005	< 0.0005	NSS	30	109	50	140	NSS	50	140
Phenanthrene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	90	50	140	NSS	50	140
Pyrene	GCM0276-JUN25	mg/L	0.0001	< 0.0001	NSS	30	97	50	140	NSS	50	140

QC SUMMARY

Semi-Volatile Organics (continued)

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENVIGC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
3,3-Dichlorobenzidine	GCM0331-JUN25	mg/L	0.0005	< 0.0005	NSS	30	80	30	130	NSS	30	130

Suspended Solids

Method: SM 2540D | Internal ref.: ME-CA-[ENVIEWL-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Suspended Solids	EWL0439-JUN25	mg/L	2	< 2	1	10	95	90	110	NA		

Total Nitrogen

Method: SM 4500-N C/4500-NO3- F | Internal ref.: ME-CA-[ENVISFA-LAK-AN-002

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Kjeldahl Nitrogen	SKA0173-JUN25	as N mg/L	0.5	<0.5	2	10	100	90	110	100	75	125

QC SUMMARY

Volatile Organics

Method: EPA 5030B/8260C | Internal ref.: ME-CA-[ENV]GC-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
1,1,2,2-Tetrachloroethane	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	106	60	130	105	50	140
1,2-Dichlorobenzene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	108	60	130	107	50	140
1,4-Dichlorobenzene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	108	60	130	106	50	140
Benzene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	98	60	130	96	50	140
Chloroform	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	104	60	130	102	50	140
cis-1,2-Dichloroethylene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	103	60	130	101	50	140
Ethylbenzene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	105	60	130	103	50	140
m-p-xylene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	105	60	130	104	50	140
Methylene Chloride	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	104	60	130	101	50	140
o-xylene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	105	60	130	104	50	140
Tetrachloroethylene (perchloroethylene)	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	95	60	130	100	50	140
Toluene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	100	60	130	98	50	140
trans-1,3-Dichloropropene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	97	60	130	93	50	140
Trichloroethylene	GCM0267-JUN25	mg/L	0.0005	<0.0005	ND	30	98	60	130	98	50	140

QC SUMMARY

Method Blank: a blank matrix that is carried through the entire analytical procedure. Used to assess laboratory contamination.

Duplicate: Paired analysis of a separate portion of the same sample that is carried through the entire analytical procedure. Used to evaluate measurement precision.

LCS/Spike Blank: Laboratory control sample or spike blank refer to a blank matrix to which a known amount of analyte has been added. Used to evaluate analyte recovery and laboratory accuracy without sample matrix effects.

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

Reference Material: a material or substance matrix matched to the samples that contains a known amount of the analyte of interest. A reference material may be used in place of a matrix spike.

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

Multielement Scan Qualifier: as the number of analytes in a scan increases, so does the chance of a limit exceedance by random chance as opposed to a real method problem. Thus, in multielement scans, for the LCS and matrix spike, up to 10% of the analytes may exceed the quoted limits by up to 10% absolute and the spike is considered acceptable.

Duplicate Qualifier: for duplicates as the measured result approaches the RL, the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL.

Matrix Spike Qualifier: for matrix spikes, as the concentration of the native analyte increases, the uncertainty of the matrix spike recovery increases. Thus, the matrix spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

LEGEND

FOOTNOTES

NSS	Insufficient sample for analysis.
RL	Reporting Limit.
↑	Reporting limit raised.
↓	Reporting limit lowered.
NA	The sample was not analysed for this analyte
ND	Non Detect

Results relate only to the sample tested.
Data reported represent the sample as submitted to SGS. Solid samples expressed on a dry weight basis.
"Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.
Analysis conducted on samples submitted pursuant to or as part of Reg. 153/04, are in accordance to the "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality" published by the Ministry and dated March 9, 2004 as amended.

SGS provides criteria information (such as regulatory or guideline limits and summary of limit exceedances) as a service. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. Comparison to the most current criteria is the responsibility of the client and SGS assumes no responsibility for the accuracy of the criteria levels indicated.

SGS Canada Inc. statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

This report supersedes all previous versions.

-- End of Analytical Report --

Request for Laboratory Services and CHAIN OF CUSTODY

SGS Industries & Environment - Lakefield: 185 Concession St., Lakefield, ON K0L 2H0 Phone: 705-652-2000 Fax: 705-652-6365 Web: www.sgs.com/environment
- London: 657 Consortium Court, London, ON, N6E 2S8 Phone: 519-672-4500 Toll Free: 877-848-8060 Fax: 519-672-0361

No: 043186 Page _____ of _____

Laboratory Information Section - Lab use only

Received By: Anneer
Received Date: 06 12 25 (mm/dd/yy)
Received Time: 11 : 30 (hr : min)
Received By (signature): [signature]
Custody Seal Present: Yes ☑ No ☐
Custody Seal Intact: Yes ☐ No ☐
Cooling Agent Present: Yes ☑ No ☐ Type: ICE
Temperature Upon Receipt (°C) 9 x 3
CA 40161 JUN 25
LAB LIMS #: _____

REPORT INFORMATION

Company: DS Consultants
Contact: Meysam Jafari
Address: 6221 Hwy 7 Unit 16 Markham
Phone: 905-764-9813
Fax: _____
Email: MJafari@dsconsultants.ca

INVOICE INFORMATION

☒ (same as Report Information)
Company: Accounting
Contact: _____
Address: _____
Phone: _____
Email: _____

Quotation #: 25-163-100
Project #: 1755 Jane St, Northyork
P.O. #: _____
Site Location/ID: _____

TURNAROUND TIME (TAT) REQUIRED

☐ Client Regular TAT ☒ Regular TAT (5-7days)
TAT's are quoted in business days (exclude statutory holidays & weekends). Samples received after 6pm or on weekends: TAT begins next business day

RUSH TAT (Additional Charges May Apply): ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days
PLEASE CONFIRM RUSH FEASIBILITY WITH SGS REPRESENTATIVE PRIOR TO SUBMISSION

Specify Due Date: _____

*NOTE: DRINKING (POTABLE) WATER SAMPLES FOR HUMAN CONSUMPTION MUST BE SUBMITTED WITH SGS DRINKING WATER CHAIN OF CUSTODY

REGULATIONS

☐ O.Reg 153/04 ☐ O.Reg 406/19
☐ Table 1 ☐ Res/Park Soil Texture: ☐ Coarse
☐ Table 2 ☐ Ind/Com ☐ Medium/Fine
☐ Table 3 ☐ Agri/Other
☐ Table _____ Appx. _____
Soil Volume ☐ <350m3 ☐ >350m3

Other Regulations:
☐ Reg 347/558 (3 Day min TAT)
☐ PWQO ☐ MMER
☐ CCME ☐ Other: _____
☐ MISA
☐ ODWS Not Reportable *See note

Sewer By-Law:
☒ Sanitary
☒ Storm
Municipality: Toronto

RECORD OF SITE CONDITION (RSC) ☐ YES ☐ NO

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	# OF BOTTLES	MATRIX	M&I: Field Filtered (Y/N)	M&I: Metals & Inorganics (incl CrVI, CN,Hg pH,(B(HWS),EC,SAR–soil) (Cl, Na–water)	M&I: Full Metals Suite (ICP metals plus B(HWS-soil only) Hg, CrVI	M&I: ICP Metals only Sb,As,Ba,Be,B,Cd, Cr,Co,Cu,Pb,Mo,Ni,Se,Ag,Tl,U,V,Zn	SVOC: PAHs only	SVOC: SVOCs all incl PAHs, ABNs, CPs	PCB: PCBs Total ☐ Aroclor ☐	PHC: F1-F4 + BTEX	PHC: F1-F4 only no BTEX	VOC: VOCs all incl BTEX	VOC: BTEX only	Pest: Pesticides Organochlorine or specify other	Other (please specify)	Other	Other	Other	Other: Sewer Use: Specify pkg:	Other: Water Characterization Pkg General ☐ Extended ☐	SPLP: Specify tests ☐ Metals ☐ VOC ☐ 1,4-Dioxane ☐ OCP ☐ ABN	TCLP: Specify tests ☐ M&I ☐ VOC ☐ PCB ☐ B(a)P ☐ ABN ☐ Ignit.	COMMENTS:
1	BH 5-3	June 16 2025	AM	19	GW	N																				Mutliward
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

Observations/Comments/Special Instructions

Sampled By (NAME): [signature] Signature: [signature] Date: 6/16/25 (mm/dd/yy)
Relinquished by (NAME): [signature] Signature: [signature] Date: 6/16/25 (mm/dd/yy)

Pink Copy - Client
Yellow & White Copy - SGS

Revision #: 1.8
Date of Issue: 06 SEP 2024

Appendix E: Groundwater Monitoring Data

Table: Groundwater Monitoring D

Location: 1771-1775 Jan Street

Date					20-Jun-25			04-Jul-25			18-Jul-25			01-Aug-25			15-Aug-25			29-Aug-25		
Well ID	Ground Level	Stick Up	Well Depth	Well Depth	Water Level	Water Level	Water Level Elev.	Water Level	Water Level	Water Level Elev.	Water Level	Water Level	Water Level Elev.	Water Level	Water Level	Water Level Elev.	Water Level	Water Level	Water Level Elev.	Water Level	Water Level	Water Level Elev.
	masl	m	T.O.P m	(mbgs)	T.O.P-m	(mbgs)	(masl)	T.O.P-m	(mbgs)	(masl)	T.O.P-m	(mbgs)	(masl)	T.O.P-m	(mbgs)	(masl)	T.O.P-m	(mbgs)	(masl)	T.O.P-m	(mbgs)	(masl)
25-1	126.20	0.85	8.50	7.65	5.88	5.03	121.17	5.42	4.57	121.63	4.35	4.50	121.70	4.41	3.56	122.64	5.40	4.55	121.65	6.05	5.20	121.00
25-2	126.90	0.00	19.90	19.90	4.44	4.44	122.46	4.57	4.57	122.33	4.32	4.32	122.58	5.18	5.18	121.72	4.59	4.59	122.31	4.62	4.62	122.28
15-1	126.60	0.00	9.20	9.20	4.65	4.65	121.95	4.73	4.73	121.87	4.61	4.61	121.99	3.82	3.82	122.78	3.52	3.52	123.08	3.42	3.42	123.18
15-2	127.00	0.00	9.20	9.20	3.45	3.45	123.55	3.51	3.51	123.49	3.54	3.54	123.46	3.57	3.57	123.43	3.60	3.60	123.40	3.62	3.62	123.38
15-3	127.30	0.00	9.20	9.20	3.45	3.45	123.85	3.76	3.76	123.54	3.86	3.86	123.44	3.88	3.88	123.42	3.91	3.91	123.39	3.95	3.95	123.35